COR670.

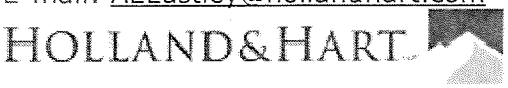
From: Alison Eastley [AEEastley@hollandhart.com]
Sent: Thursday, July 14, 2011 6:27 PM
To: COcomments
Cc: 'joshhw@me.com'; 'jeremiah mercier'; Thomas Todd
Subject: Weinstein - Vagabond Ranch Comment Letter Regarding Proposed Colorado Roadless Rule.PDF
Attachments: Weinstein - Vagabond Ranch Comment Letter Regarding Proposed Colorado Roadless Rule.PDF

To whom it may concern:

Attached, please find Vagabond Ranch Huts' comment to the proposed Colorado Roadless Rule. Please contact me with any questions.

All the Best,
Alison

Alison E. Eastley
Associate Attorney
Holland & Hart LLP
600 East Main Street, Suite 104
Aspen, CO 81611-1991
Phone (970) 429-6880
Fax (970) 315-3524
E-mail: AEEastley@hollandhart.com



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COR670

19384 County Rd. 4
Granby, CO 80304

T 303-242-5338

josh@vagabondranch.com

www.vrhuts.com

July 14, 2011

VIA EMAIL
COComments@fsroadless.org
Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

Re: Comments of Vagabond Ranch Huts on Proposed 36 C.F.R. § 294 and the Colorado Roadless Areas Revised Draft Environmental Impact Statement

To whom it may concern:

Vagabond Ranch Huts ("Vagabond Ranch") operates various privately owned huts and offers its guest guided and unguided recreational opportunities in and around the Never Summer Mountains of the Arapaho National Forest, including mountain biking, hiking, horseback riding, backcountry skiing, Nordic skiing, snowmobiling, and snowshoeing. Vagabond Ranch uses various roads, forest roads, and trails in its operations. Vagabond Ranch appreciates the opportunity to comment on the proposed Colorado Roadless Rule ("proposed rule") and the associated revised draft environmental impact statement.

Vagabond Ranch generally supports conserving and managing roadless areas in the national forest lands in Colorado. However, Vagabond Ranch seeks clarification of key provisions in the proposed rule that may affect Vagabond Ranch operations. In addition, Vagabond Ranch seeks confirmation that the proposed Rule will not interfere with Vagabond Ranch's existing and expected reserved rights in the Arapaho National Forest. If the lead and cooperating agencies cannot provide Vagabond Ranch with these clarifications and assurances, as discussed below, Vagabond Ranch cannot support the proposed rule and would prefer that the lead and cooperating agencies select the no-action alternative, Alternative 3, and conserve and manage national forest land in Colorado under individual forest plan direction.

Discussion

I. Definition Issues - § 294.41

a. "Road construction and reconstruction" should be defined.

The proposed rule does not currently define "road construction and reconstruction." The definition of "road construction and reconstruction" is fundamental for understanding the prohibition on road construction and reconstruction in Colorado Roadless Areas. Throughout 36 C.F.R. § 294.41, reference is made to the existing regulations concerning travel

management (36 C.F.R. § 212). For example, the words "road," "forest road," and "temporary road" all use definitions from 36 C.F.R. § 212.1. Vagabond Ranch supports inclusion of the terms "road construction and reconstruction" in the proposed rule and defining the terms as they are defined in 36 C.F.R. § 212.1: "Road construction or reconstruction. Supervising, inspecting, actual building, and incurrence of all costs incidental to the construction or reconstruction of a road."

Inclusion of this term makes sense, given that roadless areas will need to be administered as part of the forest transportation system. Furthermore, a clear definition of "road construction and reconstruction" is especially important because it provides a distinction between construction activities and maintenance activities. Second, the supplementary information to the proposed rule states that "[s]ome provisions of this proposed rule use terminology and concepts from existing plans and planning regulations. . . . [which] is potentially subject to adjustment." Vagabond Ranch requires a fixed definition of "road construction and reconstruction" that is not subject to adjustment, except through noticed amendments to the regulations.

b. "Trail" should be defined.

The proposed rule does not currently define "trail." As with the terms "road construction and reconstruction," 36 C.F.R. § 212.1 defines the term "trail" as, "a route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail." The definition of "trail" seems especially important to include in the proposed rule, given that the term "trail" is referenced in the proposed rule's definition of "road" ("Road: As defined at 36 C.F.R. § 212.1, the term means a motor vehicle route over 50 inches wide, *unless identified and managed as a trail.*").

In addition to using the definition of "trail" from 36 C.F.R. § 212.1, the proposed rule should also clarify whether the prohibition of road construction and reconstruction applies to trails. The definition of "road" does not make clear if trails constitute roads. For instance, one may read the definition of "road" as, "[a] motor vehicle route over 50 inches wide, [but not necessarily 50 inches wide if] identified and managed as a trail." On the other hand, one may read the definition of "road" as, "[a] motor vehicle route over 50 inches wide, [not including a route that is] identified and managed as a trail." The distinction is important, since if trails are roads, then trails are affected by the prohibition on road construction and reconstruction. The distinction is also important for providing a clearer meaning of 36 C.F.R. § 294.45 (c), which appears to excuse trails from the prohibition on road construction and reconstruction ("Nothing in this subpart shall affect the current or future management of motorized and non-motorized trails in Colorado Roadless Areas. Decisions concerning the management or status of motorized and non-motorized trails within Colorado Roadless Areas under this subpart shall be made during the applicable forest travel management processes.").

II. Clarification of Road & Trail Maintenance - § 294.42 & 294.43

The proposed rule's prohibitions against road construction and reconstruction, as well as tree-cutting, sale, or removal should more clearly describe when road and/or trail maintenance may occur. Under the current version of 36 C.F.R. § 294.43 (d)(5), maintenance of roads is

permissible in Colorado Roadless Areas, but only when a road construction/reconstruction project has been implemented. Under 36 C.F.R. § 294.43 (c), road maintenance in non-upper tier acres is allowed and even preferred over road realignment. Under 36 C.F.R. § 294.45 (c), it appears that trail management decisions, including decisions whether to allow trail maintenance, are not affected by the proposed rule. Finally, the supplementary information to the proposed rule indicates that, "maintenance of temporary or forest roads would be permitted," and "[t]ree-cutting that is incidental to a management activity that is otherwise not prohibited by the [proposed] rule is allowed. . . . [including] trail construction or maintenance."

The various provisions and supplementary information are conflicting and confusing. Vagabond Ranch seeks clarification from the lead and cooperating agencies that the proposed rule allows routine road and trail maintenance. Road and trail maintenance in Colorado Roadless Areas is critical for Vagabond Ranch's continued operations.

III. Vagabond Ranch's Existing & Expected Reserved Rights

Vagabond Ranch seeks confirmation of its existing and expected reserved rights, so that it may continue to reasonably exercise such rights on national forest land within roadless areas. First, Vagabond Ranch seeks confirmation of a forest road easement that the U.S. Forest Service granted to Richard and Linda Kelly, predecessors in interest to Vagabond Ranch, in 1990. That easement is recorded in Grand County, Colorado at Reception No. 294417. Second, Vagabond Ranch seeks confirmation of statements from staff at the Sulphur Ranger District that the Forest Service will not oppose future development of a lodge on the Vagabond Ranch property and that Vagabond Ranch will be assured continued access to the property. Third, Vagabond Ranch seeks recognition of two pending permits. Vagabond Ranch is in the process of obtaining a special use permit from the Sulphur Ranger District of the Arapaho National Forest in Granby, Colorado allowing skiing on Gravel Mountain and Cascade Mountain, as well as mountain biking south of the Continental Divide. The District is expected to issue a permit as soon as it completes a resource capacity study. Next, Vagabond Ranch is in the process of obtaining a special use permit from the Parks Ranger District of the Medicine Bow Routt National Forests in Walden, Colorado allowing use of the Illinois Pass Trail to access the Ruby Basin north of the Continental Divide for skiing and mountain biking.

Thank you for your consideration of this comment. We hope to work with the lead and cooperating agencies to incorporate the suggested changes into a Final Rule.

Sincerely,

Alison E. Eastley for Holland & Hart LLP
on behalf of Joshua H. Weinstein of Vagabond Ranch Huts

COR671.

From: Clanahan, Jennifer [Jennifer.Clanahan@mail.house.gov]
Sent: Thursday, July 14, 2011 3:58 PM
To: COcomments
Subject: Representative DeGette's comments on CO Roadless Rule
Attachments: CO Roadless Rule DLD comments 7-11 Final.docx

Please find attached and pasted in below, Congresswoman DeGette's comments on the proposed Colorado Roadless Rule.
Thank you,

Jen Clanahan
Senior Policy Advisor/ Deputy Press Secretary
U.S. Representative Diana DeGette | CO-1
600 Grant Street, Suite 202
Denver, CO 80203
p- 303-844-4988
m - 303-549-7536 | f - 202-225-5657
http://degette.house.gov/

July 14, 2011
Colorado Roadless Area Review Team
U.S. Department of Agriculture, Forest Service
P.O. Box 1919
Sacramento, CA 95812

Re: Submission of Comments on Proposed Colorado Roadless Rule and Revised Draft EIS

Dear Colorado Roadless Area Review Team:
As a Member of the Colorado Congressional delegation with a particular interest in natural resources, I write to submit my comments on the proposed Colorado Roadless Rule. The Rule would impact 4.2 million acres of roadless national forest land in Colorado. These are our last remaining undeveloped forest lands which we depend on for critical wildlife habitat, clean air and recreational opportunities. Wildlife viewing and hunting and fishing are vital for Colorado's tourism, one of our strongest economic engines.
As has consistently been my position, I do not believe Colorado needs a separate state-specific roadless rule since the 2001 Roadless Rule received unprecedented public comment and great support, here in Colorado and across the country. Since these are federal lands, they should be managed as other federal lands, with a consistency that gives certainty to all who use and enjoy them. Our Colorado forest lands also deserve the same level of protection as those across the country. Additionally, since there are local protections and flexibility built into the 2001 Roadless Rule, the Colorado plan is unnecessary.
The proposed alternative of the Colorado Roadless Rule falls short in several ways. It provides 'upper tier' protection to only 13% of Inventoried Roadless Areas even though over 65% of these areas are identified in the various alternatives for the 'upper tier' category. Also, the 13% of roadless lands in Alternative 2 are those that generally already enjoy the same protection under their current forest plan. It seems disingenuous to declare them 'upper tier' which does not add additional protection but only changes the administrative mechanism by which those protections can be changed. The 'upper tier' protections should be afforded to all the 2.8 million acres identified in the various alternatives. In addition, it would allow oil and gas surface occupancy and linear construction zones even in the 'upper tier' lands. I urge you to prohibit both surface occupancy and linear construction zones in these critical areas. The majority of the Inventoried Roadless Areas (87%) face these threats as well as many other exceptions for special interests, such as oil and gas leasing and coal mining. These lands are vulnerable to development, road building and extraction.

COR671

Lastly, I am concerned about some of the proposed regulations that permit road building far from the nearest community for fuel reduction. We have limited dollars to deal with the threats of forest fire around these areas. Those limited dollars should be targeted to the areas closest to those communities rather than far into the backcountry.

I strongly urge you to provide Colorado roadless areas with the highest level of protection possible. Without strong rules to protect our fragile forest ecosystem it will be more vulnerable to threats such as climate change and insect and disease outbreaks. In 2010, U.S. Dept. of Agriculture Secretary Tom Vilsack pledged that the Colorado rule would be as protective or more protective than the 2001 Roadless Rule, the current proposal does not offer that level of protection.

Sincerely,

D

Diana DeGette
Member of Congress

Cc: USDA Sec. Tom Vilsack
USFS Chief Tom Tidwell

COR671

July 14, 2011

Colorado Roadless Area Review Team
U.S. Department of Agriculture, Forest Service
P.O. Box 1919
Sacramento, CA 95812

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Sincerely,

Δ

Diana DeGette

Member of Congress

Cc: USDA Sec. Tom Vilsack

USFS Chief Tom Tidwell

COR672.

From: Daukas, Paula [Paula.Daukas@denverwater.org]
Sent: Thursday, July 14, 2011 3:09 PM
To: COcomments
Subject: CO Roadless Rule Comments
Attachments: Denver Water_CO Roadless Rule Comments_7-14-11.pdf

Attached are comments on the proposed Colorado Roadless Rule from Denver Water.

Paula Daukas | Environmental Planning Manager
Denver Water | t: 303-628-6524 | f: 303-628-6852
1600 West 12th Ave | Denver, CO 80204-3412

CO2672

DENVER WATER
1600 West 12th Avenue • Denver, Colorado 80204-3412
Phone 303-628-6000 • Fax No. 303-628-6199 • denverwater.org

July 14, 2011

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812
(Submitted via email – COComments@fsroadless.org)

Subject: Comments on New Proposed Colorado Roadless Rule and Revised Draft Environmental Impact Statement (RDEIS)

This letter provides comments from the City and County of Denver, acting by and through its Board of Water Commissioners ("Denver Water"), on the new Proposed Colorado Roadless Rules (proposed rule).

Denver Water is a municipal utility that provides water to a significant portion of the state's population and has water collection facilities in or adjoining several roadless areas. Denver Water serves a population of approximately 1.3 million, and is dependent on its water supply through two major river basins: South Platte River and Colorado River. Denver Water's customers rely on safe and reliable drinking water, which largely originates on U.S. Forest Service lands. The proposed rule will affect approximately 14% of Denver Water's watershed collection area located on U.S. Forest Service lands. The proposed rule will also restrict Denver Water's access to existing and future facilities on U.S. Forest Service lands in the Upper Williams Fork Collection System, as shown in the enclosed Figures 1 through 5.

Denver Water recognizes the importance and benefits of roadless areas to protect water quality and other natural resource values while also providing the latitude for watershed protection and water supply development. We are, however, very concerned with the overly restrictive and rigid nature of the proposed rule, its implementation and potential conflicts with existing rights and law. Some examples of these conflicts are included in Colorado Springs Utilities' comments to the Rules; additional conflicts may affect Denver Water.

Water Supply providers along the Front Range of Colorado currently rely on municipal water supply systems on U.S. Forest Service lands. Municipal water supply planning is generally a multi-decade process where a large number of factors are considered. There are likely water rights and geographic areas where future projects have only been conceived or may not be considered viable until sometime into the future. Examples of uncertainties and issues facing municipal water providers are:

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- population growth trends
- changing water supply system reliability due to aging infrastructure
- threats due to natural disaster
- physical security threats due to terrorist acts
- timing and volume of future water supply due to climate change, and
- watershed damage by wildfire

Wildfire damage to infrastructure and subsequent sediment loading of water conveyance structures such as reservoirs, canals, ditches and intake structures could severely decrease or eliminate function of facilities; thus potentially severely impacting municipal drinking water supplies.

With many of Colorado's forests and inventoried roadless areas facing serious forest health concerns and issues, including catastrophic wildfire, insects, and disease, the proposed rule would fail to provide the needed flexibility to allow forest management activities in areas to protect critical water supplies and other significant natural resource values.

Similar to many other water providers in Colorado, Denver Water is concerned with the magnitude of forest health issues and challenges to protect its water supplies and infrastructure. Denver Water and the U.S. Forest Service have committed $33 million to the Forests to Faucets program to improve forest health within our water collection system in the White River, Pike-San Isabel, and Arapahoe-Roosevelt national forests. We are concerned that the proposed rule would limit the responsible protection and management of critical watershed areas for both existing and future water supplies, as well as the development of conditional and non-decreed water rights and supplies.

Based on a review of the Proposed New Rules (*Federal Register*/Vol. 76, No. 73/Friday, April 15, 2011/Proposed Rules), Denver Water has prepared the following comments:

1. Proposed Designation of Upper Tier Areas

The highly restrictive upper tier acres have been added in the proposed rule, which further restricts the on-the-ground forest treatments for hazardous fuel reduction, as well as ecosystem maintenance and restoration. Even the flexibility provided in §294.42(c)(1) for at-risk communities and community protection zones (CPZs) would be eliminated and only those treatments not involving tree cutting or road construction would be allowed. This level of restriction would not allow for responsible protection and management of critical watershed areas for municipal water supplies. This additional category is overly protective and should be removed from the proposed rule.

If upper tier areas are not removed from the proposed rule, then flexibility is essential in the rule to allow for responsible protection, management and development of municipal water supplies. Such flexibility would include areas allowing activities to reduce hazardous fuels to an at-risk community or municipal water supply system. Therefore, the following changes should be considered to protect drinking water source supply and critical water delivery infrastructure:

In §294.42(b) *Upper Tier Acres,* we recommend an additional exclusion:

> (3) Tree-cutting, sale, or removal is needed in areas where there is a significant risk that a wildland fire disturbance event could adversely affect a municipal water supply system

COR672

or the maintenance of that system. A significant risk exists where the current forest conditions and fire hazard and risk indicate a serious likelihood that a wildland fire disturbance event would present a high risk of threat to a municipal water supply system.

In §294.43(b) *Upper Tier Acres*, we recommend an additional exclusion:

(3) A road is needed for the operations, maintenance or development of future water supplies for municipal water supply systems.

2. Eliminating Regional Forester Determinations in Non-Upper Tier Acres

If the Forest Service line officer has the authority and responsibility to make decisions about protection and management of Colorado Roadless Areas for activities in non-upper tier areas, then it is not necessary for the Regional Forester to make special determinations for activities specifically related to at-risk communities and municipal water supply systems. The other activities such as maintaining ecosystems, improving habitats for special status species and developing oil and gas leases and coal mine leases are all allowed with only the determination of the "Responsible Official" that the activity is consistent with the applicable land management plan. Activities related to maintaining forest health and protecting water supplies are as important, if not more important and should not be held to a higher standard.

In §294.42(c), we recommend modifying the text as follows (additions shown in red, bold type):

(1)~~The Regional Forester determines~~ Tree-cutting, sale, or removal is needed to reduce hazardous fuels..."

(2) ~~The Regional Forester determines~~ Tree-cutting, sale, or removal is needed outside the community protection zone where there is a significant risk that a wildland fire disturbance event could adversely affect a municipal water supply system or the maintenance of that system. A significant risk exists where the ~~history of fire occurrence,~~ **current forest conditions** and fire hazard and risk indicate a serious likelihood that a wildland fire disturbance event would present a high risk of threat to a municipal water supply system.

In §294.43(c) *Non-Upper Tier Acres,* we recommend modifying subpart (iv) as follows:

(iv)~~The Regional Forester determines~~ **A** road is needed to allow for the construction, reconstruction, or maintenance of an authorized water conveyance structure which is operated pursuant to a ~~pre-existing~~ water court decree (see also §294.44(b)(1));

In §294.43(c)(vi) and (vii), we recommend removing "The Regional Forester determines".

3. Water Court Decrees

A roadless rule alternative must recognize Denver Water's need and legal rights, pursuant to Colorado law, to exercise existing entitlements under its absolute and conditional water rights as well as to obtain future water rights decrees. The alternative must not foreclose flexibility in Denver Water's operations or preclude development of needed future water supplies.

The current proposed rule (p. 21276) states "The definition for *water conveyance structures* has been modified to include reservoirs to clarify that they are included under the exception for construction, reconstruction or maintenance of roads for authorized water conveyance structures." This change is in response to comments by Denver Water and others in October 2008. However, the current proposed rule (p.21276) adds "This exception to the proposed rule applies only to those structures operated pursuant to a water court decree existing as of the date of the final rule." "Pre-existing Water Court Decree" is defined in §294.41 on page 21289 as "A decree issued by the Colorado Courts prior to [final rule effective date]..." Water development should not be limited to pre-existing decrees, but rather should be authorized by any Water Court Decree. Additionally, the definition of "Water Court Decree" needs clarification.

Denver Water proposes to delete the current "Pre-existing Water Court Decree" definition and replace it with the following in §294.41:

> *Water Court Decree:* A Colorado Water Court decree adjudicating absolute or conditional water rights, as defined under Colorado law, including any amendments thereto. A Water Court Decree includes a decree issued by the Colorado Water Courts changing a point of diversion, place of storage, place of use, water conveyance structure or any other water conveyance component to a location within a Colorado Roadless Area.

While the above language changes are essential for development of municipal water supplies, if such development is limited to "pre-existing" Water Court Decrees, then the following changes to the definition of "Pre-existing Water Court Decree" are necessary:

> *Pre-existing Water Court Decree:* A Colorado Water Court decree adjudicating absolute or conditional water rights, as defined under Colorado law, entered before [final rule effective date] or after [final rule effective date] if the decreed appropriation date is before [final rule effective date] or is based upon a Water Court Application filed before [final rule effective date] with a point of diversion, place of storage, place of use, water conveyance structure or other water supply system component within a Colorado Roadless Area, including all decree changes or amendments after [final rule effective date] from a location outside of a Colorado Roadless Area to within or a change of location within a Colorado Roadless Area. Nothing in this subpart shall be construed as affecting the jurisdiction or responsibilities of the Forest Service or existing rights.

In §294.43(c) *Non-Upper Tier Acres,* we recommend modifying subpart (iv) by eliminating "pre-existing" as shown under Comment #2, above.

In §294.44(b) Linear Construction Zones, we recommend modifying item (1) as follows:

> (1) The construction, reconstruction, or maintenance of a **decreed** ~~n authorized~~ water conveyance structure which is operated pursuant to a ~~pre-existing~~ water court decree (see also §294.43(c)(1)(iv));

4. Conflicts with Proposed Boundaries of Roadless Areas

Denver Water would like to provide the following explanation of differences seen in mapping of Denver Water properties. The Colorado Roadless Areas mapping appears to be based on, or at least to include, the 2010 COMaP database of open space and land ownership compiled annually by NREL staff at CSU. This dataset includes Denver Water property boundaries last submitted to

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NREL in August of 2009 for inclusion in the annual COMaP update. For each annual update, NREL staff have to reconcile boundaries from diverse datasets submitted by Federal, State, and local agencies and organizations.

Property boundary mapping at Denver Water has always been managed by the Engineering Division's Property Management department using legal descriptions and surveyed boundaries, and mapping in a local grid coordinate system (HARN, US Survey feet) with AutoCAD software. However, Planning Division GIS staff worked in conjunction with Property Management to build a separate property database for regional mapping purposes, using USGS 1:24,000-scale quads as a basemap, PLSS lines from the USGS and USFS, and mapping in UTM projection (NAD 83, meters) with ArcInfo and ArcGIS software. It was understood that the boundaries would eventually need to be adjusted to PLSS section lines from the BLM, as this is now considered the best source for PLSS lines for regional mapping. Additional attributes, such as manager and management type, were added to this dataset to provide information needed for COMaP.

Since the Denver Water property boundary database was submitted to COMaP in 2009, Property Administration had taken over the management and updating of both the survey-level and regional datasets. The intent was to use and maintain one dataset for all purposes. Some property boundaries have been adjusted since then, and differences can be seen when comparing the 2009 mapping with the newer mapping in 2010 and 2011. Recently, the need for two datasets was recognized and a generalized, regional dataset based on the newer mapping is now being constructed. When complete, this dataset will be submitted to NREL for the next update of COMaP.

In order to be a responsible steward of the resources, assets and natural environments entrusted to us, we request that all Denver Water properties, including federal property interests, be removed from within Roadless Area boundaries. Some of the areas of concern identified to-date are shown on the enclosed figures. Before boundaries are finalized, Denver Water requests an opportunity to review the boundaries to ensure that any differences in mapping between newer and older data sets are taken into account and that Denver Water's property and property interests are all removed from Roadless Areas.

We appreciate your consideration of our comments. If you have questions regarding these comments or Denver Water's system, please contact me at 303-628-6524 or paula.daukas@denverwater.org.

Sincerely,

Paula Daukas

Paula Daukas
Denver Water
Manager, Environmental Planning

Enclosures (Figures 1-8 sent under separate cover by mail)

Williams Fork Collection System Area Showing Intersect Overlap with Denver Water Properties

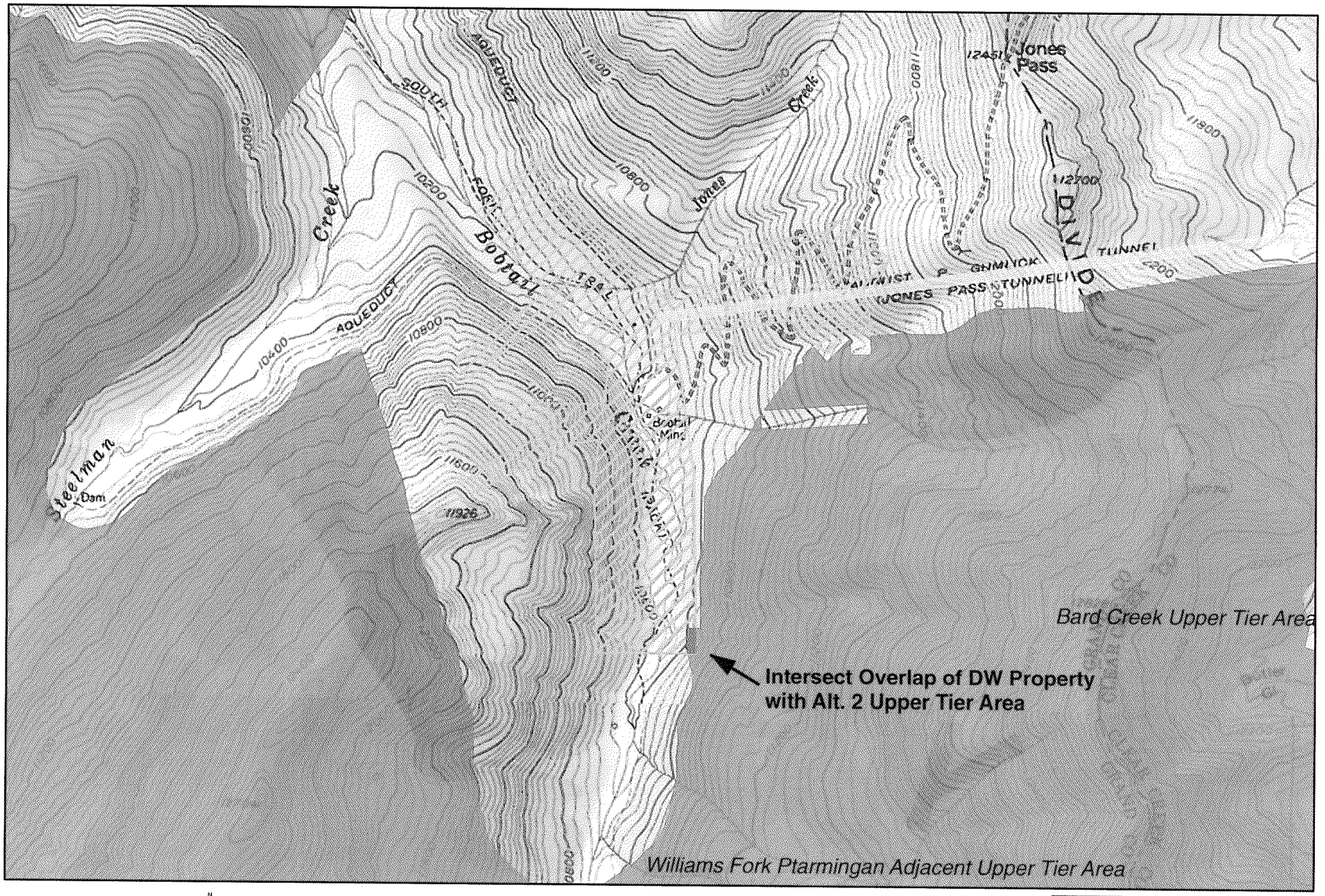

Figure 1

N

S

Scale 1:24,000

0 0.125 0.25 0.5

Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
- Continental Divide
- Denver Water Fee Simple Property
- Denver Water Right-of-Way (Acquired)
- Denver Water Proposed Reservoir
- Denver Water Proposed Diversion

Planning & Water Resources Division

This Geographic Information Systems (GIS) map is provided "as is" with no claim by the Denver Water Board as to the completeness, usefulness or accuracy of its content.

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July 2011

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Williams Fork Collection System Area Showing Intersect Overlap with Denver Water Right-of-Way

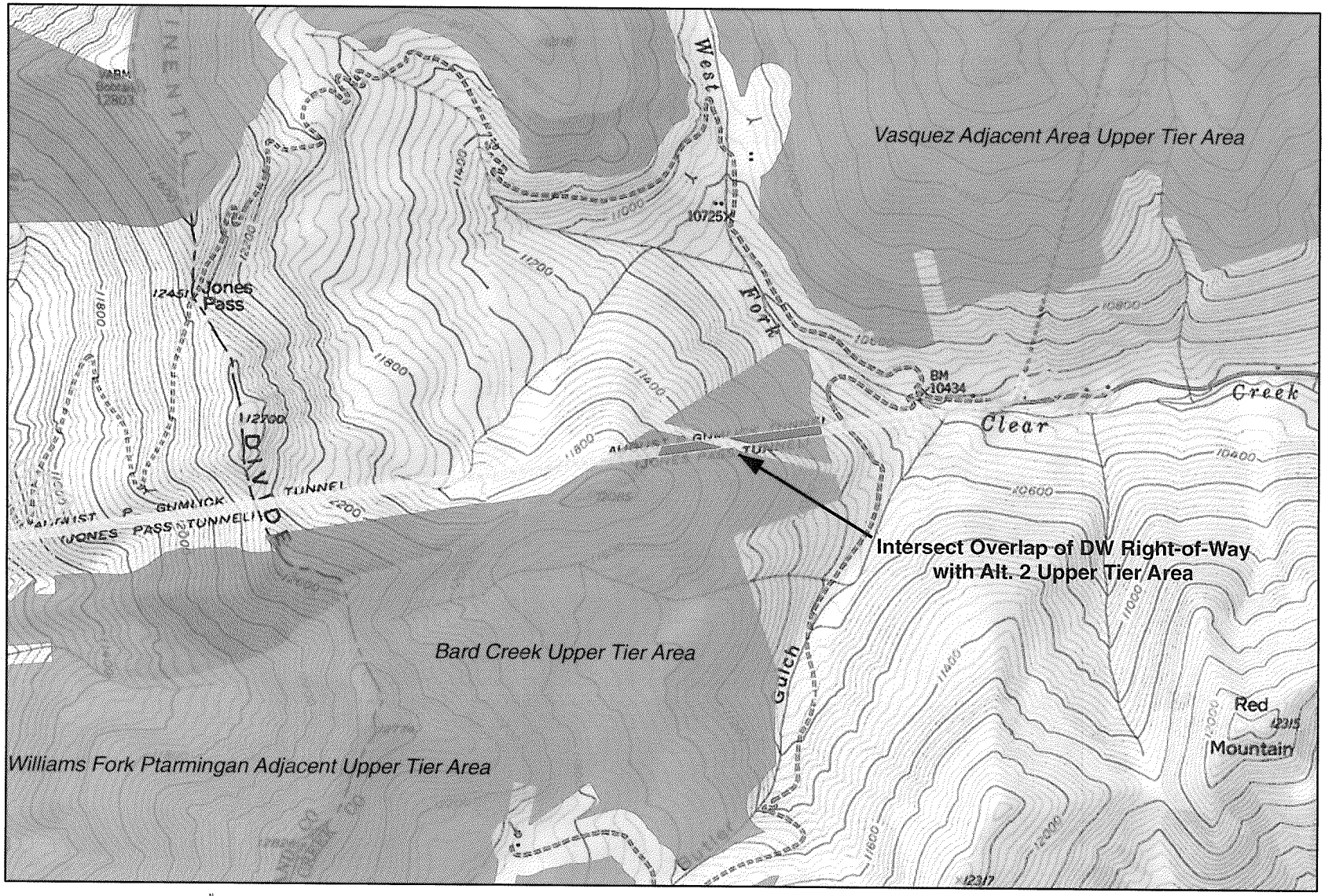

Figure 2

N

S

Scale 1:24,000

0 0.125 0.25 0.5

Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
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July 2011

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Williams Fork Extension Showing Intersect Overlap with Roadless Area and Denver Water Rights-of-Way

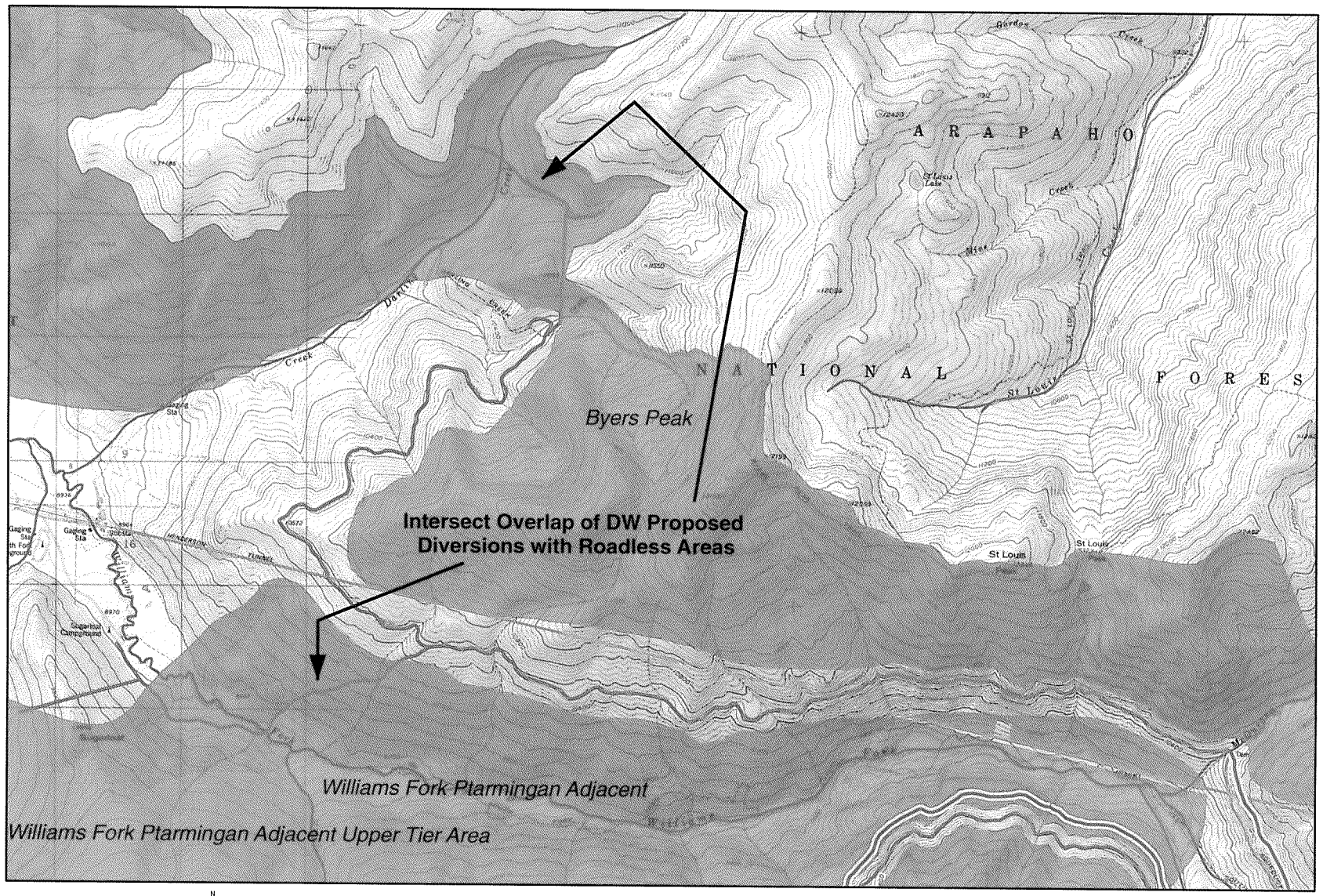

Figure 3

N

S

Scale 1:48,000

0 0.25 0.5 1

Miles

Legend

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- Alternative 2 Upper Tier Area
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COR 672

Williams Fork Extension Showing Intersect Overlap with Roadless Areas and Denver Water Rights-of-Way

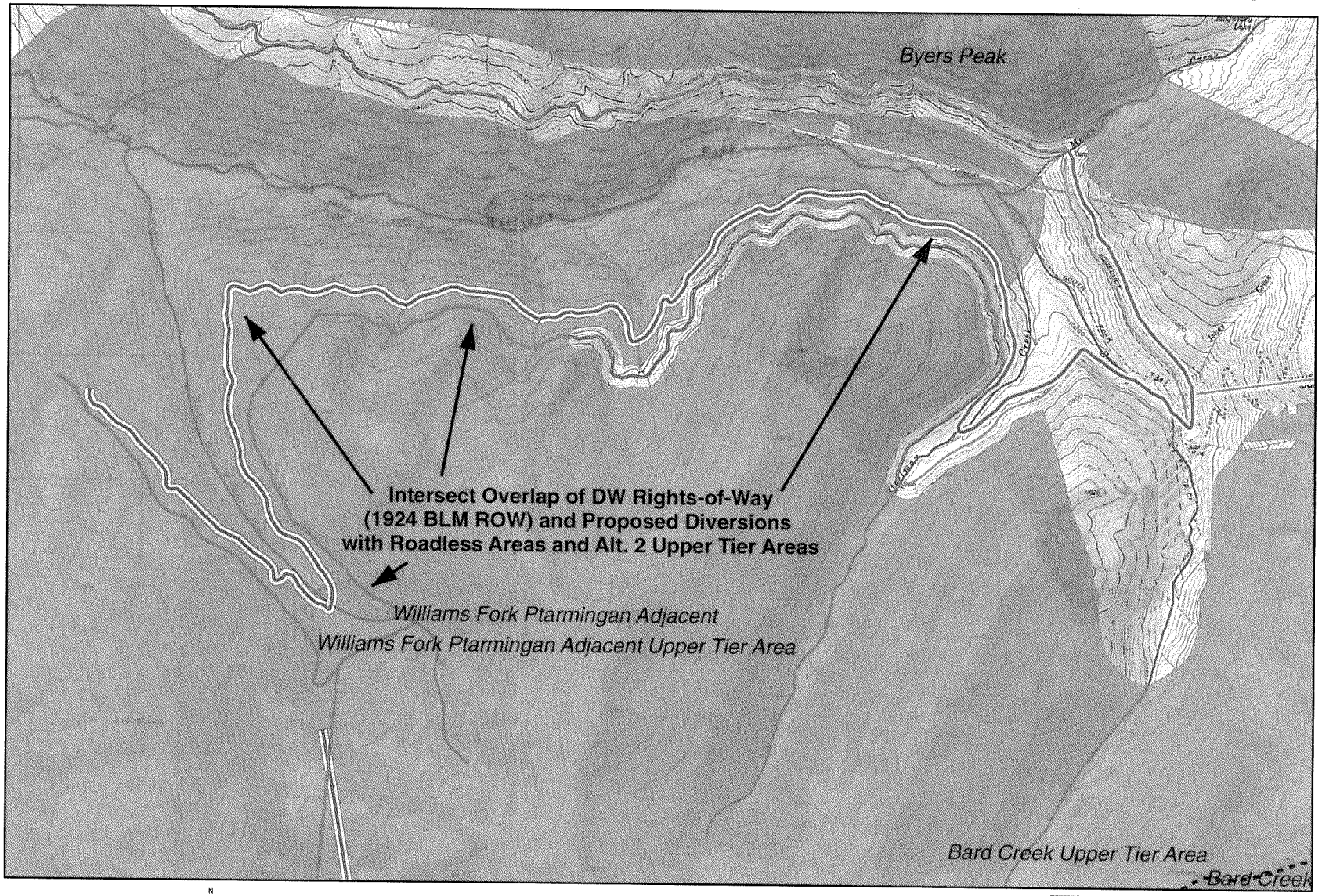

Figure 4

N

S

Scale 1:48,000

0 0.25 0.5 1

Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
- Continental Divide
- Denver Water Fee Simple Property
- Denver Water Right-of-Way (Acquired)
- Denver Water Proposed Reservoir
- Denver Water Proposed Diversion

Planning & Water Resources Division

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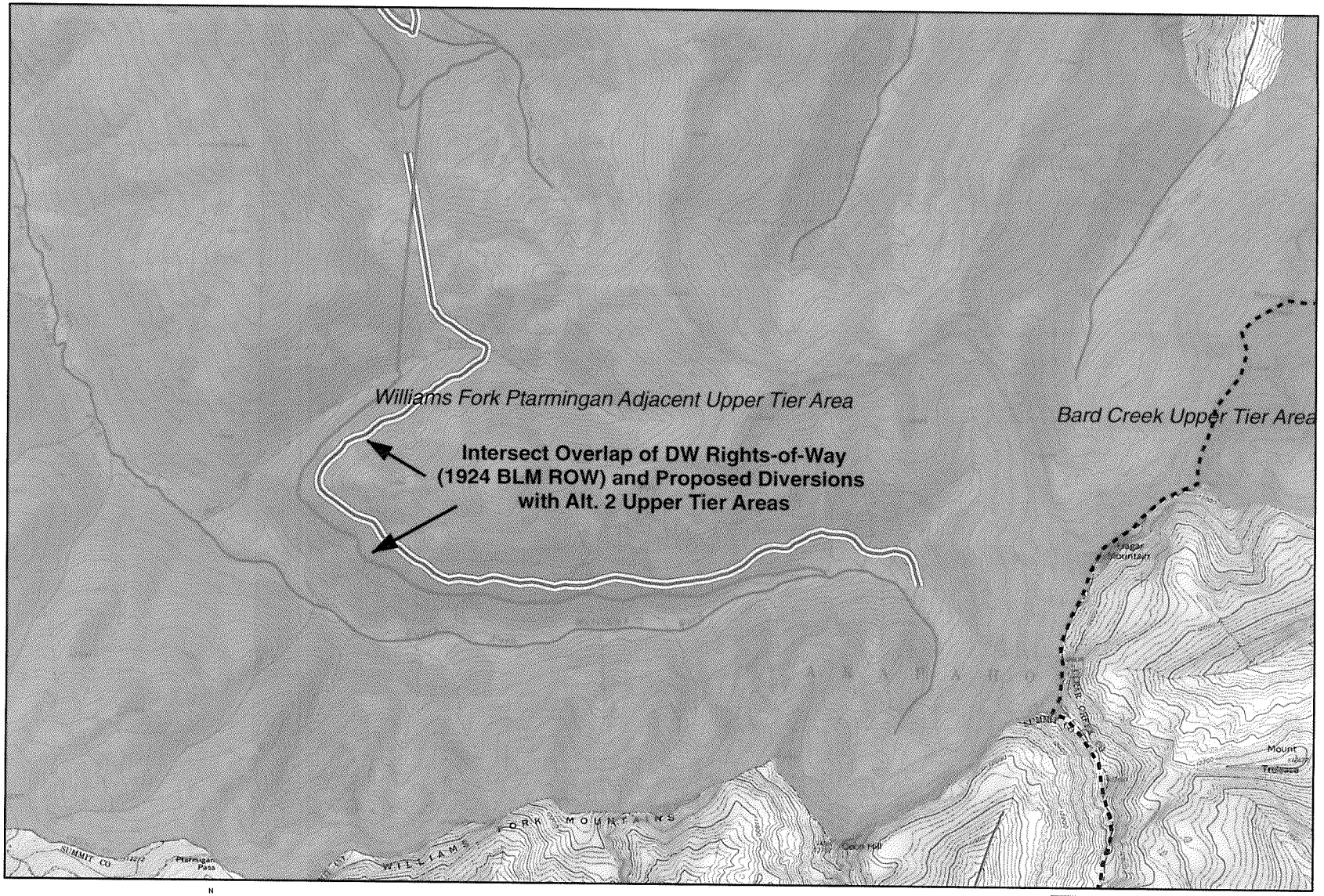

Figure 5

N

S

Scale 1:48,000

0 0.25 0.5 1

Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
- Continental Divide
- Denver Water Fee Simple Property
- Denver Water Right-of-Way (Acquired)
- Denver Water Proposed Reservoir
- Denver Water Proposed Diversion

Planning & Water Resources Division

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COR622

Roberts Tunnel Collection System Area Showing Intersect Overlap with Denver Water Rights-of-Way

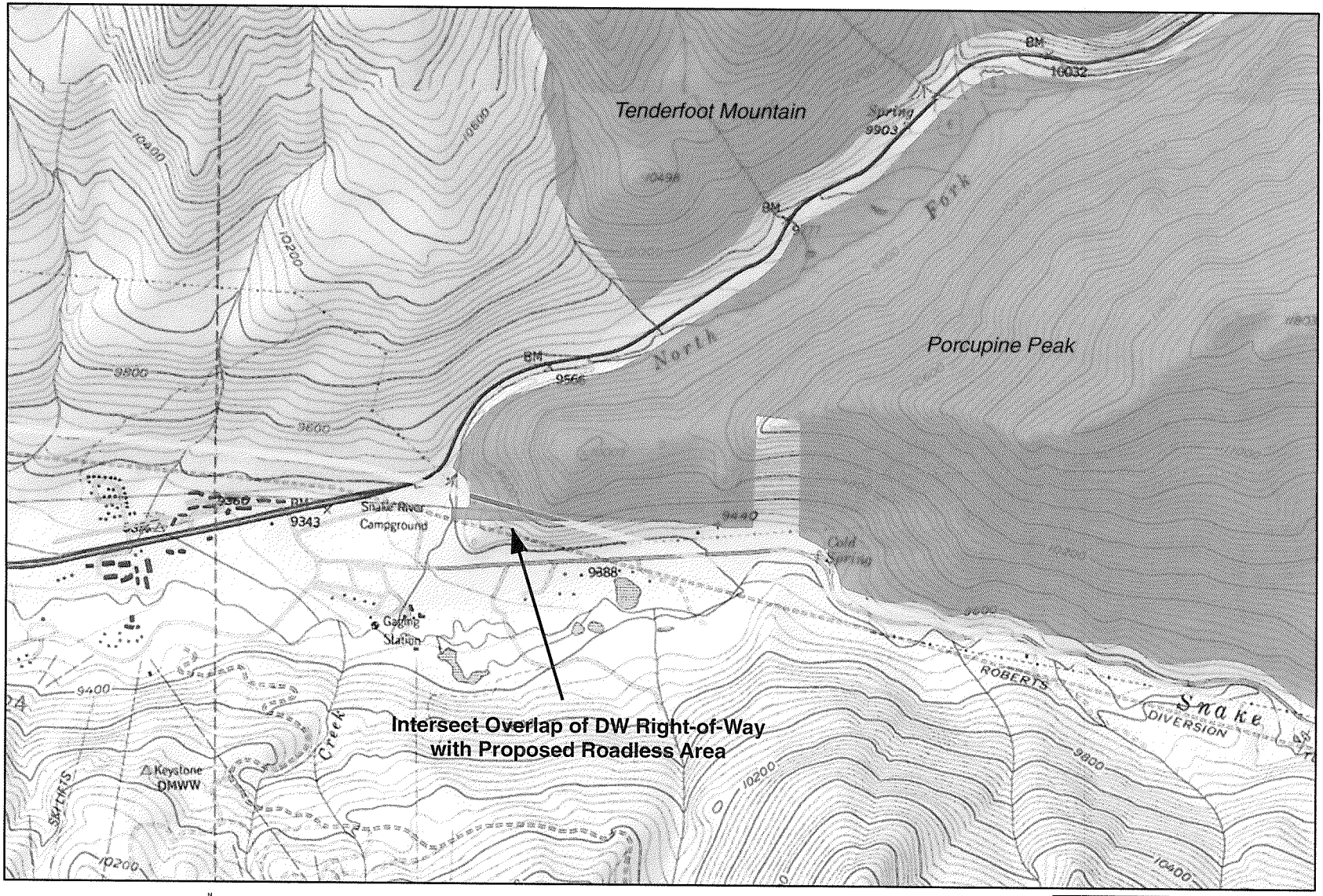

Figure 6

N

S

Scale 1:24,000

0 0.125 0.25 0.5

Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
- Continental Divide
- Denver Water Fee Simple Property
- Denver Water Right-of-Way (Acquired)
- Denver Water Proposed Reservoir
- Denver Water Proposed Diversion

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CoR 672

Roberts Tunnel Collection System Showing Intersect Overlap of Proposed Roadless Areas with Denver Water Rights-of-Way

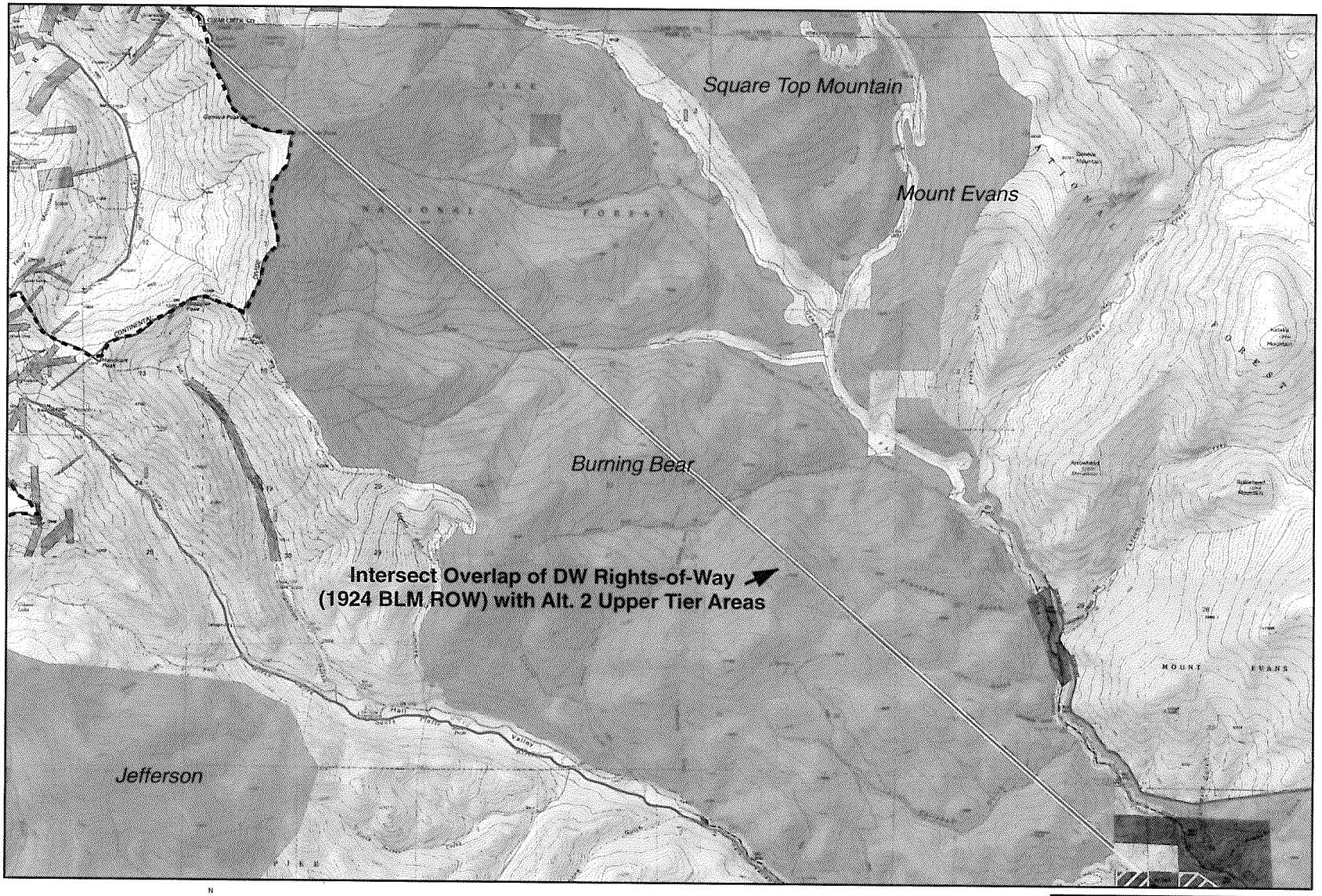

Figure 7

N

S

Scale 1:80,000

0 0.375 0.75 1.5

Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
- Continental Divide
- Denver Water Fee Simple Property
- Denver Water Right-of-Way (Acquired)
- Denver Water Proposed Reservoir
- Denver Water Proposed Diversion

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COR672

Piney Lake Area Showing Intersect Overlap with Denver Water Properties (2009 vs. 2011 DW mapping)

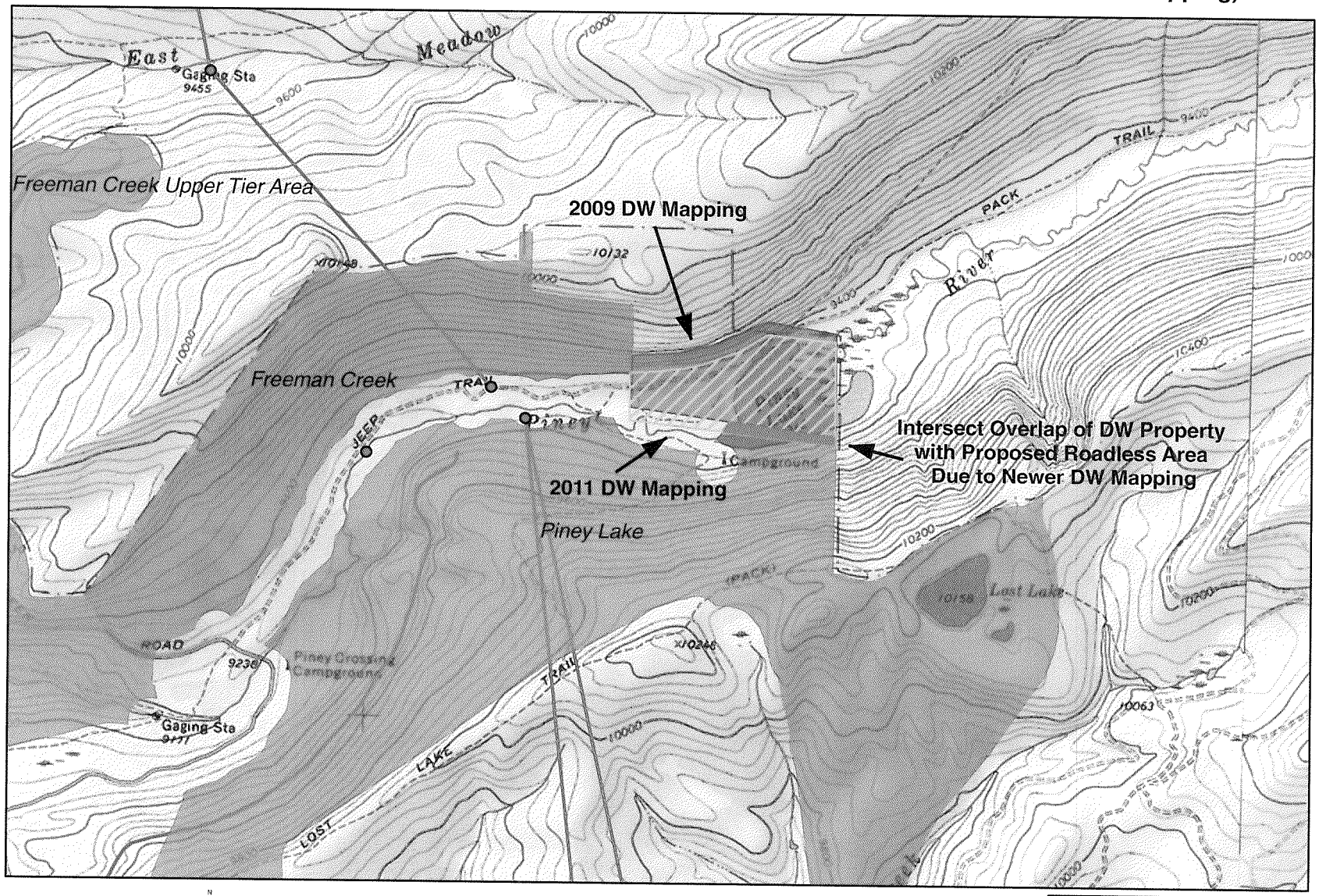

Figure 8

Scale 1:24,000

0 0.125 0.25 0.5 Miles

Legend

- CO Proposed Roadless Area
- Alternative 2 Upper Tier Area
- Continental Divide
- Denver Water Fee Simple Property
- Denver Water Right-of-Way (Acquired)
- Denver Water Proposed Reservoir
- Denver Water Proposed Diversion

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July 2011

CGR672

COR673.

From: Joel Webster [jwebster@trcp.org]
Sent: Thursday, July 14, 2011 5:04 PM
To: COcomments
Subject: TRCP Proposed CO Roadless Rule Comments
Attachments: TRCP Proposed CO Roadless Rule Comments 7_14_2011.pdf

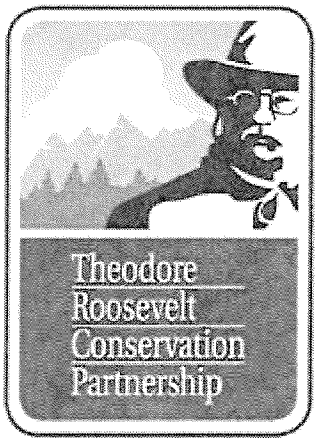
Dear Colorado roadless rule planning team.

Please find TRCP's attached comments on the proposed CO roadless rule.

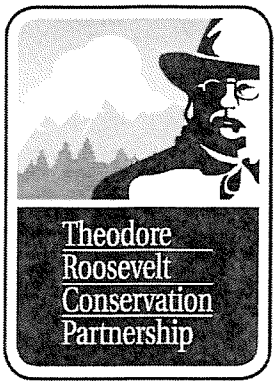
Thanks

Joel

Joel Webster
Director - Center for Western Lands
Theodore Roosevelt Conservation Partnership
8 Carriage Way
Missoula, MT 59802
406.360.3904



COR673



July 14, 2011

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

RE: COMMENTS - PROPOSED COLORADO ROADLESS RULE

Dear Colorado Roadless Rule planning team:

The Theodore Roosevelt Conservation Partnership (TRCP) is a national non-profit conservation organization (501-3c) that is dedicated to guaranteeing every American quality places to hunt and fish. The TRCP is a partnership of hunting, fishing and conservation organizations, labor unions and individual grassroots partners who represent a wide spectrum of America's outdoor community. Many of our individual partners work and live in Colorado, hunting and fishing the national forest public lands every year. We appreciate this opportunity to comment on the Proposed Colorado Roadless Rule and ask that you consider our recommendations for adoption into the final rule.

IMPORTANCE OF SAFEGUARDING ROADLESS AREAS

National forest roadless areas provide numerous benefits to fish, wildlife and sportsmen. Roadless areas provide large blocks of exceptional habitat for big-game animals such as mule deer, elk, moose, bears, bighorn sheep and mountain goats. While roads are important for enabling sportsmen's access to the lands where they hunt and fish, too many roads have been proven to decrease secure habitat while increasing species' vulnerability to overharvest. Fewer mature animals can be the result and can lead to diminished hunting opportunities, shorter seasons and fewer available tags.

Roadless areas also are strongholds for some of Colorado's last remaining native fish populations, and provide unrivaled opportunities for anglers to fish for Rio Grande cutthroat, greenback cutthroat, and Colorado river cutthroat trout. Too many roads can increase sediment loads in waterways and lower the quality of spawning habitat, decreasing the likelihood that these native trout and fishing opportunities can be sustained.

In an increasingly crowded world, roadless areas will help to provide long-term public hunting opportunities and the means for sportsmen to escape crowds and experience solitude. These areas are important not only to sportsmen who hunt and fish deep in the backcountry. Easy access to backcountry areas via adjacent roads and trailheads enables high-quality hunting and fishing even to sportsmen who stay close to their vehicles.

According to reports published by Southwick Associates, fishing and hunting annually contribute more than $190 billion to our nation's economy and more than $1.8 billion to Colorado's economy. Conscientious roadless area management can maintain strong economic engines in rural communities and continue to supply stable jobs associated with hunting, fishing and other outdoor recreation. Businesses that provide services and products to sportsmen – everything from guide and outfitter services to sporting goods stores, motels, grocery stores and gas stations – are the lifeblood of many small towns. These businesses depend on responsible roadless area management through a strong Colorado roadless rule.

STANDARD FOR THE COLORADO ROADLESS RULE

Sportsmen have been meeting with representatives from the state and U.S. Forest Service throughout the development of the Colorado roadless rule. This issue is important to our constituency because Colorado possesses world class public land hunting and fishing opportunities.

Similar to a written statement made by USDA Secretary Vilsack in April of 2010, sportsmen believe that Colorado's roadless areas must be conserved at a level, on balance, that is equal to or stronger than the protections afforded by the 2001 national rule. While improved over previous versions, the proposed Colorado rule does not live up to that standard.

We believe that the Colorado rule can be as strong as the national roadless rule if the recommendations offered in these comments are incorporated into the final rule. This level of safeguards must be achieved for the Colorado rule to adequately conserve the 4.2 million acres of roadless areas in the Centennial State.

COAL MINING AND CURRANT CREEK

TRCP appreciates the removal of the 10,800 acre Currant Creek roadless area from the N. Fork coal mining exceptions. This area provides high value elk winter and summer range, elk and mule deer migration corridors, key breeding habitat for elk and wild turkey, and prime black bear habitat. Currant Creek is not close to any other coal operations nor have the mineral rights been leased – it is inappropriate for the N. Fork coal mining exceptions.

We not only ask that you safeguard Currant Creek from coal mining, but that the area be elevated to upper tier status in the final Colorado roadless rule. With virtually no motorized use and high hunter participation for mule deer, Currant Creek is a high value roadless area that deserves long-term safeguards. Further, Currant Creek provides important economic benefits to local outfitters and protecting the surface values of this roadless area will contribute to the local hunting and fishing based economy.

GAP LEASES

TRCP remains concerned about the implications that the Colorado roadless rule could have on oil and gas leases sold after Jan. 12, 2001 that do not have surface use stipulations with road building prohibitions.

The TRCP is working to ensure the responsible development of our mineral resources. We believe that responsible energy development in national forest roadless areas means, at a minimum, that the surface

values of all roadless areas should be safeguarded from roadbuilding during the development of oil and gas resources.

The proposed Colorado roadless rule has the potential to allow road building for the development of 70,000 acres of gap leases that were sold after the promulgation of the 2001 Roadless Area Conservation Rule.

As stated in the Nov. 29, 2006, 9th District Court relief order and upheld in the 9th Circuit Court of Appeals, these gap leases were issued without the required stipulations and the court ordered that surface use in roadless areas for the development of gap leases be restricted.

> The 2001 Roadless Rule shall apply to activities commenced hereafter with respect to any and all mineral leases in IRAs in National Forest lands not affected by the Tongass Amendment that issued after January 12, 2001. The Forest Service is enjoined from approving or allowing any surface use of a mineral lease issued after January 12, 2001, that has not already commenced on the ground and which would violate the Roadless Rule...[1]

However, because these surface use restrictions aren't included in the stipulations for each lease parcel, the language provided in § 294.43 (c) (1) (viii) of the proposed Colorado roadless rule could eliminate the requirement that these parcels be developed in accordance with the RACR.

The primary concern is that the effective date for these required stipulations will move from Jan. 12, 2001 to a future date when the Colorado roadless rule record of decision is signed. Any parcels sold prior to the effective date of the Colorado rule without road building prohibition stipulations attached to the lease could potentially become available for road building to develop oil and gas resources.

We request that language be added to the Colorado roadless rule to ensure that the rule does not abrogate or otherwise have any effect on legally binding surface use restrictions that apply to oil and gas leases sold prior to the effective date of the CO rule.

ALLOWING RESTORATION WHILE MAINTAINING ROADLESS CHARACTERISTICS

Many of TRCP's partners conduct on-the-ground restoration projects, such as aspen regeneration, to maintain habitat diversity that benefits fish and game and many other species of fish and wildlife that require early successional habitat. We recognize the importance of this work for our fish and wildlife resources and believe it can be achieved in CRAs using carefully planned projects **under the following language in the rule: "Tree-cutting, sale, or removal is needed to maintain or restore the characteristics of ecosystem composition, structure and processes for the purposes of fish and wildlife conservation. These projects are expected to be infrequent."** This language should replace §294.42(c)(3) and be added to 294.42(b).

However, TRCP and many of our partners also want to ensure the long-term conservation of our national forest roadless areas and want to ensure that the rule's timber cutting exceptions are used in ways that do not negatively impact roadless area characteristics and fish and wildlife habitat. **We recommend that language be included in the final rule specifying that at §294.42(c)(1) through (4) and 294.42(b), "more than one roadless**

[1] People of the State of California vs. the United States Department of Agriculture. United States District Court Northern District of California. Page 13. Nov. 29, 2006.

area characteristic will be maintained or improved" and these projects will be developed in "coordination with the Colorado Division of Wildlife."

UPPER TIER

Inclusion of high value fish and wildlife habitat

The upper tier category helps to balance narrowly defined exceptions in the CO rule such as coal mining, ski area development, and community protection zone logging. This is very similar to the "Primitive" and "Wild Land Recreation" categories used to balance development allowances in the Idaho roadless rule. While important, the preferred alternative (alt. 2) acres are limited to areas where forest plans already prohibit road building and tree-cutting. Considering these acres as upper tier does not address key fish and wildlife habitat nor does it illustrate a commitment by the Forest Service to go beyond their current plans and create a truly protective rule.

As drafted, about 13% of the overall acreage in the proposed Colorado rule is upper tier while Idaho upper tier areas represent about 33% of the overall acreage. Further, it should be pointed out that the draft rule proposes no land for upper tier on the Pike-San Isabel National Forest and only .02% of the Inventoried Roadless Areas on the Rio Grande National Forest.

In order for the Colorado rule to be success, the upper tier category should include the Colorado roadless areas with key fish and wildlife habitat and high quality hunting and fishing. **We ask that the final Colorado roadless rule upper tier category include the 1.47 million acres of CRAs recommended by TRCP and several other organizations on July 14, 2011 in the document titled "CO RR Upper Tier Sportsmen Recommendations Final"** These recommendations are also accompanied by a spreadsheet titled, "Sportsmen Upper Tier Criteria Ranking," PDF maps entitled, "Arapaho-Roosevelt Sportsmen Upper Tier Map," "GMUG Sportsmen Upper Tier Maps," "Pike-San Isabel Sportsmen Upper Tier Map," "Rio Grande Sportsmen Upper Tier Map." "Routt Sportsmen Upper Tier Map," "San Juan Sportsmen Upper Tier Map" and "White River Sportsmen Upper Tier Map." Due to their large file size, the GIS shapefiles used in the mapping will be sent to the Region 2 Planning Team and Acting Deputy Regional Forester, Randy Karstaedt. **We also recommend that all 562,000 Alternative 2 upper tier lands included in the proposed rule maintain their upper tier status in the final rule.**

Linear Construction Zones

The upper tier category is intended to be protective of the highest value lands, yet it allows for linear construction zones (LCZ) for the development of oil and gas pipelines, electrical power and telecommunications lines and water conveyance structures. Such exceptions are contrary to the spirit of the upper tier category and should be eliminated from the final Colorado roadless rule. Upper tier LCZ exceptions should be limited to circumstances required by reserved or outstanding rights.

We recommend that the LCZ regulatory language at § 294.44 be changed to the following:

§ 294.44 Prohibition on linear construction zones.

(a) *General.* A linear construction zone may not be constructed or reconstructed in Colorado Roadless Areas except as provided in paragraphs (b) and (c) of this section.

(b) *Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, a linear construction zone may only be constructed or reconstructed in Colorado Roadless Area upper tier acres if the Responsible Official determines that:

(1) A linear construction zone is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty.

(c) *Non-Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, the Regional Forester may authorize a linear construction zone within a Colorado Roadless Area outside upper tier acres for:

Surface Occupancy for Leasable Minerals

Again, the upper tier category is intended to be most protective of the highest value CRAs, yet the surface occupancy of oil and gas development is allowed in upper tier areas. Given the rapidly changing technologies of oil and gas development, there can be no assurances that the surface values of roadless areas will be conserved unless no surface occupancy stipulations are applied to all leases sold in areas designated as upper tier. Further, upper tier areas in the Idaho roadless rule received NSO protections and the Colorado roadless rule should do the same to replicate the success of the upper tier concept.

We recommend that the following language be included in the CO rule to ensure NSO stipulations in areas designated as upper tier:

§ 294.46 Other Activities.

For mineral leases, contracts, permits, and other associated activities authorized after the effective date of this subpart the Forest Service will not recommend, authorize, or consent to road construction, road reconstruction, linear construction zones, or surface occupancy associated with mineral leases in Colorado Roadless Areas designated as upper tier.

Common variety minerals in upper tier

TRCP is also concerned about the mining of common variety minerals in areas identified as upper tier. Gravel pits diminish roadless area characteristics and the backcountry recreation experience - this loophole should be closed in areas designated as upper tier. The extraction of common variety minerals was prohibited from areas in the Primitive and Wild Land Recreation themes in the Idaho roadless rule and we believe the same approach should be followed in Colorado.

We recommend that the following language be included in the Colorado rule:

§ 294.46 Other Activities

Common Variety Minerals. After [final rule effective date], the Forest Service will not authorize the sale of common variety mineral materials in Colorado roadless acres designated as upper tier.

If the forest service is unwilling to prohibit common variety mineral withdrawal in upper tier areas, it should instead prohibit commercial entry for common variety minerals and only allow entry for non-commercial uses.

LINEAR CONSTRUCTION ZONES

Placement of LCZs

As written, the proposed Colorado roadless rule provides no direction for the placement of LCZs in proximity to linear facilities. This could potentially lead to LCZs switchbacking up a mountain or approach linear facilities from a perpendicular angle. In order to provide certainty that LCZs will in-fact follow linear facilities, the Colorado roadless rule should require LCZs to be located entirely within rights-of-ways to minimize surface disturbance and conserve the surface values of roadless areas. Allowing LCZs to be constructed outside of rights-of-ways creates opportunities for land managers to essentially create temporary roads under the name of LCZs.

We recommend that the LCZ regulatory language be changed to the following:

> § 294.44 Prohibition on linear construction zones.
>
> (c) *Linear construction zone decommissioning.* Where a linear construction zone is constructed in a Colorado Roadless Area, installation of the linear facility will be done in a manner that minimizes ground disturbance and shall be located entirely within rights-of-ways.

LCZ Definition

The Colorado roadless rule will be the first place where the LCZ is officially termed and defined by the forest service. It his highly likely that the term and definition for LCZs used in the Colorado rule will be adopted by the forest service to be used in other planning documents and for other proposed actions. Specifically, because of the Bull Mountain Pipeline, it is likely that this term and definition will be used to plan projects in inventoried roadless areas under the parameters of the 2001 roadless rule. Because of the big implications this term and definition could have on subsequent planning and management activities, it is very important that the LCZ definition be as narrow and clear as possible to ensure that it isn't used in unintended ways.

We recommend that the definition in §294.41 of the proposed Colorado rule for an LCZ be changed to:

> A temporary linear area of surface disturbance located within a right-of-way that is used for motorized transport by vehicles or construction equipment to install a linear facility. It is not used as a motor vehicle route and is not engineered to road specifications.

This recommendation makes two key changes. 1st – it specifies that LCZs will be located within rights-of-ways to ensure that LCZs do not deviate from the path of the linear facility and 2nd – it eliminates the specification that LCZs are over 50" wide. Given that LCZs are neither a road nor a trail, the 50" distinction should be eliminated from the definition.

Defining substantially greater environmental damage

The decision tree that is intended to determine if an LCZ should be built within a roadless area lacks clarity and has the potential to lead the Forest Service towards inconsistent decision making. Specifically, the term "substantially greater environmental damage" is not defined, making it difficult for the Forest Service to make consistent decisions when denying and allowing LCZs at § 294.44 (b)(2) and (3).

It is easy to imagine a situation where a roadless mountain range lies between one utility installation and another and the company would have to go all the way around the mountain range, deal with multiple land owners and agencies, and incur much greater costs than simply building the utility over the range. The

company could then argue, and would have the financial and other motivations to do so, that by going over the range it would cause less environmental damage. If the Forest Service disagreed, they would have no supporting language in the rule to substantiate their claim.

The rule should provide a clear guidance for the Forest Service to determine when a situation exists where substantially greater environmental damage will occur if an LCZ is prohibited from a roadless area.

CONCLUSION

Thank you for this opportunity to comment on the Proposed Colorado Roadless Rule. We believe that, if adopted, our recommendations will help ensure the success of the final rule. We stand ready to provide additional assistance as this process moves forward with the interest of creating a Colorado roadless rule that conserves roadless areas for the benefit of fish, wildlife, sportsmen and all Americans.

Sincerely,

Joel A. Webster
Director - Center for Western Lands
Theodore Roosevelt Conservation Partnership
8 Carriage Way
Missoula, MT 59802

COR674.

From: clearcreekec@earthlink.net
Sent: Thursday, July 14, 2011 2:59 PM
To: COcomments
Subject: Clear Creek Economic Development Corp. CRA Comments
Attachments: Roadless rule comment letter (00236301-3).DOC

Please find attached Clear Creek Economic Development Corporaton's comments on the CRA. Maps will be sent in a second email. Postal Service original will be postmarked today 7/14.

Peggy Stokstad
CCEDC

COR674

Clear Creek
ECONOMIC
DEVELOPMENT
CORPORATION

P.O. Box 2030, 502 6th St., Georgetown, Colorado 80444 303.569.2133 www.clearcreekedc.org

July 14, 2011

VIA E-MAIL
COCOMMENTS@FSROADLESS.ORG

Forest Service, U.S.
Department of Agriculture
Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

Re: Proposed Colorado Roadless Rule
76 FR 21272

Dear Forest Service Representatives:

EXECUTIVE SUMMARY

The Clear Creek Economic Development Corporation is the prominent economic development organization in Clear Creek County and is focused on business development strategies and issues that impact the growth of the local economy. CCEDC works closely with the Clear Creek County Board of County Commissioners, the business community, and the Clear Creek Watershed Foundation to maintain a healthy economic and natural environment.

CCEDC appreciates the efforts of the Forest Service in managing the Arapaho-Roosevelt and Pike National Forests within Clear Creek and Gilpin Counties, and in particular its efforts with the State of Colorado in developing a Colorado Roadless Rule ("Rule"). We appreciate the opportunity to provide comments on the proposed Colorado Roadless Rule as outlined in Alternative 2 in the Federal Register notice (76 FR 21272) and the Rulemaking for Colorado Roadless Areas Revised Draft Environmental Impact Statement ("DEIS").

We believe as a general matter that the Rule and the proposed Colorado Roadless Areas ("CRAs") should give greater consideration to protecting and enhancing forest and watershed health on a landscape level as the best method of preserving roadless area characteristics. Further, the CRA boundaries should be revised to provide greater separation from, and thus opportunities for realization of, renewable energy opportunities. CCEDC also supports the comments of the Clear Creek County Board of County Commissioners and the Clear Creek Watershed Foundation.

RESTORATION OF FOREST AND WATERSHED HEALTH

In recognition of its overwhelming benefits to a much broader section of society, the dominant theme of current Forest Service and Department of Agriculture management is the restoration of forest and watershed health. As stated by Secretary Vilsack: "Our shared vision begins with restoration. Restoration means managing forest lands first and foremost to protect our water resources, while making our forests more resilient to climate change." *Secretary of Agriculture Tom Vilsack, Seattle, Washington, August 14, 2009.* The proposed Colorado Roadless Rule so restricts the use of management options or increases their costs within CRAs, and especially the upper tier areas, that in almost all cases forest and watershed health projects will be conducted outside the CRAs. The CRAs will become neglected areas, where necessary restoration of the National Forest ecosystems is prohibited, either expressly or as a practical matter from a need to prioritize limited management funds to areas where they can achieve the greatest results.

The proposal's limitations on management options are at the risk of losing the very characteristics used to define roadless areas. The DEIS and the Colorado petition incorrectly assume that tree-cutting, sale or removal, and road construction/reconstruction have the greatest likelihood of altering and fragmenting landscapes, resulting in immediate, long-term loss of roadless area values and characteristics. Landscape level disturbances at unnatural levels, including insect and disease outbreaks and catastrophic wildfire, resulting from and resulting in degraded forest health pose a much greater threat. No road within the Hayman burn area has created greater sedimentation, stream degradation, invasive plant species invasions, landscape alteration and overall loss of roadless area characteristics than has been created by the Hayman Fire. The Hayman Fire is more representative of large Colorado wildfires over the last 20 years than the exception, and the resulting negative effects on roadless characteristics within these other large burn areas is also true. A focus on protecting and restoring forest and watershed health in general and to reduce the risk of large and damaging wildfires, and providing for effective and cost efficient post-fire forest and watershed recovery, will better serve the goals of protecting roadless characteristics than broadly defining CRA boundaries and restricting management tools. Such focus will also best protect our communities and their watersheds.

The restrictions on management within the Community Protection Zones (CPZs) are particularly troublesome. Limiting temporary roads to 1/2 mile from a CPZ ignores the need to focus on improving forest and watershed health. As noted in the DEIS (page 94), tree cutting costs often increase substantially with the distance of a project from a

road. The same is inherently true of virtually all forest health restoration activities. Honestly, but unfortunately, the DEIS recognizes that the Rule "is ***unlikely*** to substantially improve forest health and hazardous fuel conditions overall . . . [and] [t]he upper tier CRA acres would ***preclude forest health treatments involving tree-cutting*** and may thereby lead to larger areas of dead trees, and ***potentially larger and more damaging wildfires***." ***DEIS at 95 (emphasis added).***

The restrictions run counter to the protection of roadless characteristics by preventing the restoration of healthy forests that are resistant to insects, disease, and invasive species. "***[C]umulative restrictions would reduce the ability to achieve some desired conditions of healthy forests and fire hazard reduction***." ***DEIS at 97(emphasis added)***. The DEIS recognizes that wildfire creates "an opportunity for invasive plant invasion," and once invasive plants are established, their detrimental effects on resource values "may persist for decades or perhaps indefinitely." ***DIES at 97(citation omitted).*** However, the DEIS arbitrarily fails to consider that large fires, which it predicts will result from limiting forest health restoration options, will directly result in increased invasive plant species. ***DEIS at 97 – 101.***

The DEIS acknowledges that "a combination of mechanical and fire treatments [are] the most effective in reducing fire severity." ***DEIS at 110.*** "The inability to conduct vegetation treatments to create defensible fuels profiles in the WUI/CPZ and in areas outside of the WUI/CPZ could result in an ***increase in fire suppression costs, property loss, and other economic impacts***. . . . Larger and more damaging fires may result in the need for ***extensive and costly restoration and rehabilitation*** needs within roadless areas. The higher severity and larger fire size could result in ***increased adverse post fire effects due to erosion and slower vegetation recovery on lands near community watersheds or infrastructure***." ***DEIS at 111(emphasis added).*** Thus, the results of the Rules limitations on management options within the CPZ will work to defeat the purpose of the Rule in preserving roadless area characteristics.

Considering the CPZ area as potentially a 1.5 mile management zone is largely a fallacy. "The additional conditions that extend the CPZ beyond 0.5 miles are specific and ***may not allow for many additional treatments outside the 1/2 mile portion*** of the CPZ." ***DIES at 112(emphasis added).*** There is no tree cutting allowed within the upper tier acres, and outside the CPZ but not within upper tier acres although trees can be cut to reduce the wildfire hazard to a municipal water supply, temporary roads are allowed only within the first 0.5 miles of the CPZ, ***DIES at 112.*** As noted previously, prohibiting temporary roads will make treatment costly, and therefore unlikely. All treatments require focusing on small diameter trees, ***DIES at 112,*** which will prevent the realization

of economic return to offset treatment costs, even where large trees are dying or dead because of insect and disease outbreak or fire, and especially in areas where temporary roads are not allowed.

The DEIS elevates the two tree cutting exceptions to a determination by the Regional Forester. ***DEIS at 14, 15.*** Elevating this decision to the Regional Forester removes a management decision that is to be based on local conditions and impacts from Forest Service personnel best informed to make the decision, to an administrator far away from the field. Such a centralized bureaucratic management model is not in the best interest of the public, the National Forests or the Forest Service.

The distances applied to restricted management options near CPZs are themselves arbitrary and insufficient for protecting resource values, communities, and roadless characteristics. "[C]ritical locations outside the 0.5 mile CPZ may not be treated due to the limitations on temporary road construction," resulting in a "higher risk of a high-severity wildfire" ***DIES at 113.*** Temporary road construction is allowed within 0.5 miles of the CPZ, which may be extended to 1.5 miles where steep slopes create the potential for wildfire behavior endangering at-risk communities or geographic features aid in creating an effective fire break. However, "under moderate fire weather conditions, gusts of 20 mph produce spotting distance of over 1/2 mile and . . . under the influence of stronger gusts, such as those experienced from passing thunderstorms, spotting distances in excess of 1.5 miles are possible from groups of subalpine fire and lodgepole pine. Therefore the ***1/2 mile may not be sufficient for community protection goals*** as spotting could easily breach the treatments. ***There may be critical locations in fire pathways that cannot be treated outside the CPZ***. ***Suppression opportunities would be impacted*** by restrictions on tree-cutting and road construction. . . In the event of a wildfire, there could be the ***need for extensive and costly restoration and rehabilitation***. Intermediate levels of treatments for maintenance and restoration of ecosystem composition and structure ***may lead to more dead trees and higher severity wildfires*** . . ." ***DIES at 113.***

A healthy, natural forest ecosystem, with its species and age class diversity, stocking levels and mosaics provides pure water and is more resistance to large scale disease, insect epidemics and stand replacement wildfire. While extreme disturbances are always possible, their frequency and magnitude can be reduced by management focused on improving watershed health with the least amount of environmental degradation. The Colorado Roadless Rule should direct management emphasis at forest and watershed health as the best means of protecting and enhancing roadless characteristics. The boundaries of the CRAs within Clear Creek County should be removed to at least the tops of the divides above the watersheds within which each of the

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County's communities lies, or the Rule revised to allow all management options necessary to provide for restoring forest and watershed health. Also, to provide the greatest opportunities for improving the health of the CRAs, local Forest Service managers must retain authority for determining appropriate management and protection instead of elevating such decisions to the Regional Forester.

PRESERVING RENEWABLE ENERGY OPPORTUNITIES

As concerns renewable energy, the delineated proposed CRAs' boundaries and the Rule itself are backwards looking, resulting in no consideration of the potential for renewable energy development. This is particularly confusing in relation to wind and solar energy development potential within Clear Creek County that has been identified by the U.S. Department of Energy's National Renewable Energy Laboratory ("NREL").

As you are aware, the January 2005 joint report by the Forest Service and NREL, Assessing the Potential for Renewable Energy on National Forest System Lands ("Renewable Energy Assessment"), identified and evaluated the potential for solar and wind energy resource development on National Forest System lands, identifying National Forest System lands with high potential for solar and wind development. The Renewable Energy Assessment identified the Arapaho-Roosevelt National Forest, as having the fifth greatest potential for renewable wind energy development among all National Forest units. Areas within the Arapahoe-Roosevelt National Forest were also identified as having a high potential for solar energy development. The high national ranking for the Arapahoe-Roosevelt National Forest, including areas within Clear Creek County, by the Renewable Energy Assessment resulted despite it excluding from its analysis all areas that were included within the 2001 Roadless Rule.

To gain a more complete picture of renewable energy development within Clear Creek County, the Board of County Commissioners teamed with NREL to evaluate the wind and solar energy development potential on all lands within Clear Creek County that are available for such development under County land use regulations. This follow-up analysis found significant areas within Clear Creek County that have high potential for both wind and solar energy development, and that are located within the areas now proposed as the CRAs. These areas are depicted on the map included with this letter as Exhibit A.

In evaluating bids for development of wind energy to meet the Colorado statutory Renewable Energy Standard (§40-2-124, C.R.S.), Public Service Company of Colorado has considered favorably the wind energy production from Clear Creek County:

- Expansion of their existing projects will cause communities to look to tying into the existing transmission lines running through Clear Creek County.
- Diversity of the mountain wind capture location, as compared to the existing wind sites in the eastern area of the State, has an advantage pertaining to transmission system reliability.
- Being directly connected to one of the nation's largest pumped storage locations at Cabin Creek Reservoir is an advantage. Line losses would be considerably less for power generated within Clear Creek County than for other more distant wind capture locations.
- The close association with the Denver transmission loop is an advantage for Clear Creek County wind capture locations.

***2011 Public Service Company of Colorado 200MW Wind RFP: Competitive Analysis of the Clear Creek County Bid vs. Short-listed Bids*, prepared by Clear Creek Watershed Foundation, April 6, 2011.**

Within Clear Creek County major electric transmission lines run up Cabin Creek, up Leavenworth Creek across to Summit County, and up the West Fork of Clear Creek into Grand County. The importance of these existing electric energy transmission corridors to Colorado and the entire west cannot be understated. Yet in numerous areas the proposed CRAs provide only the narrowest of corridors for these lines. The CRAs' boundaries and the Rule's prohibitions on linear construction zones ("LZAs") will prohibit any meaningful opportunities for future opportunities to utilize these existing corridors, and to connect them to the previously mentioned renewable energy generation sites.

For the above reasons, we strongly recommend that the CRA boundaries be realigned to exclude the areas of high potential for wind and solar energy development identified by NREL, and to exclude greater areas for existing major transmission corridors, as depicted on the map included with this letter as Exhibit B.

FURTHERING THE RECREATION AND TOURISM ECONOMY

Tourism is a major component of Colorado's economic base, with non-motorized tourism a small component of the overall tourism component. Tourism encompasses a cross section of economic sectors, though not reported as a separate economic sector. Accommodations & Food Services, along with Recreation Services, provide a reasonable indication of tourism activity. Visitors are drawn to Colorado year round, for the world-class skiing in the winter months, and the myriad of recreational activities and

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breathtaking scenery in the summer. Colorado's travel and tourism industry generated over $13.6 billion in 2009. Of this total, $9.73 billion was from domestic overnight visitors. The remainder was from international visitors, and day trips. This economic fuel provides private sector jobs, tax revenues, and financial resources to care for the National Forests.

In Clear Creek County tourism is the third largest economic sector after mining and public administration. Opportunities for the expansion of tourism infrastructure and providing for a healthy forest environment are high priorities for Clear Creek County. Forest Service management options should continue to afford management options which can take advantage of tourism opportunities while emphasizing protection and enhancement of forest health. Forest Service policy which overly restricts access and recreation options while preventing forest health improvement projects designed to prevent the ravages of erosion, insect and disease outbreaks and wildfire, could result in economically devastated communities in Clear Creek County.

CONCLUSIONS

The purpose of promulgating a Colorado Roadless Rule to protect roadless area characteristics is in many locations worthy. However, its goal will be defeated by its very restrictions, as repeatedly recognized by the DEIS. To better serve this goal, the Colorado Roadless Rule should focus on preserving management options designed to protect and restore forest and watershed health, and balanced tourism and recreation opportunities. This is especially true where forest health within proposed CRAs is directly tied to the physical and economic health of local communities such as Georgetown, Idaho Springs, Silver Plume, and Empire, and the major watersheds of Clear Creek. In the alternative, the major watersheds of these communities should be removed from the CRAs so that management for forest and watershed health can proceed unhindered, and the benefits of balanced tourism and recreation opportunities realized.

As regards development of renewable energy opportunities, green-energy development and forest management will be best balanced by removing these areas from the proposed CRAs and relying on Forest Land Management Plans to guide management decisions. Where existing energy transmission corridors exist, a greater buffer from the CRAs' boundaries will balance the proposed Colorado Roadless Rule's goal of preserving roadless area characteristics while recognizing the national importance of these transmission corridors.

Thank you for your consideration.

Sincerely,

Peggy Stokstad
President/CEO

enc.
cc: Board of Directors
Clear Creek Economic Development Corporation
Board of County Commissioners
Clear Creek County

From: clearcreekec@earthlink.net
Sent: Thursday, July 14, 2011 3:01 PM
To: COcomments
Subject: CCEDC CRA Maps
Attachments: Roadless Exhibit A.doc; Roadless Exhibit B.pdf

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Maps for written comments from CCEDC.

Peggy Stokstad

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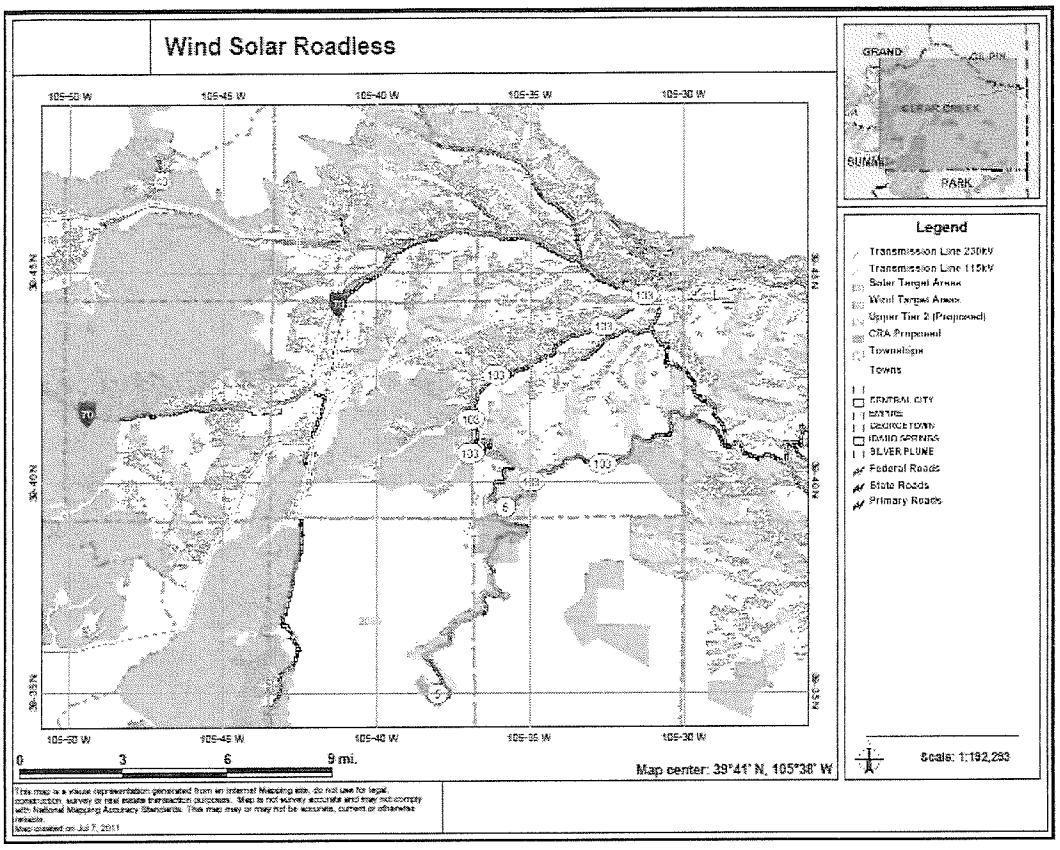
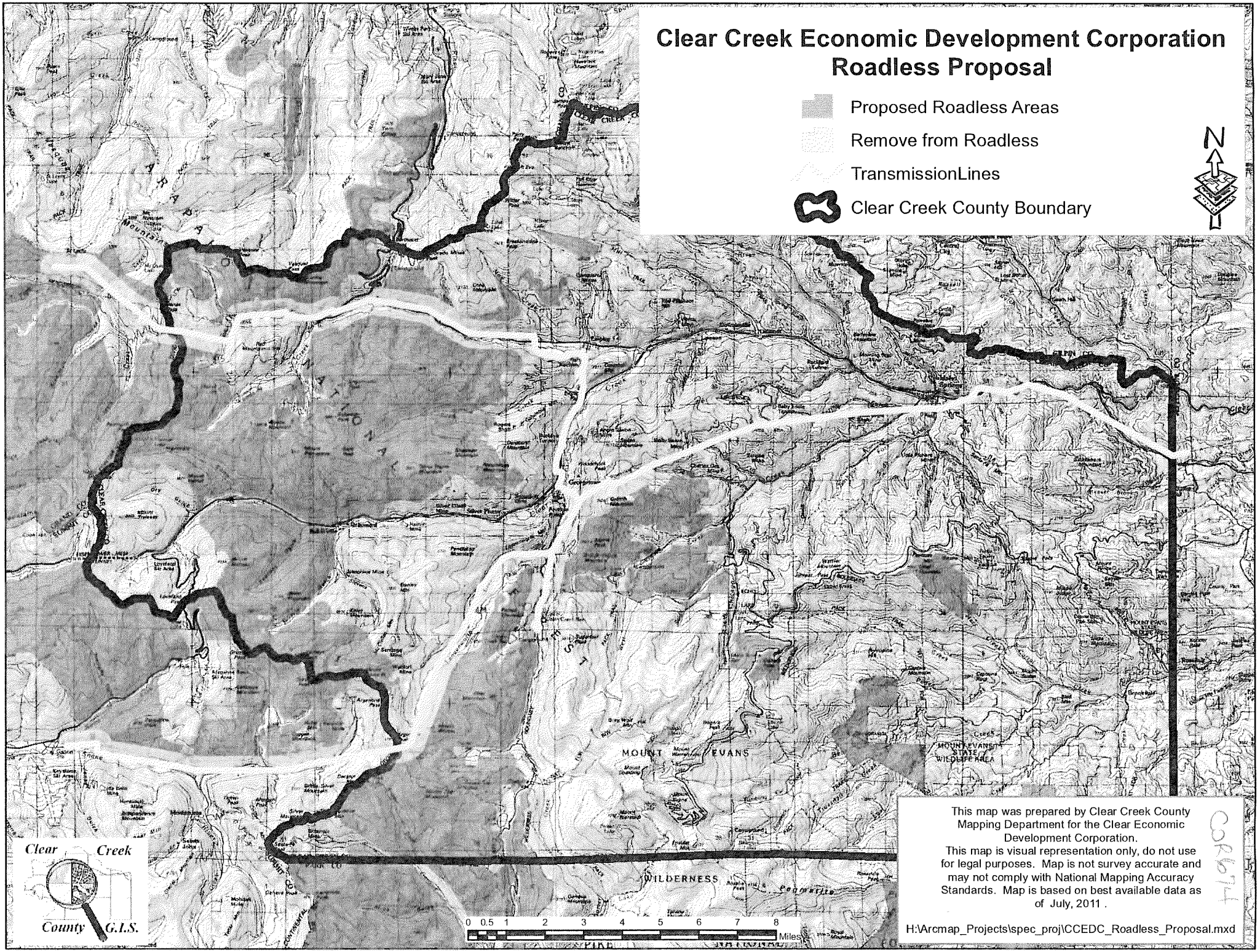


Exhibit A


Clear Creek Economic Development Corporation
Roadless Proposal
Proposed Roadless Areas
Remove from Roadless
TransmissionLines
Clear Creek County Boundary
N
MOUNT EVANS
MOUNT EVANS STATE WILDLIFE AREA
WILDERNESS
PARK CO
PIKE
Clear Creek County G.I.S.
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Miles
This map was prepared by Clear Creek County Mapping Department for the Clear Economic Development Corporation.
This map is visual representation only, do not use for legal purposes. Map is not survey accurate and may not comply with National Mapping Accuracy Standards. Map is based on best available data as of July, 2011 .
H:\Arcmap_Projects\spec_proj\CCEDC_Roadless_Proposal.mxd
CR671

COR675.

From: John Huebner [johnh@sanmiguelcounty.org]
Sent: Thursday, July 14, 2011 3:21 PM
To: COcomments
Subject: Colorado Roadless Rule on National Forest System (NFS) lands
Attachments: SMCBOCCColoradoRoadlessRuleonUSFSlands.pdf

Dear Forest Service Chief Tidwell and Colorado Roadless Rule Team:

Attached to this e-mail are the comments from the San Miguel County Board of Commissioners regarding Colorado Roadless Rule on National Forest System (NFS) lands. Thank you for your consideration.

John

John Huebner
Chief Deputy Clerk to the Board
San Miguel County
phone: 970-369-5429
facsimile: 970-728-3718
email: johnh@sanmiguelcounty.org
website: sanmiguelcounty

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SAN MIGUEL COUNTY

BOARD OF COMMISSIONERS

ELAINE FISCHER ART GOODTIMES JOAN MAY

VIA US MAIL AND E-MAIL

July 13, 2011

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812
E-mail: COComments@fsroadless.org

Comments: Colorado Roadless Rule on National Forest System (NFS) lands

Dear Forest Service Chief Tidwell and Colorado Roadless Rule Team:

The San Miguel County Board of Commissioners appreciates this opportunity to provide comments on the draft proposed rule for Colorado National Forest Roadless Areas, and to express our support for ensuring that these lands receive protections that are, on balance, at least as strong as the 2001 Roadless Rule.

We also appreciate the years of work and careful consideration that have gone into this rulemaking, and the improvements that have been made from earlier proposals.

Roadless areas provide unsurpassed backcountry recreational opportunities, protect our clean water sources, and secure critical wildlife habitat. Each of these values is extremely important to the economic wellbeing and quality of life in our communities.

In San Miguel County specifically, we support adding The Ophir Needles, Wilson Mesa, and Iron Mountain (USFS IRA names) into the 'upper tier' category.

We support the inclusion of Naturita Canyon in the updated roadless inventory (USFS CO Roadless Area) and agree with the proposed rule that these lands belong in the upper tier category.

We appreciate the work of the state Department of Natural Resources and the US Forest Service to tighten the so-called Bull Mountain loophole that allowed a new natural gas pipeline to bisect several roadless areas on the GMUG, and support the parameters outlined in the proposed rule for pipelines.

Thank you again for this opportunity to provide comment. Our national forest roadless areas are an American treasure. Locally they are of critical importance to the residents and businesses of San Miguel County.

Sincerely,

SAN MIGUEL COUNTY, COLORADO
BOARD OF COUNTY COMMISSIONERS

Joan May

Joan May, Chair

P.O. BOX 1170 • Telluride, Colorado 81435 • (970) 728-3844 • FAX (970) 728-3718
www.sanmiguelcounty.org

From: John Huebner [johnh@sanmiguelcounty.org]
Sent: Thursday, July 14, 2011 3:36 PM
To: COcomments
Subject: Colorado Roadless Rule on National Forest System (NFS) lands
Attachments: JoaMayCommentsColoradoRoadlessRule.pdf

Dear Forest Service Chief Tidwell and Colorado Roadless Rule Team:

Attached to this e-mail are comments from San Miguel County Commissioner, Joan May independent of the County Board of Commissioners regarding Colorado Roadless Rule on National Forest System (NFS) lands. Thank you for your consideration.

John

John Huebner
Chief Deputy Clerk to the Board
San Miguel County
phone: 970-369-5429
facsimile: 970-728-3718
email: johnh@sanmiguelcounty.org
website: sanmiguelcounty

COR676

SAN MIGUEL COUNTY

BOARD OF COMMISSIONERS

JOAN MAY

VIA E-MAIL

July 14, 2011

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812
E-mail: COComments@fsroadless.org

Comments: Colorado Roadless Rule on National Forest System (NFS) lands.

Dear Forest Service Chief Tidwell and Colorado Roadless Rule Team:

I appreciate the opportunity to provide comments on the draft proposed rule for Colorado National Forest Roadless Areas, and to express support for ensuring that these lands receive protections that are, on balance, at least as strong as the 2001 Roadless Rule.

I concur with my fellow San Miguel County, Colorado Board of Commissioners in expressing my appreciation for the years of work and careful consideration that have gone into this rulemaking, and for the improvements that have been made from earlier proposals. However, it remains my position that the draft rule still falls short of meeting the Obama administration's commitment.

In particular when I heard USDA Secretary Tom Vilsack speak in Washington DC in December 2009 to the Pew Charitable Trust's gathering of Roadless advocates, he pledged to craft a rule that was "at least as protective and preferably more so" than the 2001 Rule, and to add a "significant amount of acres" of roadless lands into a category that was more protective than this landmark conservation tool. Yet the draft proposed rule fails to meet that mark—placing only 13% of the state's Inventoried Roadless Areas into an 'upper tier' category.

Roadless lands that are not placed into this upper tier (87% under the proposed rule) are protected to a weaker standard than the 2001 Rule, making the inclusion of additional lands in the more protective category paramount to crafting a rule that meets the administration's goals and stated position.

In addition, I encourage you to insure that these lands gain stronger prescriptions than currently included in the proposal—specifically, I believe that all upper tier lands should be managed with both a no-road building and binding No Surface Occupancy stipulation for future oil and gas leasing and development, and so-called 'linear construction zones' should be prohibited in these areas.
I concur with my fellow commissioners in expressing that in San Miguel County

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specifically, The Ophir Needles, Wilson Mesa and Iron Mountain (USFS IRA names) should be added into the 'upper tier' category, with the modifications to provisions for those lands as noted above.

I support the inclusion of Naturita Canyon in the updated roadless inventory (USFS CO Roadless Area) and agree with the proposed rule that these lands belong in the upper tier category.

Regarding the non 'upper tier' roadless lands, I oppose allowing new roads for future water projects and believe that the concept of the 'linear construction zones' should not be expanded to include future transmission lines, utility corridors and other linear features.

I do appreciate the work of the state Department of Natural Resources and the US Forest Service to tighten the so-called Bull Mountain loophole that allowed a new natural gas pipeline to bisect several roadless areas on the GMUG, and support the parameters outlined in the proposed rule for pipelines. However, it is my understanding that this rulemaking provides an opportunity to close that loophole altogether (other than for valid, existing rights) and I believe that such a provision should at least be considered in one of the alternatives in the environmental impact statement that accompanies the proposed rule, such as in the 'conservation' alternative. As it stands, this alternative provides little difference from the proposed rule, other than in the inclusion of some additional acres for upper tier protections.

Thank you again for the opportunity to provide comments. I urge that you issue a final rule only after you have made the suggested changes to craft a rule that is truly 'on balance' as protective of the 2001 Rule.

Sincerely,

Joan May

Joan May
San Miguel County Commissioner

COR677.

From: Leiker, Diana [dleiker@tristategt.org]
Sent: Thursday, July 14, 2011 4:16 PM
To: COcomments
Cc: Thompson, Rick; Grage, Sonia
Subject: Tri-State Generation and Transmission's Comments on the Proposed Roadless Rule
Attachments: Comments Roadless Area Rule.pdf

Hello,
Please find attached, Tri-State Generation and Transmission's comments for your consideration regarding the Proposed Colorado Roadless Area Rule.

Thank you,

Diana

Diana Leiker
Environmental Planner
Tri-State G&T
1100 W. 116th Ave.
Westminster, CO 80234
dleiker@tristategt.org
303-254-3565

COR677

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

July 14, 2011

Mr. Rick Cables
Regional Forester
U.S. Forest Service
Rocky Mountain Region
740 Simms Street
Golden, Colorado 80401

RE: COMMENTS TO THE 2011 PROPOSED COLORADO ROADLESS AREA RULE

Dear Mr. Cables:

Tri-State Generation and Transmission Association, Inc. (Tri-State) is a wholesale electric power producer and supplier that serves 44 rural electric cooperatives and public power districts in Colorado, Nebraska, New Mexico, and Wyoming. Tri-State's member distribution systems serve nearly 578,000 metered customers (translating to a population of more than 1.4 million people). Tri-State's 250,000-square-mile member service territory includes all or parts of 56 of Colorado's 64 counties, all or parts of 20 counties in western Nebraska, all or parts of 14 counties in central and northern Wyoming, and all or parts of 27 counties throughout New Mexico. Tri-State's transmission system includes approximately 5,212 miles of high-voltage transmission line and 135 substations and switching stations. Nine percent of Tri-State's transmission system is located on National Forest System lands and a smaller percentage is within proposed roadless areas. We have numerous telecommunications sites on National Forest System land that help us control and maintain a reliable and secure interconnected electric system.

Tri-State appreciates the chance to provide comments to the U.S. Forest Service (USFS) regarding the proposed Colorado Roadless Area Rule. Tri-State was pleased to see that some of the previous comments from the utility industry have been incorporated into the proposed rule but stresses that Tri-State would like to see more comments integrated into the current proposed rule. As proposed, this rule would provide a more consistent framework for Tri-State to conduct business in an environmentally responsible manner. Tri-State understands the importance of protecting Colorado Roadless Areas and the critical role they play in protecting Colorado's natural resources. In accordance with USFS management plans, Tri-State currently strives to: (1) conserve roadless area values and characteristics; (2) protect human health and safety; (3) reduce hazardous fuels; (4) maintain or restore essential wildlife habitats; (5) maintain, operate and repair existing facilities; and (6) maintain reasonable access to critical infrastructure and transmission facilities.

Tri-State uses a thorough siting and routing process for all new facilities to ensure minimal impact to the natural and human environment. Future facilities are sited and routed outside of sensitive areas and within previously disturbed corridors to the maximum extent practical. Tri-State is committed to maintaining existing transmission and substation facilities in order to minimize impacts to the natural and human environment, including where infrastructure occurs in roadless areas. Active coordination with the USFS and the State of Colorado will ensure existing and future facilities will be sited, designed, and maintained to avoid substantial impacts to the character of a roadless area.

Below are Tri-State's comments from the 2011 proposed Colorado Roadless Area Rule Revised Draft Environmental Impact Statement. The proposed Colorado Roadless Area Rule will result in management implications for existing and future electric lines. These comments do not directly discuss issues from the 2001 rule because it is no longer the preferred alternative and Tri-State believes it is being used primarily for comparison purposes. Tri-State's primary concerns include the following topics, listed below:

- Loss of access to existing transmission facilities
- Increased permitting times

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- Constraints on new development
- Socioeconomics
- Public health and safety
- Specific locations of concern

1.0 LOSS OF ACCESS

1.1 New Transmission Lines

New transmission lines for Tri-State could be significantly altered by the proposed rule.

2011 proposed Roadless Area Rule Section 294.44.b.2 states the following:

> *"Authorize electrical power lines or telecommunication lines within Colorado Roadless Areas only if there is no opportunity for the project to be implemented outside the Colorado Roadless Area without causing* ***substantially*** *greater environmental damage."*

The word "substantially" is too vague and open to interpretation. "Substantially" could translate to a spectrum of different meanings, leaving Tri-State without guidance to the definition of environmental damage and a consistent regulatory framework. It is important for Tri-State to have a clear idea of what the proposed rule entails so that we can comply and strive toward better environmental protection. This statement could lead to lawsuits associated with the project approval process, further delaying transmission line construction, and/or denial of transmission line construction.

1.2 Maintenance Access

Maintenance for transmission lines and associated equipment is vital to the operation of providing reliable electricity to the public. The proposed Colorado Roadless Area Rule could cause difficulty for adequate line maintenance for the following reasons:

1.2.1 Routine Maintenance

The proposed rule fails to mention access to existing transmission facilities and other associated vital equipment necessary for Tri-State's continued operations within the proposed Colorado Roadless Areas. This will lead to regulatory uncertainty and may cause denial of access to this equipment in the future, leading to potential failure of electric transmission and decrease in reliability.

2011 proposed Roadless Area Rule Section 294.42 states the following:

> *"(b) Upper Tier Access. Notwithstanding the prohibition in paragraph (a) of this section, trees may be cut, sold, or removed in Colorado Roadless Areas upper tier acres if the Responsible Official determines the activity is consistent with the applicable land management plan" and*
>
> *"(c) Non-Upper Tier Access. Notwithstanding the prohibition in paragraph (a) of this section, trees may be cut, sold, or removed in Colorado Roadless Areas outside upper tier acres if the Responsible Official, unless otherwise noted, determines the activity is consistent with the applicable land management plan, one or more of the roadless area characteristics will be maintained or improved over the long-term with the exception of paragraphs (c)(5) and (6) of this section, and one of the following circumstances exists..."*

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The above statements imply the need for Regional Forester's approval for any tree removal operation, even if located within Tri-State's access or rights-of-way. This will slow down or inhibit adequate maintenance of transmission line corridors if approval is needed for such operations.

Tree and vegetation removal is vital to providing reliable electricity. Overgrown vegetation can cause blow downs, increased fire risk, difficult access to facilities, and decrease safety and reliability.

Tri-State requires clear access to transmission lines and associated facilities to conduct maintenance. Tri-State currently implements a vegetation management policy as mandated by the North American Electric Reliability Council (NERC) federal reliability standards. This policy is requires specific right-of-way management practices and notification to jurisdictional agencies as warranted.

Many of the items discussed in the "Routine Maintenance" section above will also apply to emergency maintenance. If an emergency situation occurs where electricity must be restored as soon as possible, Tri-State will need immediate access to transmission lines. If transmission line function is not restored promptly, the issue could become a matter of public health and safety. Public health and safety are discussed in Section 5.0 of this document.

1.3 Fire Prevention Access

Fire prevention is vital for transmission lines because of the importance of reliable power to local communities. Tri-State implements protection measures to ensure electric reliability and non-outage situations as well as to reduce the risk of transmission lines causing forest fires. Tri-State recommends that fire prevention measures for transmission lines and facilities be included in discussions regarding Community Protection Zones or be defined as a part of Community Protection Zones in Section 294.41 of the 2011 proposed Roadless Area Rule. Tri-State needs access to transmission corridors and permission to remove trees for fire damage prevention.

Removing discussions of the wildland-urban interface (WUI) from the current version of the rule, leaves transmission lines, considered part of the WUI, in a gray area. Tri-State requests that this be addressed in the final rule.

1.4 Potential to Lead to More Wilderness Areas

More wilderness areas could be designated as an indirect effect of the proposed Colorado Roadless Area Rule. One requirement of designating wilderness areas is the presence of minimal or no roads within an area. Roads will be strictly limited or not allowed within the Colorado Roadless Areas, which provides a stepping-stone for designating wilderness areas. An increase in wilderness areas will make it more difficult for Tri-State to maintain or construct transmission infrastructure servicing expanding communities and load growth, thus leading to constraints on development and threats to reliability.

2.0 INCREASED PERMITTING TIMES

Current rulemaking requires National Environmental Policy Act (NEPA) processes in order to renew Special Use Permits (SUP). The proposed Colorado Roadless Area Rule creates regulatory uncertainty regarding the appropriate approval process.

Typically, Tri-State constructs or modifies new and existing facilities. A new SUP is often required in such cases, even if there is no associated change in operation or disturbance.

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Language in the proposed rule may require an Environmental Impact Statement for a new or renewed SUP (2011 proposed Roadless Area Rule Section 294.45). Tri-State believes that this is an excessive requirement for an action that does not directly result in ground disturbing activities and requests that this language be changed or clarified. A new or amended SUP will be required in cases where previously unspecified access is being specified or where access routes are being reconstructed. Similarly, an Environmental Impact Statement may not be the appropriate level of NEPA analysis for such limited ground disturbing activities.

2011 proposed Roadless Area Rule Section 294.45 states the following:

> *(a) "Environmental documentation will be prepared pursuant to Section 102 of the National Environmental Policy Act, 40 CFR 1500, 36 CFR Part 220 for any proposed action within a CRA. Proposals that* ***substantially*** *alter the undeveloped character of a CRA require an Environmental Impact Statement."*

The word "substantially" is too vague and open to interpretation. This statement could cause every action, significant or not, to require an Environmental Impact Statement.

- Projects could be delayed several years because of an Environmental Impact Statement, even if it is for a new SUP for a change in ownership without a change in proposed disturbance to the environment.
- Tri-State made this comment during the previous proposed roadless rule comment period, and this clarification still has not been made. Clarification on what a "substantial alteration" to the "undeveloped character of a Colorado Roadless Area" is requested.

Increased permitting times could delay construction and/or maintenance of needed transmission lines. If regular maintenance is not performed on existing transmission lines due to increased permitting requirements, it could lead to increased transmission line failures and unreliable electricity supply to users. Compliance with current federal reliability standards is a requirement not a choice. Non-compliance is not an option for Tri-State and could lead to heavy fines and violations.

If new SUPs for changes in ownership are not in place by the time the Colorado Roadless Area Rule is effective, Tri-State's access to transmission lines will be in question. Tri-State's transmission lines will either be left unmaintained or accessed in trespass.

Currently, there is regulatory uncertainty regarding environmental protection of roadless areas. Tri-State believes that the proposed roadless rule will help establish boundaries and clarify environmental management goals for roadless areas. A majority of Tri-State's access is not currently specified and is authorized as casual use with administrative SUP rights for ingress and egress. Casual use to reach structures in rugged terrain may require road construction or reconstruction. Tri-State is in the process of identifying areas where current access is not specified and is authorized as casual use. This may lead to new requests for access to existing and proposed facilities located within or adjacent to proposed CRAs.

3.0 CONSTRAINTS ON NEW DEVELOPMENT

Tri-State will have more difficulty permitting new and existing transmission lines with the proposed rule. Additional restrictions on transmission line and access route locations, increased permitting costs, increased permitting timelines, and increasing NEPA requirements will lead to constraints on electric transmission development and reliability. The potential decrease in the ability for transmission

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development or expansion will lead to a decrease in the ability to keep up with growth and development in Tri-State's member distribution service territories throughout Colorado and increase operating costs.

To this end, Tri-State requests that language in the proposed ruling regarding cutthroat trout habitat impacts be removed.

- The subspecies of cutthroat trout in Colorado are currently petitioned for listing or are already listed as threatened under the Endangered Species Act. In addition, the USFS has listed the subspecies as sensitive. Both of these actions have associated species management plans to protect cutthroat trout populations and habitat.
- The Endangered Species Act and NEPA processes are already in place to help protect the cutthroat trout subspecies.
- Tri-State believes that the wording in the proposed ruling is not necessary and is redundant because of current protections.
- The language in the proposed ruling is too general and excessively restrictive.
  - Official determinations on the status of the subspecies are still being decided. If the proposed Colorado Roadless Area Rule were to go into effect, it will restrict linear construction zones in cutthroat trout habitat regardless if it is later determined that cutthroat trout subspecies are not sensitive or threatened.
  - The proposed language does not allow for mitigation measures to protect or avoid negative impacts to cutthroat trout habitat if avoidance is not possible.
  - The current language in 2011 proposed Roadless Area Rule Section 294.44.b.4. states the following:

    "If a proposed linear construction zone meets one of the exceptions then the following must be determined:

    "(iii) Within a native cutthroat trout catchment or identified recovery watershed, a linear construction zone will not diminish, over the long-term, conditions in the water influence zone and the native cutthroat habitat."
  - This language is too vague and open to interpretation. Specifically, the terms "diminish," "long-term," and "conditions" are not defined in the document. These three terms could be interpreted in many different ways, and each interpretation could lead to different consequences to Tri-State.

4.0 SOCIOECONOMICS

4.1 Cost Analysis

The Revised Draft Environmental Impact Statement for the proposed Colorado Roadless Area Rule fails to adequately analyze economic impacts to utilities. It is recommended that analysis of increased operation costs to utilities and their associated rate increases should be included in the Revised Draft Environmental Impact Statement socioeconomic analysis. Rural Colorado has many areas with low-income populations and depressed local economies where any electric rate increase could be detrimental. Increased costs to utilities will be due to increased:

- Permitting costs
- Construction, operation, and maintenance costs

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- Risk of litigation
- Insurance costs from increased risk of fire damage

4.2 Increase in Utility Cost for Users

The proposed action in the Revised Draft Environmental Impact Statement could result in an increase in operation and maintenance costs because of increased permitting timelines and costs, the need for longer transmission lines or access routes to avoid CRAs, and higher maintenance costs. Tri-State strives to avoid or minimize rate increases to its member distribution systems and relating service territories in rural areas.

5.0 PUBLIC HEALTH AND SAFETY

Reliable electric transmission is a vital aspect of modern American life and culture. It is vital to communities. Many services like traffic control, medical facilities, and home medical devices rely on a stable electricity source. If Tri-State is unable to conduct adequate routine or emergency maintenance because of the proposed Colorado Roadless Area Rule, thousands of users will be negatively affected. This will lead to a decrease in the quality of life for many residents of Colorado.

6.0 SPECIFIC LOCATIONS OF CONCERN

Tri-State has three electric transmission lines that will be affected by the proposed Colorado Roadless Area Rule:

1. Crested Butte to Skito 115,000 volt (115 kV)– 2.3 miles
2. Telluride to Cascade, 115 kV; San Juan County – 4.5 miles
3. Bayfield to Pagosa, 115 kV; Archuleta County – 1.7 miles

A total of 8.5 miles of line will be directly affected by the proposed rule. Other portions of Tri-State transmission lines closely border roadless areas. Access, fire management, vegetation management or other maintenance tasks could be impeded by the proposed rule.

Tri-State has six telecommunication sites located in proposed Colorado Roadless Areas vital to communication, control, and operation of their generation and transmission system:

1. Lands End
2. Main
3. Oak Brush
4. South Canal
5. Sunlight Peak
6. Sunshine Tap

Attachment 1 provides a detailed summary of Tri-State's telecommunication and transmission line infrastructure located within proposed Colorado Roadless Areas. This attachment also includes detailed comments regarding each potential conflict Tri-State has identified.

Overall, Tri-State does not believe areas with existing transmission lines or related access routes meet the definition of a roadless area. These areas should be removed from the 2011 Proposed Colorado Roadless Rule.

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We would like to stress the overall importance of Tri-State's need for permanent access to our facilities for reliable and safe operations. Tri-State appreciates the consideration of our comments on the proposed Colorado Roadless Area Rule. Please do not hesitate to contact Rick Thompson at 303-254-3211 if we can provide any additional information or assistance. We look forward to working with you on this important issue.

Sincerely,

Rick Thompson
Senior Manager, Transmission Land Rights and Permitting
Tri-State Generation and Transmission Association, Inc.

Attachments

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Transmission Lines

1	Crested Butte to Skito	Flattop Mountain Roadless Area	Gunnison County
Approximately 2.3 miles of the Crested Butte to Skito Transmission Line is located from approximately 8600 to 9500 feet in elevation within the proposed Flattop Mountain Roadless Area. This portion of transmission line is less than one mile to the west of Almont, Colorado and the Gunnison River. Numerous four-wheel-drive roads are located within close vicinity to the transmission line including portions of National Forest System Roads 862, 862.3A, 862.3B, 862.3C, 863.2D, and 863.2E. It is critical that Tri-State retain all season, overland access via pick-up truck, ATV, and snowcat/snowmobile. Tri-State recommends the proposed Flattop Mountain Roadless Area Rule be revised to exclude Tri-State transmission lines and all required access roads.			
2	Telluride to Cascade	West Needle Wilderness, San Miguel, and Weminuche Adjacent Roadless Areas	San Juan County
Six different portions of the Telluride to Cascade Transmission Line totaling 4.5 miles are located at varying elevations within the proposed West Needle Wilderness, San Miguel, and Weminuche Adjacent Roadless Areas. These portions of transmission line are within the Uncompaghre and San Juan National Forests. The existing transmission line is in close vicinity (less than 0.25 miles) to portions of County Road D65, the Million Dollar Highway (US 550), Old Lime Creek Road, and County Road 8. The Telluride to Cascade transmission line is located west of Silverton, Colorado, crossing both Molas pass to the south and Ophir Pass to the northwest of Silverton. It is critical that Tri-State retain all season, overland access via pick-up truck, ATV, and snowcat/snowmobile. Tri-State requests the proposed West Needle Wilderness, San Miguel, and Weminuche Adjacent Roadless Area Rule be revised to exclude Tri-State transmission lines and all required access roads.			
3	Bayfield to Pagosa	Piedra Roadless Area	Archuleta County
Approximately 1.7 miles of the Bayfield to Pagosa Transmission Line is located from approximately 7300 to 7600 feet in elevation within the proposed Piedra Roadless Area. This portion of transmission line is less than one-half mile to the west of the Piedra River, near Piedra, Colorado. The existing transmission line is less than one-half mile to the north of State Highway 160. It is critical that Tri-State retain all season, overland access via pick-up truck, ATV, and snowcat/snowmobile.			

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Telecommunication Sites

1	Lands End Communication Site	Flat Tops/Elk Park Roadless Area	Mesa County
Lands End Communication Site is located east of Colby Horse Park Reservoir and west of East Loon Lake at approximately 10,100 feet in elevation on the Grand Mesa National Forest. Hunter Road is approximately 0.2 miles east of the Tri-State's infrastructure. Approximately 3 miles of roads inside the proposed roadless areas are needed to access this site. It is critical that Tri-State retain all season access via pick-up truck, ATV, and snowcat/snowmobile.			
2	Main Communication Site	Piedra Area Adjacent Roadless Area	Hinsdale County
The Main Communication Site is located near the divide above Little Sand and Weeminuche Creeks at approximately 7,880 feet in elevation on the San Juan National Forest. The site is located in the Piedra Area Adjacent Proposed Roadless Area. This location is not accessed via road, but rather overland by foot, ATV, pick-up, or snowcat/snowmobile.			
3	Oak Brush Communication Site	South San Juan Roadless Area	Archuletta County
Oak Brush Communication Site is located north of Bear Mountain and South of the Blanco Basin Road near the summit of Blue Mountain at approximately 8,800 feet in elevation on the San Juan National Forest. The site is accessible via primitive/four-wheel drive roads from both the south and the north. Approximately 4 miles of roads inside the proposed roadless areas are needed to access this site. It is critical that Tri-State retain all season access via pick-up truck, ATV, and snowcat/snowmobile.			
4	South Canal Communication Site	Chipeta Roadless Area	Saguache County
South Canal Road Communication Site is located north of Marshall Pass Road and west of Tent Creek on the southern slope of Ouray Peak approximately 11,900 feet in elevation on the San Isabel National Forest. The site is accessible overland from the Marshall Pass Road by pick-up truck, ATV, and snowcat/snowmobile. Parts of Marshall Pass Road are included in the proposed roadless area and Tri-State requests that the Forest Service amend the Colorado Roadless Area Rule to exclude both Tri-State's Marshall Pass Road Communication Site and the entirety of Marshall Pass Road. It is critical that Tri-State retain all season access via pick-up truck, ATV, and snowcat/snowmobile.			
5	Sunlight Peak Communication Site	Woods Lake Roadless Area	Eagle County
Sunlight Peak Communication Site is located northeast of Woods Lake and southwest of Eagle Lake at approximately 9,720 feet in elevation on the White River National Forest. The site is accessible overland from via private land by pick-up truck, ATV, and snowcat/snowmobile. Tri-State recommends a slight modification to Colorado Roadless Area Rule to exclude Tri-State's Woods Lake Communication Site and all required access roads.			
6	Sunshine Tap Communication Site	Hermosa Roadless Area	La Plata County
Sunshine Tap Communication Site is located east of Hermosa Creek at approximately 9,400 feet in elevation near the top of the Big Lick Creek Drainage on the San Juan National Forest. The site is accessible via primitive/four-wheel drive roads by pick-up truck, ATV, and snowcat/snowmobile. Tri-State uses over 4 miles of road located within the proposed roadless area to reach this site. It is critical that Tri-State retain all season access via pick-up truck, ATV, and snowcat/snowmobile.			

COR678.

From: Matt Reed [matt@hccaonline.org]
Sent: Thursday, July 14, 2011 3:33 PM
To: COcomments
Subject: Colorado Roadless Rule Comments
Attachments: GunnisonNationalForest.Roadless.HCCAComments.pdf

Please find attached comments from High Country Citizens' Alliance concerning roadless inventories in the proposed Colorado Roadless Rule.

Thank you.

Matt Reed
Public Lands Director
High Country Citizens' Alliance
PO Box 1066
Crested Butte, CO 81224
(970) 349-7104
(970) 349-0164 (fax)
http://www.hccaonline.org/

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HIGH COUNTRY CITIZENS' ALLIANCE

PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

Colorado Roadless Rule/EIS
PO Box 1919
Sacramento, CA 95812

Via email: COComments@fsroadless.org

July 14, 2011

Dear Forest Service,

The following comments are submitted by High Country Citizens' Alliance and concern roadless inventories associated with the Proposed Colorado Roadless Rule. This comment letter examines specific roadless areas on the Gunnison National Forest, Gunnison Ranger District. The aim of the letter is to point out discrepancies between the roadless acreage in Colorado Roadless Areas (CRAs) and previous inventories, and to highlight outstanding ecosystem values found in these areas.

High Country Citizens' Alliance (HCCA) is a non-profit conservation organization based in Crested Butte, Colorado. Founded in 1977, and with more than 600 members from diverse backgrounds, HCCA's mission is to champion the protection, conservation and preservation of the natural ecosystems within the Upper Gunnison River Basin. HCCA collaborates with interested and affected parties to protect public lands, endangered species, water resources and ecological diversity, achieving goals by integrating expert analysis and scientific research with environmental education, informed debate and policy participation. HCCA is a member of the Southern Rockies Conservation Alliance (SRCA), which undertook extensive on-the-ground roadless analysis in the late 1990s and early 2000s, culminating in a 2003 inventory referenced in this letter.

This comment letter includes:

- Colorado Roadless Area name, as identified in the RDEIS, Appendix A
- The Inventoried Roadless Area name, if different than the Colorado Roadless Area name
- Total acreage identified in the Inventoried Roadless Area (2001)
- Total acreage identified by SRCA (2003)
- Total acreage identified in Draft Grand Mesa, Uncompahgre and Gunnison (GMUG) Forest Plan Revision process (2005)
- Total acreage identified in the Proposed Colorado Roadless Rule Inventory (2009)
- Descriptions of the area

We draw attention to particularly egregious acreage differences between the 2001 and/or SRCA's 2003 inventory and the CRA inventory, and also highlight roadless landscapes that have not been included in the CRA Inventory. HCCA references the comments of Rocky Mtn. Wild et al, dated July 13, and urges the agency to consider this comment letter as supplementing that letter.

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HIGH COUNTRY CITIZENS' ALLIANCE
PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

Agate Creek (Chipeta in 2001)

- 2001 – 16,200 acres
- 2003
- 2005 – 12,700
- 2009 – 11,800
- Existing vegetation is dominated by lodgepole pine, mixed with aspen and spruce at the lower elevations, with aspen dropping out of the mix at the higher elevations. Riparian habitats occur along Agate Creek. This vegetative diversity provides for species requiring higher elevation conifer habitats. Most of this area is within the Poncha Pass lynx linkage area and is mapped as Canada lynx denning and winter foraging habitat. The area provides summer range for mule deer and elk. The higher alpine and lower lodgepole/aspen habitats provide summer concentration areas for elk. The highest elevations in the alpine habitat on the eastern edge are summer range for bighorn sheep. These alpine habitats also provide habitat for white-tailed ptarmigan. Suitable habitats for Uncompahgre fritillary butterfly occur along the divide between the GMUG and the Pike/San Isabel NF. The forested portions of the Agate Creek area provide habitat for the following sensitive species: American martin, American three-toed woodpecker, Northern goshawk, boreal owl, olive-sided flycatcher, and golden crowned kinglet. Potential habitat for wolverine is also present in this area.

  Significant acreage has been removed from the acreage identified in the 2001 National Roadless Rule Inventory, as well as the 2005 GMUG inventory process. Given the outstanding wildlife and ecosystem qualities identified above, it is imperative that the Colorado Roadless Rule increase acreage to previously identified sizes.

Canyon Creek

- 2001 – 12,600 acres
- 2003 – 20,900
- 2005 – 10,300
- 2009 – 10,900

Canyon Creek/Antero (was not within an IRA in 2001)

- 2001 – 0
- 2003 – 6200
- 2005 –
- 2009 – 1700
- The Whitepine Iron Fen Potential Conservation Area identified for an iron fen and subalpine riparian habitats occur within this CRA. Alpine habitats provide summer range for mountain goat. Lower elevation habitats provide summer concentration areas for elk. Lynx habitat has

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PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

been mapped in the forested areas. Suitable habitat for the Uncompahgre fritillary butterfly occurs adjacent to this CRA, within the Pike/San Isabel NF. White-tailed ptarmigan habitat occurs in the alpine areas. Away from the Tomichi Creek road, the Antero portion of the CRA has a high degree of naturalness.

While Canyon Creek/Antero was not identified in the 2001 National Roadless Rule inventory, SRCA nevertheless identified 6200 acres in its inventory process. HCCA strongly urges the Forest Service to follow this guidance, and to increase the acreage in the CRA to better reflect the actual roadless landscape.

Cochetopa (Middle Fork in 2001)

- 2001 – 11,200
- 2003 – 12,700
- 2005 – 2540
- 2009 – 6600
- The Cochetopa CRA is adjacent to the La Garita Wilderness Area. The removal of acreage from this CRA is a prime example of the misapplication of wilderness capability and availability standards instead of roadless characteristics, as occurred when the GMUG conducted its 2005 re-inventory.

  Areas of the former Middle Fork IRA were excluded from the inventory primarily because of a determination that management of the roadless boundaries would be difficult. The GMUG also found that these areas were to be excluded from the roadless inventory because they did not have the remoteness, solitude, and recreation opportunities required for wilderness designation. No particular mention is made of the fact that the Middle Fork IRA is an area greater than 5,000 acres in size, free of roads, and has a largely natural character. The connectivity afforded to wildlife by this area's location and its natural character make it appropriate for continued management as roadless. The Cochetopa CRA boundaries should be expanded to match those of the former Middle Fork IRA.

Cochetopa Hills

- 2001 – 71,400
- 2003 – 74,000
- 2005 – 46,230
- 2009 – 48,500
- Cochetopa Hills is the largest remaining roadless area on the Gunnison National Forest. This area is located along the southern boundary of the Gunnison National Forest adjacent to the Rio Grande National Forest, Bureau of Land Management lands, and other roadless areas in close proximity. Cochetopa Hills is a natural continental divide - crossing point of many wildlife

PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

species. This area is clad in rolling mixed-conifer, aspen and spruce-fir forests, and is an important wildlife corridor between the Rio Grande/San Juan Basin to the south and the Gunnison Basin to the north. It remains a critical stronghold for bear, mountain lion, and lynx, and supports large herds of both deer and elk. In addition, the area has been especially noted as a well-used trans-basin lynx crossing point in the USFS Region 2 2004 Lynx assessment.

In the 2005 re-inventory of lands, the GMUG reduced the inventoried acreage of this area by over 20,000 acres to a total of only 46,230 roadless acres. Ongoing resource activities cited for the reduction in acreage included the presence of cattle allotments, ponderosa pine restoration projects, and single track motorized trails – all of which are permissible within roadless areas. In addition, detailed review of the GMUG 2005 Roadless Inventory document indicates that a substantial portion of the Cochetopa Hills were eliminated from the roadless inventory to enhance manageability, a criterion not found in the definition of roadless areas. The large, remote, and rugged character of the Cochetopa Hills is the essence of roadlessness.

The GMUG has inappropriately eliminated roadless acreage from its inventory of this area to promote other resource uses at the expense of the area's integrity and wild character. Large acreages at both the eastern, western and north central portions of the Cochetopa Hills must remain in the roadless inventory; system roads can be cherry-stemmed out of the inventory.

<u>Deer Creek (part of Elk Mountain-Collegiate in 2001, along with Double Top, part of Gothic, Italian Mountain, Schofield Pass and Texas Creek)</u>

- 2001 – (Elk Mountain-Collegiate = 65,100)
- 2003 - 10,600
- 2005 – 9430
- 2009 – 9500
- Most of this CRA is within The Nature Conservancy's Crested Butte conservation site. The West Brush Creek Potential Conservation Area identified for boreal toad, and several types of riparian habitat occurs in this CRA. This area provides summer habitat for black bear, with fall concentration in the East River, Deer Creek, West and Middle Forks of Brush Creek. This entire CRA is an elk production area. It also has essential habitat components for elk winter range. Lynx habitat is mapped primarily in the forested portion of this CRA. Potential habitat for Gunnison sage grouse occurs along the East River. Breeding populations of boreal toad occur in both West and Middle Brush Creek Drainages. Colorado River cutthroat trout populations occur in Middle Brush Creek. This CRA is within a state defined source water assessment area (municipal water supply). Over 70% of this assessment area is managed by the FS which recognizes the CRA as having a high value for domestic water supply.

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HIGH COUNTRY CITIZENS' ALLIANCE
PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

Gothic

- 2001 – 6200 acres
- 2003 – 8000
- 2005 – 7550
- 2009 – 5800
- The Gothic Research Natural Area is located in the northern portion of this CRA. The entire area is within The Nature Conservancy's Crested Butte conservation site. Two Potential Conservation Areas (PCA's) extend into this CRA; the East River PCA at Rustler's Gulch, identified for the presence of boreal toad and pygmy shrew; and the Mount Belleview PCA, identified for rare alpine plants. This area provides summer range for big game species, with elk possibly using the lower elevations of Snodgrass Mountain for winter range. Lynx habitat is present within this CRA. Boreal toad and pygmy shrew are both known to inhabit the East River drainage. White-tailed ptarmigan use the alpine habitats along the northern edge of this unit.

  The 2001 and SRCA Inventory areas are adjacent to the Maroon Bells - Snowmass Wilderness area and the Gothic Mountain area is in close proximity to the Deer Creek and Poverty Gulch CRA's. All recent inventories of this area agree that there are more roadless acres in this region than had been included in prior inventories. The importance of the ecology of this area and increasing pressures on this particular drainage from recreation activities cannot be overstated. Rocky Mountain Biological Laboratory has been conducting critical scientific research in the region for many decades; roadless protection maintains the integrity of the ecosystems being studied.

  The southern portion of the Gothic CRA near Snodgrass Mountain is being incorrectly and inappropriately proposed for removal from the roadless inventory to accommodate a possible ski area expansion for Crested Butte Mountain Resort. The broad exceptions of the Colorado Roadless Rule make clear that ski areas can be managed within roadless areas, and the removal of such areas from the inventory is inappropriate. A great deal of public support exists for continuing to manage Snodgrass Mountain as roadless. Snodgrass Mountain must remain in the Gothic CRA.

Matchless Mountain

- 2001 – 34,100 acres
- 2003 – 42,800
- 2005 – 22,420
- 2009 – 27,000
- This CRA provides summer habitat for mule deer. It also provides elk production areas, summer concentration habitat, and winter range. It is a major complex of migration routes for both elk

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PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

and mule deer. The southern boundary of the CRA is a fall concentration area for black bear. Lynx habitat has been identified within this CRA. The unit is also bald eagle winter range. White-tail ptarmigan habitat occurs in the alpine areas. For bighorn sheep, the CRA offers summer range and two of three production areas for the Taylor Canyon Herd. Lamb recruitment into this population is historically low. The protection of production areas may be critical for herd survival. The area has a high degree of naturalness. Over 70% of this assessment area is managed by the FS and is recognized as having a high value for domestic water supply.

Matchless Mountain is adjacent to the Granite Basin CRA and sits approximately one mile northwest of the Fossil Ridge Wilderness Area. Large portions of the Matchless Mountain Roadless Area were removed by the GMUG 2005 re-inventory and many of those changes are carried forward in the Colorado Roadless Rule proposal.

Mirror Lake

- 2001 – 8300 acres
- 2003 – 12,400
- 2005 – 6010
- 2009 – 6000
- Mountain goat summer range occurs in the alpine areas, as does elk summer concentrations. Summer habitat for black bear and mule deer also exists in this area. Forested habitats have been mapped as lynx habitat. Suitable habitat for Uncompahgre fritillary butterfly occurs in and adjacent to this area on the Pike/San Isabel NF. White-tailed ptarmigan habitat exists in the alpine areas. The land generally appears natural although there is some evidence of historic mining activities. The Alpine Tunnel Historic District is directly south of this unit. The rugged terrain is mostly above timberline. Once away from Mirror Lake and associated roads, the land provides a sense of solitude. This CRA lies within a source water assessment area (municipal water supply). Over 70% of this assessment area is managed by the FS and is recognized as having a high value for domestic water supply.

  Mirror Lake CRA is adjacent to Sanford Basin CRA. The large area northeast of the Town of Pitkin contains no Forest Service system roads or routes of any type. The only conceivable reason this area might have been removed from the inventory would be to facilitate future timber harvest activities for wildfire risk reduction. However, as is explicitly clear under the Colorado Roadless Rule proposal, fuels reduction can be easily accomplished without removing acres from the inventory. These acres should remain in the Mirror Lake CRA.

Poverty Gulch

- 2001 – 2146 acres
- 2003 – 7500

HIGH COUNTRY CITIZENS' ALLIANCE
CO2676
PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

- 2005 – 5540
- 2009 – 5500
- Poverty Gulch CRA is adjacent to the Raggeds Wilderness Area and is in very close proximity to the Gothic and Treasure Mountain CRA's. While the Colorado Roadless Rule proposal does increase the acreage of this unit, it fails to include some areas which remain free of system roads and where roads are unlikely to be proposed in the future.

  Specifically, the portion of the area surrounding Cascade Mountain retains its roadless character. The proposed action for the Gunnison Travel Management Plan proposes that Forest Road 552 would be decommissioned past the junction with Forest Road 552.2A. Further, Forest Road 552.2A would become a foot and horse trail past that same junction. The absence of system roads in this area and the characteristics of the area lend themselves to roadless management. The habitat connectivity afforded by including this area in the inventory would have real benefits for wildlife use of the area.

  In addition, the GMUG 2005 re-inventory eliminated a 2,000 acre area of roadless lands south of Peeler and Garfield peaks. The area above Irwin Lake remains an iconic, high quality roadless area. Forest Road 826.1D accesses several historic mining claims, but the road and claims can be appropriately cherry-stemmed out of the inventory without significant impacts to the inventory or manageability. This area is highly popular for summer and winter recreation activities, all of which can continue under roadless designation. This area is also provides an important corridor for wildlife between the Raggeds Wilderness and the Upper East River valley floor.

  The Slate River Potential Conservation Area extends into this area along the Slate River and Poverty Gulch drainages. Mountain goat summer range extends into the CRA around Purple Mountain. Summer range is available for most other big game species, with a summer concentration for elk occurring as well. Lynx habitat has been mapped in the forested areas of this CRA. White-tailed ptarmigan habitat is found in the alpine areas.

<u>Sawtooth</u>

- 2001 – 44,500 acres
- 2003 – 28,300
- 2005 – 22,850
- 2009 - 22,800
- The Sawtooth CRA is situated in the southernmost extent of the Gunnison Ranger District to the east of the Cochetopa Hills. While the acreage of the Sawtooth CRA has been dramatically reduced from the 2001 Roadless Inventory, this reduction in acreage is at least partially accurate due to on the ground conditions. The southern extent of the former IRA now contains Forest

HIGH COUNTRY CITIZENS' ALLIANCE
PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
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Service system roads and does not retain its roadless character. However the 2005 GMUG re-inventory of roadless lands failed to retain a several thousand acre northern portion of the Sawtooth Mountain IRA that remains roadless. The few roads in the northern part of the CRA can easily be cherry-stemmed out of the inventory while the core of this region, at the headwaters of Lick and Bead Creeks can and should remain in the inventory to protect wildlife habitat.

The area provides summer range for bear, mule deer, elk and moose, and is a calving area for elk. Lynx habitat is mapped in this CRA. East Fork South Beaver Creek is designated a native cutthroat water and contains a conservation population of Colorado River cutthroat trout. Winter range for bald eagle extends into the eastern edges of this CRA. Motorized and mechanized travel opportunities have been limited by the closures. The decommissioning of roads within the area has been largely successful and previously roaded lands are reverting to a natural appearing landscape. Rugged terrain, dense vegetation, distance away from sights and sounds of development, and lack of trails within the unit provide opportunities for remoteness and solitude. Recreation activities are generally non-motorized, hunting and horseback riding. This CRA is within a state defined source water assessment area (municipal water supply).

Whetstone

- 2001 – 17,500 acres
- 2003 – 20,300
- 2005 – 14,170
- 2009 – 15,500
- The Whetstone CRA is one of the premier remaining roadless areas in the Upper East River valley region. This stand alone roadless area is over 15,000 acres in size and contains the headwaters of several area creeks. The protection of this area is of paramount concern for local residents. This area is likely to be proposed for Wilderness designation under a revised GMUG Forest Plan. The SRCA inventory of this area is an accurate indication of the actual roadless acres that should be included in the Whetstone CRA.

  The entire CRA is within the very large Crested Butte conservation site identified by The Nature Conservancy. This CRA contains elk production (calving area) and summer concentration area which is contiguous with summer concentration areas to the west and south in the West Elk Wilderness. A major migration corridor also crosses this area which currently allows migration to winter ranges south and west. CRA provides important summer habitat for mule deer. This CRA contains lynx habitat and is adjacent to home ranges for several lynx. Other sensitive species dependent on high elevation conifer habitats could potentially occur in this area.

HIGH COUNTRY CITIZENS' ALLIANCE
PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

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Additional Roadless Areas Not Included in the Proposed CRA, That Should be Included:

Cochetopa Dome

- The Cochetopa Dome area is in the Gunnison Ranger District southeast of Gunnison, northeast of the Dome Lake State Wildlife Area. The SRCA inventory of this area found 5,900 acres. The Cochetopa Dome area is directly adjacent to SRCA inventoried roadless land managed by the BLM for a total of 9,000 roadless acres. This adjacent BLM land should be considered when deciding whether or not to include this area in the roadless inventory. The 2001 Roadless Rule inventory found 7,200 roadless acres in the Cochetopa Dome area including land east of forest road 804.1F that was excluded from the SRCA inventoried area described here. The Cochetopa Dome area was not included in the Colorado Roadless Rule inventory.

  The Cochetopa Dome area is bounded on the north, east, and south by the national forest boundary, on the southeast by forest route 804 and on the east by forest routes 804.1E and 804.1F. Private inholdings on the northeast along State Highway 114 are excluded from the area.

  The 11,132 foot high Cochetopa Dome was created by volcanic activity but never erupted. Several tributaries of West Pass Creek and Cochetopa Creek in the Gunnison River system originate in this roadless area. Grasslands are found at the lower elevations of this area, which give way to ponderosa pine woodlands, and spruce-fir forest, with smaller areas of aspen and sagebrush steppe. Bald eagles concentrate in the winter along West Pass Creek and Cochetopa Creek at the edges of this area. Potential habitat for lynx is found in this area. Opportunities for recreation, including fishing and birding, are found in the Dome Lakes State Wildlife Area that is adjacent to the roadless area across roadless BLM land.

Killdeer Creek

- The Killdeer Creek area is in the Gunnison Ranger District, south of Gunnison, east of the Cebolla Creek State Wildlife Area, and north of the La Garita Wilderness Area. The SRCA inventory of this area found 11,200 acres. The Kildeer Creek area was not included in the 2001 Roadless Rule inventory or in the Colorado Roadless Rule inventory.

  The Killdeer Creek area is bounded on the northwest by forest route 788 and on the west, south, southeast, and northeast by forest route 790. Forest routes 790.1A, 778.2I, 778.2J, 790.1D and other spurs into this area are excluded from the area.

  Killdeer Creek and Bull Creek have their headwaters in this area. South Pinos Creek flows through this area from its headwaters in the La Garita Wilderness. All of these creeks are in the Gunnison River system. Spruce-fir and mixed conifer forest are the most common vegetation

PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

types in this area. Aspen, subalpine meadows, alpine wet meadows, and riparian shrublands are also found here. This area is in a watershed of Cochetopa Creek, where Colorado River Cutthroat Trout are found. Potential habitat for lynx is found in this area.

Cathedral Creek

- The Cathedral Creek area is in the Gunnison Ranger District, south of Blue Mesa Reservoir and the Cebolla Creek State Wildlife Area. It is adjacent to the La Garita Wilderness. The SRCA inventory of this area found 11,300 acres. The 2001 roadless area inventory included the western portion of this area as Mineral Mountain. The 2001 roadless inventory of the 6,400 acre Mineral Mountain area included a portion of the SRCA inventoried Cathedral Creek area. The Cathedral Creek area was not included in the Colorado Roadless Rule inventory.

  The Cathedral Creek area is bounded on the north by forest road 790 and 788, the northwest portion of the area is bounded on the east by forest road 790, on the northwest by the National Forest Boundary and on the west by forest road 592. The eastern portion of the area is bounded on the south by La Garita Wilderness, on the east by forest roads 794 and 794.2B. The spurs off of forest roads 794 and 794.2B are excluded from the area.

  Numerous creeks cross this area on their way to the Gunnison River including Sheep Creek, Spring Creek, Cathedral Creek, Los Pinos Creek, East Fork Los Pinos Creek, Pauline Creek, Perfecto Creek, and Chavez Creek. All of these creeks originate in this area or in the adjacent La Garita Wilderness. Spring and Cathedral Creeks are part of the water supply for the Blue Mesa Reservoir.

  Spruce-fir is the most common vegetation type in this area that also includes a large number of riparian shrublands. Aspen forests and montane and subalpine meadows are also found in this area. Potential habitat for lynx is found in this area. Recreational opportunities in this area include the Cebolla trail that crosses this area on its way in and out of the La Garita Wilderness.

Park Cone

- The Park Cone area is in the Gunnison Ranger District northeast of Gunnison, north of the Fossil Ridge Wilderness Area (but not adjacent) and south of Taylor Park Reservoir and Lakeview Campground. The SRCA inventory of this area found 6,500 acres. The 2001 Roadless Rule Inventory of the 20,000-acre Crystal Creek area includes the Park Cone area. The Park Cone area was not included in the Colorado Roadless Rule inventory.

  The Park Cone area is bounded on the north and west by County road 742, on the south by private land along Lottis Creek, and on the east by forest road 752. Spurs off of the northern end of forest road 752 are excluded from this area.

PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hcca online.org • www.hccaonline.org

The 12,100-foot symmetrical Park Cone peak is practically an island surrounded by Taylor Reservoir, Taylor River, Lottis Creek and its unnamed tributaries through Union Park. Although this is a relatively low summit, there is a significant distance between its low and high elevations giving it good prominence within the surrounding area. Several tributaries of these streams in the Gunnison River system have their headwaters in the Park Cone area. Lodgepole pine and spruce-fir forests are common in this area, with pockets of montane grassland, tundra, and some relatively large areas of riparian shrub land. The Park Cone area is in a watershed of the Taylor River that contains Colorado River cutthroat trout. Elk have calves in this area. Potential habitat for lynx is found in this area. Opportunities for recreation in this area include visiting it from the nearby Lakeview campground and off-trail hiking to a prominent peak.

Red Mountain Creek

- The Red Mountain Creek area is in the Gunnison Ranger District, northeast of Gunnison and of Taylor Park Reservoir and is adjacent to the Collegiate Peaks Wilderness. The SRCA inventory of this area found 4,900 acres. The 2001 Roadless Rule Inventory found 3,900 roadless areas in the Red Mountain Creek area, part of the area named Elk Mountains – Collegiate. The Red Mountain Creek area was not included in the Colorado Roadless Rule inventory. This area is adjacent to wilderness so the 5,000 acre minimum size rule does not apply.

  The Red Mountain Creek area is bounded on the north and northeast by the Collegiate Peaks Wilderness Area, on the west and southwest by forest road 742 along the Taylor River and on the east by forest road 742.3D along Pieplant Creek. Forest road 742.3H along Red Mountain Creek that leads to trail 414 is excluded from the area.

  Lodgepole pine is the most common vegetation type in this area. Sagebrush steppe, subalpine riparian shrub land, and aspen are also found in this area. Potential habitat for lynx is found in this area. This area is in a watershed of the Taylor River that contains Colorado River Cutthroat Trout. Recreational opportunities in this area include the Timberline Trail (trail 414) that provides access to the Collegiate Peaks Wilderness.

Sargents

- The Sargents area is in the Gunnison Ranger District east of Gunnison, southwest of Monarch Pass, and northwest of the small community of Sargents on U.S. Highway 50. The SRCA inventory of this area found 12,700 acres. The Sargents area was not included in the 2001 Roadless Rule inventory or in the Colorado Roadless Rule inventory.

  The Sargents area is bounded on the north by forest roads 887 and 887.4B and the state land board inholding in section 36, on the northwest by forest road 768 through horn gulch and private inholdings along the road, on the southwest by the forest boundary, on the south by forest road 913 along Hicks Gulch and Swag Gulch, on the southeast by the powerline, and on

HIGH COUNTRY CITIZENS' ALLIANCE
PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

the east by the inholdings along Tomichi Gulch. Forest road 819 and various spurs off of 819 and 768 are excluded from the area.

Numerous streams that originate in this area flow into Tomichi Creek, which is a tributary of the Gunnison River including Dawson Creek, Cow Creek, Calf Creek and Mountain Spring Creek. Lodgepole pine, aspen, mixed-conifer forest, subalpine grassland, subalpine riparian woodland, and sagebrush steppe are all found in this area. Elk have calves in this area and concentrate here in the winter. An active sage grouse lek is found in or near this area. Potential habitat for lynx is found in this area. Opportunities for recreation in this area include the Quakey Mountain Trail (trails 537 and 538).

Slumgullion

- The Slumgullion area is in the Gunnison Ranger District east of Lake City and west of (but not quite adjacent to) the La Garita Wilderness Area. The SRCA inventory of this area found 6,300 acres. The Slumgullion area is directly adjacent to SRCA inventoried roadless land managed by the BLM for a total of about 8,700 roadless acres. The 2001 Roadless Rule inventory found 8,100 roadless acres in what was called the Carson Peak IRA. The Slumgullion area was not included in the Colorado Roadless Rule inventory.

  The Slumgullion area is bounded on the north by forest road 473 on the west by the National Forest boundary with BLM land, on the south by the boundary between the GMUG and Rio Grande National Forests, on the southeast by forest road 547 and on the east and northeast by Colorado Highway 149 (the Silver Thread Highway). Forest road 735 is excluded from this area by a long cherry stem.

  Slumgullion Mountain at 12,210 feet is just north of this area across forest road 473. Rambouillet Creek and several of its forks have their headwaters in this area and are tributaries of the Gunnison River. Spruce-fir forest, aspen, and alpine meadows are found in this area along with large patches of woody wetlands and other riparian areas. This area is in a watershed of Cebolla Creek that contains Colorado River Cutthroat Trout. Potential habitat for lynx is found in this area. Recreational opportunities in this area include the Continental Divide National Scenic Trail that forms the southeastern boundary of this area.

Conclusion

It is imperative that the Forest Service maintain an accurate, up to date roadless area inventory. HCCA appreciates the improvements in inventory that have occurred between the first draft of the Colorado Roadless Rule and the current draft. However, we think that are still errors. HCCA urges you to expand the roadless acreage in the areas indentified above to reflect the on-the-ground reality.

Thank you for your consideration of these comments.

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PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

Sincerely,

Matt Reed

Matt Reed
Public Lands Director
High Country Citizens' Alliance
Crested Butte, CO 81224
(970) 349-7104
matt@hccaonline.org

COR679.

From: MJGriffin [MJGriffin@co.summit.co.us]
Sent: Thursday, July 14, 2011 2:36 PM
To: COcomments
Subject: Submission of Comments on Proposed Colorado Roadless Rule and Revised Draft EIS
Attachments: Final Roadless Area Comment Letter to USFS executed.pdf

Colorado Roadless Area Review Team:

Attached is a comment letter sent on behalf of Summit County Government.

Please let me know if you have any questions.

Thank you,

MJ

M.J. Griffin
Administrative Manager
Office of the County Manager
Summit County Government
PO Box 68
208 East Lincoln Avenue
Breckenridge, CO 80424
970-453-3403
970-453-3535 fax
mjgriffin@co.summit.co.us

COR679

Board of County Commissioners

970-453-2561
fax 970-453-3535

208 East Lincoln Avenue
Post Office Box 68
Breckenridge, Colorado 80424

July 12, 2011

Colorado Roadless Area Review Team
U.S. Department of Agriculture, Forest Service
P.O. Box 1919
Sacramento, CA 95812

Re: Submission of Comments on Proposed Colorado Roadless Rule and Revised Draft EIS

Dear Colorado Roadless Area Review Team:

With this letter, the Summit County Board of County Commissioners hereby respectfully submits our comments and recommendations on the Proposed Colorado Roadless Rule and Revised Draft EIS. Recognizing the significant implications that the Proposed Rule will have on local land management needs within our community, the County has spent significant time analyzing this proposal, and we ask that our comments and suggestions be thoroughly evaluated and seriously considered by the Roadless Area Review Team.

As requested by the U.S. Forest Service (USFS) in the Proposed Rule published in the April 15, 2011 Federal Register, a large portion of the County's recommendations focus on identifying the specific areas within the nineteen (19) Colorado Roadless Areas (CRAs) in Summit County that should and should not be included in the upper tier lands, including the reason for the recommended inclusion or exclusion. The County has analyzed the proposed upper tier land designations in Alternative 2 and Alternative 4 in the context of local land management needs within our community, and submits the following comments:

Upper Tier Lands in Summit County: Alternative 2 (Proposed Action – Colorado Roadless Rule):

Alternative 2 proposes to designate two (2) of the 19 CRAs within Summit County as upper tier lands. A list of the acres and percentage of the two CRAs, which are designated as upper tier lands in Alternative 2, is included in the Table below.

Alternative 2: Proposed Summit County Upper Tier Lands			
CRA	Acres in Alternative 2 Upper Tier	Total CRA Acres	% of CRA in Upper Tier
Ptarmigan B	1,800	1,800	100%
Ptarmigan C	900	900	100%
17 Other Non-Upper Tier CRAs	0	78,500	0%
Total Summit County	**2,700**	**81,200**	**3%**

The County supports the Ptarmigan B and Ptarmigan C Roadless Areas being designated as upper tier

lands. Both CRAs are remote, primitive properties, which are located adjacent to the Ptarmigan Peak Wilderness. Comments submitted by the County to the Colorado Roadless Area Review Task Force in 2006 noted that the Board of County Commissioners continues to support the inclusion of Ptarmigan B and Ptarmigan C Roadless Areas into the Ptarmigan Peak Wilderness Area, as recommended in the White River National Forest Land and Resource Management Plan.

The County supports an upper tier designation for the majority of the Ptarmigan B and Ptarmigan C Roadless Area. However, for the Ptarmigan B Roadless Area, it is recommended that the boundary of the upper tier land designation be adjusted to provide a 200 foot setback from all private land, and for the Ptarmigan C Roadless Area, it is recommended that the boundary of the upper tier land designation be adjusted to maintain a 600 foot setback from all private properties along the southern and western edges of this CRA. The purpose of the recommended standard tier buffer areas is to accommodate respective wildfire mitigation / firefighting needs within these areas, which have been identified by the Summit County Wildfire Council.

Upper Tier Lands in Summit County: Alternative 4 (Colorado Roadless Rule with Additional Public Proposed Upper Tier Acres):

Alternative 4 proposes to designate portions of all 19 Summit County CRAs as upper tier lands. Due to the significant limitations on tree cutting within upper tier roadless areas, some of the proposed upper tier designations create concerns, most notably on properties adjacent to existing residential development where wildfire mitigation will need to be conducted.

Compatibility with Summit County Community Wildfire Protection Plan (SCCWPP)

The SCCWPP was originally adopted in September 2006 and last revised in May 2010. The purpose of the Plan is to identify areas where the risk and potential community impact of wildfire is greatest and to guide and coordinate community efforts to reduce the risk of wildfire through public education, reducing hazardous fuels and reducing structural ignitability. Like all Community Wildfire Protection Plans, the SCCWPP is a direct extension of the Healthy Forest Restoration Act (HFRA) authorized by Congress in 2003, which aims to enhance life safety for residents and responders, mitigate undesirable fire outcomes to property and infrastructure, and mitigate undesirable fire outcomes to the environment and quality of life within the community. Within Summit County, implementation of the SCCWPP is particularly imperative in light of the epidemic outbreak of mountain pine beetle that the County has been experiencing for the past decade. Currently, there are no lodgepole stands in Summit County that do not have some mountain pine beetle activity.

The SCCWPP identifies a total of 26 "focus areas" or locations where the need for fire protection is most critical. Identification of these "focus areas" is based on the following five components: fuel hazards; risk of wildfire occurrence; essential infrastructure at risk; community values at risk; and local preparedness and firefighting capability. The identified focus areas represent those areas where community resources should be focused to most effectively reduce potential damage from wildfire.

The County has analyzed the proposed upper tier land designations against the management prescriptions set forth in the SCWPP for each respective "focus area". The Upper Tier Land Recommendations outlined below reflect the County's analysis of the anticipated effects that the proposed designations would have on the ability to conduct wildfire hazard reduction efforts and vegetation management in CRAs adjacent to developed residential communities, which have been identified as "focus areas" in the SCCWPP.

Upper Tier Land Recommendations

The BOCC is submitting the following recommendations outlining which areas the County recommends should and should not be designated as upper tier lands. A list of the acres and percentage of each Summit County CRA, which are designated as upper tier lands in Alternative 4, is included in the Table below, along with recommendations on the appropriate designation for each CRA.

Alternative 4: Proposed Summit County Upper Tier Lands				
CRA	Acres in Alternative 4 Upper Tier	Total CRA Acres	% of CRA in Upper Tier	Recommendations
LOWER BLUE BASIN				
Black Lake East	800	800	99%	An upper tier designation is appropriate as this is a remote, primitive property, which is not proximate to residential development and is contiguous with the Eagles Nest Wilderness Area.
Black Lake West	900	900	99%	An upper tier designation is appropriate as this is a remote, primitive property, which is not proximate to residential development and is contiguous with the Eagles Nest Wilderness Area.
Boulder	700	1,300	57%	**This area should not be designated as an upper tier land** due to its proximity to residential development and the identified need to protect the public health, safety and welfare of the adjacent residents through wildfire hazard reduction efforts. There are two residential subdivisions adjacent to the Boulder Roadless Area, which are both identified as "focus areas" for prioritized wildfire hazard reduction efforts in the SCCWPP – the Boulder Creek and Pebble Creek Ranch Focus Areas. Portions of the focus areas delineated around these two subdivisions are located within the Boulder Roadless Area. The SCCWPP management prescriptions for these focus areas note that a fuel break on the USFS property surrounding these communities would greatly reduce the threat to life and property.
Elliot Ridge	1,900	3,200	59%	An upper tier designation is appropriate as this is a remote, primitive property, which is not proximate to residential development and is contiguous with the Eagles Nest Wilderness Area.
Maryland Creek	800	1,500	51%	**This area should not be designated as an upper tier land** due to its proximity to residential development and the need for wildfire hazard mitigation along the wildland / urban interface. Adjacent subdivisions to the north, including Pebble Creek Ranch and Meadowbrook Acres, are identified as "focus areas" for prioritized wildfire hazard reduction efforts in the SCCWPP. The SCCWPP management prescriptions for these focus areas note that a fuel break on the USFS property surrounding these communities would greatly reduce the threat to life and property.
Ptarmigan A	2,700	2,800	99%	An upper tier designation is appropriate for the majority of this roadless area. However, the western boundary of the roadless area borders the Hamilton Creek Subdivision, which is identified as a "focus area" for prioritized wildfire hazard reduction efforts in the SCCWPP. The SCCWPP management prescriptions for this focus area note that a small fire break should be implemented to separate the homes from the steep draw on the north side of the community. In addition, the Summit County Wildfire Council has identified wildfire mitigation / firefighting needs throughout all of the residential areas bordering the western edge of this CRA. Therefore, based on recommendations made in the SCCWPP and by the Wildfire Council, **the County recommends that**

Alternative 4: Proposed Summit County Upper Tier Lands				
CRA	Acres in Alternative 4 Upper Tier	Total CRA Acres	% of CRA in Upper Tier	Recommendations
				the boundary of the upper tier designation be adjusted to provide a 600 foot setback from all private properties to the west.
Ptarmigan B	1,200	1,800	69%	An upper tier designation is appropriate for the majority of this CRA as this is a remote, primitive property, which is adjacent to the Ptarmigan Peak Wilderness Area. For this CRA, there is a discrepancy between the acreage designated as upper tier land in Alternative 2 vs. Alternative 4. The County supports designating the majority of this CRA as an upper tier land, in accordance with proposed Alternative 2. However, **the County recommends that the boundary of the upper tier land designation be adjusted to provide a 200 foot setback from all private land,** in order to accommodate specific wildfire mitigation / firefighting needs within this area, which have been identified by the Summit County Wildfire Council.
Ptarmigan C	900	900	100%	An upper tier designation is appropriate for the majority of this CRA as this is a remote, primitive property, which is adjacent to the Ptarmigan Peak Wilderness Area. However, **the County recommends that the boundary of the upper tier land designation be adjusted to maintain a 600 foot setback from all private properties along the southern and western edges of this CRA.** The purpose of the recommended buffer is to accommodate specific wildfire mitigation / firefighting needs within these areas, which have been identified by the Summit County Wildfire Council.
Ryan Gulch	100	600	22%	**This roadless area should not be designated as an upper tier land** as it surrounds one of the most densely populated residential areas in Summit County (the Wildernest area subdivisions) on three sides. There are two large "focus areas" identified for prioritized wildfire hazard reduction efforts in the SCCWPP located within and adjacent to the Ryan Gulch Roadless area. The SCCWPP management prescriptions for both focus areas recommend fuels reduction and the creation of a fuel break on USFS property. Specific prescriptions for fuels reduction in the Salt Lick Gulch focus area (located entirely on USFS property) are addressed in the NEPA documents covering this focus area, which can be obtained by contacting the Dillon Ranger District. Due to the identified need to protect the public health, safety and welfare of the approximately 2,800 adjacent residents through wildfire hazard reduction efforts, it is recommended that the Ryan Gulch Roadless area be designated as a standard tier roadless area.
Williams Fork	5,200	6,600	79%	An upper tier designation is appropriate for the majority of this CRA. However, **the County recommends that the boundary of the upper tier land designation be adjusted to provide a 200 foot setback from all private land,** based on specific wildfire mitigation /firefighting needs in this area, which have been identified by the Summit County Wildfire Council.
Willow	600	1,100	54%	**This area should not be designated as an upper tier land** due to its proximity to residential development and the need for wildfire hazard mitigation adjacent to two residential subdivisions bordering the eastern edge of the roadless area. These two subdivisions (Eagles Nest and Ruby Ranch) are identified as "focus areas" for prioritized wildfire hazard

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Alternative 4: Proposed Summit County Upper Tier Lands				
CRA	Acres in Alternative 4 Upper Tier	Total CRA Acres	% of CRA in Upper Tier	Recommendations
				reduction efforts in the SCCWPP. SCCWPP management prescriptions for these focus areas note that a fuel break on the USFS property surrounding these communities would greatly reduce the threat to life and property.
SNAKE RIVER BASIN				
Tenderfoot Mountain	8,400	8,400	99%	**The Tenderfoot Mountain and Porcupine Peak Roadless Areas should not be designated as upper tier lands** due to multiple land management activities needed throughout these roadless areas. The western portion of the Porcupine Peak roadless area borders the Keystone "focus area", which is identified for prioritized wildfire hazard reduction efforts in the SCCWPP. SCCWPP management prescriptions for the Keystone focus area recommend work on adjacent USFS property to provide additional protection for the Keystone Resort community. In addition, the Town of Dillon has identified a need for forest and fire management in approximately 1,046 acres of the Town's watershed, which is located within these two CRAs. Lastly, the need for maintenance work in and along Straight Creek has also been identified by the CO Department of Transportation (CDOT) and the Town of Dillon. Therefore, due to the multiple land management activities needed throughout these two roadless areas, it is recommended that these CRA be designated as standard tier roadless area.
Porcupine Peak	7,600	7,600	99%	
TEN MILE BASIN				
Corral Creek	3,100	3,300	94%	An upper tier designation is appropriate because this area is not located within close proximity to residential development and borders the Eagle's Nest Wilderness Area.
East Vail	7,200	8,000	90%	An upper tier designation of the 74 acres of this CRA, which are located within Summit County, is appropriate because the property is not located within close proximity to residential development and it is unlikely that tree-cutting exceptions for wildfire hazard mitigation will be needed.
Ptarmigan Hill A	300	13,100	2%	An upper tier designation is appropriate as this is a remote property, which is not proximate to residential development. It is therefore unlikely that tree-cutting exceptions for wildfire hazard mitigation will be needed.
Ptarmigan Hill B	6,900	7,000	99%	An upper tier designation is appropriate because this is a remote property, which is not located within close proximity to residential development and it is unlikely that tree-cutting exceptions for wildfire hazard mitigation will be needed.
Tenmile	4,400	6,300	70%	An upper tier designation is appropriate because this is a remote, high alpine property, which is not located within close proximity to residential development.
UPPER BLUE BASIN				
Hoosier Ridge	6,000	6,000	100%	This area should not be designated as an upper tier land due to its proximity to residential development and the identified need to protect the public health, safety and welfare of the adjacent residents through wildfire hazard reduction efforts. There are numerous residential subdivisions that abut the western portion of this CRA and the SCCWPP identifies three "focus areas" along the western edge of the CRA surrounding the adjacent subdivisions – the Blue River, Fredonia Gulch, and Quandary Village / Alpine Breck / Valley of the Blue Focus Areas. SCCWPP management prescriptions for these focus areas recommend fuels reduction work on USFS

Alternative 4: Proposed Summit County Upper Tier Lands				
CRA	Acres in Alternative 4 Upper Tier	Total CRA Acres	% of CRA in Upper Tier	Recommendations
				property to protect the adjacent subdivisions from wildfire hazard. Therefore, in order to allow sufficient wildfire hazard mitigation work to protect the subdivisions west of this CRA, it is recommended that **the Hoosier Ridge Roadless Area should not be designated as an upper tier land or, at a minimum, only the eastern 1/2 of the roadless area should be designated as an upper tier land.**
Total	**59,700**	**81,200**	**74%**	

As summarized in the table above, overall the County recommends that six (6) of the 19 CRAs, which are currently being proposed as upper tier lands in Alternative 4, should instead be designated as standard tier roadless areas (i.e. Boulder, Maryland Creek, Ryan Gulch, Willow, Tenderfoot Mountain and Porcupine Peak Roadless Areas). This recommendation is based on the proximity of these CRAs to heavily populated residential areas, which are identified as "focus areas" for prioritized wildfire hazard reduction efforts in the Summit County Community Wildfire Protection Plan (SCCWPP). The County strongly emphasizes that, if applied to these CRAs, the increased restrictions on tree cutting within upper tier lands would detrimentally impact the identified need to protect the public health, safety and welfare of adjacent residents through prioritized wildfire hazard reduction efforts. Additional considerations built into the County's recommendations for the Tenderfoot Mountain and Porcupine Peak Roadless Areas include the need for forest and fire management in approximately 1,046 acres of the Town of Dillon's watershed and the need for maintenance in and along Straight Creek. Therefore, based on the local land management needs summarized in the table above, the County requests that these six CRAs be designated as standard tier roadless areas.

As noted in the above table, the County also recommends that the upper tier designations currently being proposed for five (5) additional CRAs (i.e. Ptarmigan A, Ptarmigan B, Ptarmigan C, Williams Fork and Hoosier Ridge) be modified to exclude portions of these respective roadless areas which are immediately adjacent to residential neighborhoods and have been identified as areas for prioritized wildfire hazard reduction efforts.

Additional Recommended CRA Boundary Adjustments:

In addition to the upper tier boundary adjustments outlined above, the County would like to recommend modifications to the boundaries of the overall CRA for the Ptarmigan A and Tenderfoot Mountain Roadless Areas. An explanation of each proposed boundary modification and the reasoning for the requested change is provided below:

Ptarmigan A Roadless Area: There is a defunct, historic logging road, which extends southeast from the TYL Ranch into the Ptarmigan A Roadless Area. In the Proposed Rule, this road has been excluded from the boundary of the Ptarmigan A Roadless Areas as a "cherry stem". However, there is no legal public access to this road across the adjacent private property, and the road is located on National Forest System Land designated as "non-motorized" in the White River National Forest Land and Resource Management Plan and respective Travel Management Plan. Therefore, to facilitate better land management in this area and deter illegal motorized use, the County recommends that the "cherry stem" located around this old logging road be incorporated into the boundary of the Ptarmigan A Roadless Area.

Tenderfoot Mountain Roadless Area: To accommodate potential future expansion of the I-70 corridor in accordance with CDOT recommendations, the County recommends that the boundary of the Tenderfoot Mountain Roadless Area be modified to provide an additional 500 foot buffer from the existing I-70 right-

of-way.

Recommendations on Exceptions to Access Existing Water Conveyance Structures:

Comments previously submitted by the County to the Colorado Roadless Area Review Task Force in 2006 requested that the USFS recognize the legal right to access and maintain existing head gate features within 11 of the 19 roadless areas in Summit County.

The County is pleased to see that an exception has been added to the Proposed Rule for roads to access authorized water conveyance structures operated according to a State water court decree, which were in existence at the time of the promulgation of the final rule. However, as currently proposed, this exception is only applicable to standard tier roadless areas. This creates a concern, as there are existing head gate features located on the following five (5) Summit County roadless areas, which the County is supporting as proposed upper tier lands in Alternative 4: Black Lake West, Elliot Ridge, Corral Creek, Ptarmigan Hill B and Hoosier Ridge. To address this issue, the County recommends that the Proposed Rule be modified to recognize the legal right to access and maintain existing water conveyance structures on upper tier lands, in addition to the exceptions already provided for standard tier lands.

Recommendation to Specify Allowance for Avalanche Control Work within CRAs Adjacent to Public Rights-of-Way:

Within the Porcupine Peak Roadless Area, CDOT has identified needs to conduct avalanche control work in areas where existing avalanche paths cross over State Highway 6 (e.g., the Professor Avalanche Path). Such work does not necessitate the construction of roads or the removal of vegetation, and does not appear to be prohibited by the Proposed Rule. Nevertheless, in light of the important life safety considerations associated with this land management activity, the County requests that the Proposed Rule be modified to specifically recognize the legal right to conduct avalanche control work in both standard and upper tier roadless areas, where needed to protect adjacent public rights-of-way from avalanche hazard.

Recommendation to Allow Post-Wildfire Water Protection Efforts in Standard and Upper Tier Roadless Areas:

In addition to the exceptions already included in the Proposed Rule for forest management activities, the County suggests that an exception also be provided in both standard tier and upper tier roadless areas for post-wildfire watershed protection efforts (e.g., the ability to construct water quality protection structures). If a wildfire occurs in Summit County, the loss of vegetative ground cover may result in major erosion episodes that could greatly increase sediment loading in area streams and lakes. The results could impact water quality and threaten the ability of water bodies such as Goose Pasture Tarn (the Town of Breckenridge's primary water source) to provide a safe water supply for area residents. Having the ability, in the aftermath of a wildfire, to construct water quality structures such as sediment retention ponds is critical in order to ensure a safe and reliable water supply for the residents and businesses of Summit County. The County therefore requests that this exception be added for both standard and upper tier roadless areas.

Request to Consider Previously Proposed Boundary Adjustments in the County's 2006 Recommendations:

The County submitted detailed recommendations on the 19 Summit County roadless areas to the Colorado Roadless Area Review Task Force in June 2006, which included recommended boundary adjustments to 13 of the 19 roadless areas in Summit County.

In reviewing the current version of the Proposed Rule, it appears that the only boundary adjustments that have been made were adjustments to the Porcupine Peak and Ptarmigan Hill B Roadless Areas to remove lands located within the ski area boundaries for Arapahoe Basin and Copper Mountain from these roadless areas' boundaries. Additional boundary adjustments, which the County had suggested, have not been made in the Proposed Rule. A summary of the more substantive boundary adjustments recommended by the County in 2006 is provided below:

Ptarmigan B Roadless Area: To better manage the area south of Ute Pass Road, which is located west of the roadless area, it is recommended that this approximately 187-acre area be incorporated into the Ptarmigan B Roadless Area. This modification will result in a roadless area boundary that follows the entire Recommended Wilderness management prescription boundary in the White River National Forest Land and Resource Management Plan.

Tenderfoot Mountain Roadless Area: Expand the boundary of the roadless area approximately 1,281-acres north and west around I-70 to incorporate lands within the boundaries of the identified Special Interest Areas – Minimal Use or Interpretation and Pristine Wilderness management prescriptions (excluding areas already designated as part of the Ptarmigan Peak Wilderness Area). The expanded boundary should provide an adequate buffer for possible expansion of the Interstate. The eastern boundary of the roadless area (west of Loveland Pass) should also be extended to match the boundary of the U.S. Forest Service Backcountry Recreation – Non-Motorized management prescription, thus adding approximately 102 acres to the roadless area designation.

Porcupine Peak Roadless Area: Incorporate approximately 719 acres of land that is within the U.S.F.S. Backcountry – Non-motorized management prescription into the roadless area boundary.

Ten Mile Roadless Area: Consider extending the boundary of the roadless area further north, south and west: extend north to encompass the Peak One area and recognize U.S. Forest Service land trades (following the Backcountry Recreation – Non-motorized management prescription); extend south to Mayflower Gulch Road while excluding privately held mining claims; and extend west to match the Backcountry Recreation – Non-motorized management prescription boundary. The recommended expansion/extension would incorporate approximately 1,200 acres to the north, approximately 1,309-acres to the south, and approximately 116.6 acres to the west into the Tenmile Roadless Area (approximately 2,625.6 acres total).

Ptarmigan Hill B Roadless Area: The 160-acre in-holding parcel excluded as part of the inventoried roadless area should be included in the roadless area. Also, extend the boundary to include the Guller Gulch area to I-70 (following the Forested Landscape Linkages management prescription).

Hoosier Ridge Roadless Area: The privately owned mining claims/in-holdings just east of the terminus of Fredonia Gulch Road should be excluded from the roadless area, and the "cherry stems" that buffer the Fredonia and Hunter Road should be expanded/extended east to show access to the respective privately held in-holdings.

Copies of the detailed recommendations for these six (6) roadless areas, which were submitted by the County in 2006, are attached to this letter along with corresponding maps showing the recommended boundary adjustments described above. The County requests that these previously recommended boundary adjustments be reconsidered by the USFS at this time.

The County understands the overall ramifications that the Proposed Colorado Roadless Rule will have on local land management needs within our community, and has therefore invested significant time reviewing and commenting on the Proposed Rule. Therefore, we respectfully request that the issues and recommendations outlined in this letter be thoroughly evaluated and taken into consideration by the Roadless Area Review Team as the USFS works review public comments and finalize the Colorado

Roadless Rule.

To ensure that our recommendations are fully understood and seriously considered during this review process, the Board of County Commissioners would like to request a face-to-face meeting with one or more members of the Roadless Area Review Team, in order to discuss our recommendations in person. Please contact Karn Stiegelmeier, BOCC Chairperson, at 970-453-3412 or karns@co.summit.co.us to coordinate a convenient time and location when such a meeting can take place.

We thank you for your consideration of our comments and suggestions, and we look forward to communicating with you further during your process to evaluate public comments and finalize the Colorado Roadless Rule.

Sincerely,

Karn Stiegelmeier
Chairperson

Thomas C. Davidson
Commissioner

Dan Gibbs
Commissioner

Attachments:

- Copies of the County's Detailed Recommendations Submitted to the Colorado Roadless Areas Review Task Force in June 2006 for Ptarmigan B, Tenderfoot Mountain, Porcupine Peak, Ten Mile, Ptarmigan Hill B and Hoosier Ridge Roadless Areas.

COR679

ROADLESS AREA: Ptarmigan B **ACREAGE:** 1,804 acres

GENERAL LOCATION: Eastern portion of the Lower Blue Basin, east of Highway 9 and south of Ute Pass Road.

EVALUATION CRITERIA:

USFS LAND AND RESOURCE MANAGEMENT PLAN "MANAGEMENT PRESCRIPTION"

- Recommended Wilderness

USFS MANAGEMENT CONSIDERATIONS (i.e. current management goals, land trades, boundary adjustments)

- The existing roads near the west-central boundary of the roadless area provide management challenges for the USFS. Particularly excessive motorized use and people getting stuck.
- There is a mapping error along the eastern boundary of the roadless area that could be adjusted (i.e. match the boundary with the top of the ridge more accurately).

SUMMIT COUNTY LOWER BLUE MASTER PLAN CONSIDERATIONS (i.e. land use designation, visibility, significant routes)

- *Land Use Designation* – Federal Lands (Placed on USFS and BLM lands intended to be used for public use and to be protected from development other than recreational uses. The land use designation suggests management activities maintain or improve the quality of recreational opportunities).
- *Visibility* – The southeastern portion of the property (Ute Peak and the surrounding area) is visible from 156-227 observation points, and the remainder of the property includes areas visible from 0-9 observation points, 10-82 observation points, and 83-155 observation points.
- *Significant Routes* – Acorn Creek Trail crosses the southeastern corner of the roadless area (summer and winter route), and Ute Peak Trail runs along the eastern portion of the roadless area. Designating the area as roadless would not affect the ability to manage continued use of the identified significant routes.

ADJACENT LAND USES AND OWNERSHIP PATTERNS

- Situated between Ptarmigan Peak Wilderness Area to the south, Ute Pass Road to the north, and National Forest System lands to the west.

ENVIRONMENTAL AND WILDLIFE CONSIDERATIONS (i.e. unique ecosystems, wetlands, slope)

- Steep slopes 30% or greater (including Ute Peak), streams, and some wetlands adjacent to the streams.
- Division of Wildlife representatives indicate the proposed roadless area would not negatively affect their ability to manage wildlife.

OTHER (i.e. legal, infrastructure, unique issues)

- As part of the county's review of the White River National Forest Land and Resource Management Plan and Draft EIS in 1999/2000, it was recommended by the Board of County Commissioners the Ptarmigan B Roadless Area receive a Wilderness designation.

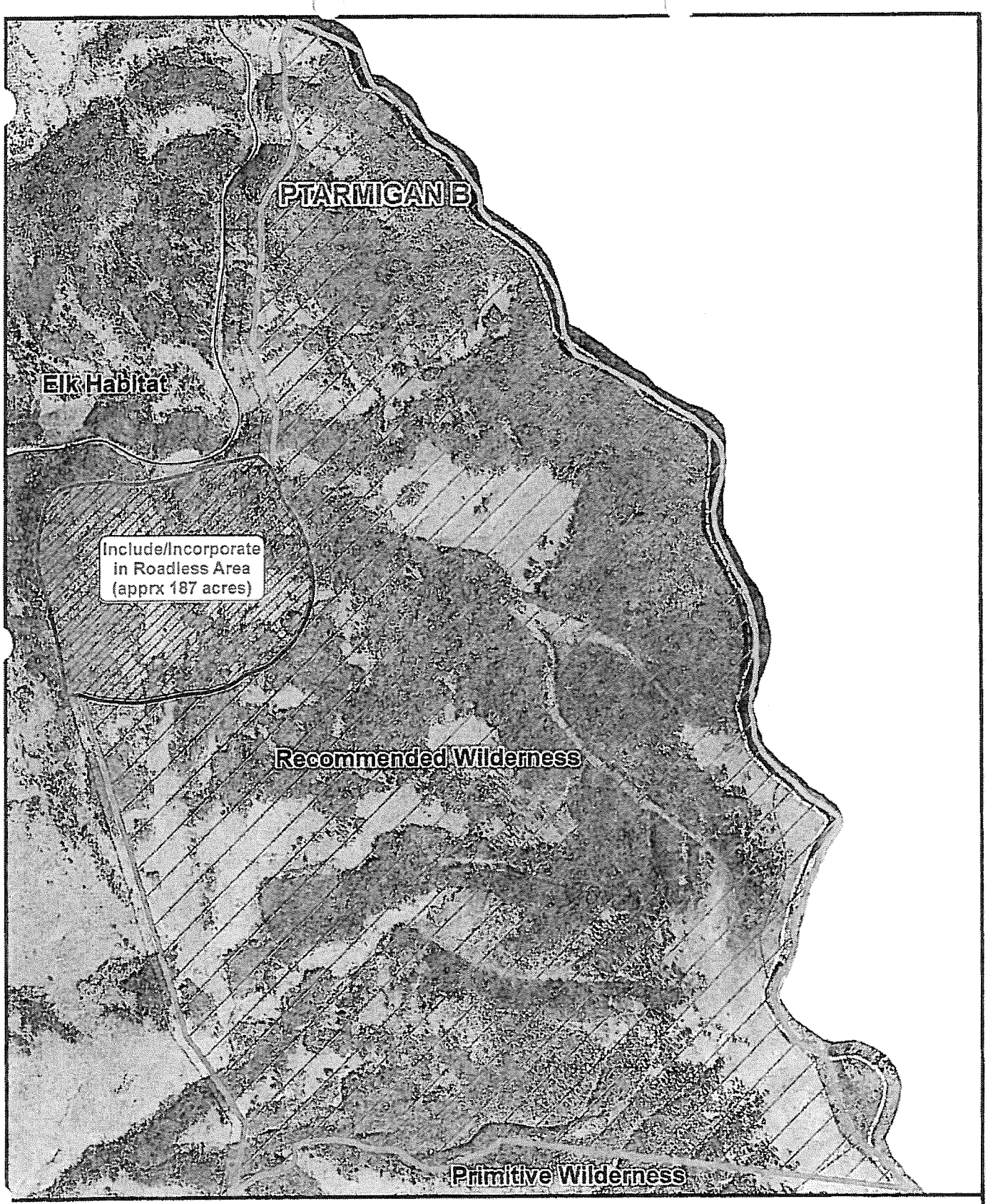
RECOMMENDATIONS:

- The inventoried roadless area should be designated as roadless.
- To better manage the area south of Ute Pass Road/west of the roadless area, it is recommended to designate this approximately 187-acre area as roadless.
- In the context of the "U.S. Forest Service Edge Mapping/Mapping Errors" guiding principle, it is suggested the roadless area boundary be modified to follow the entire Recommended Wilderness management prescription boundary.
- The Board of County Commissioners continues to support the inclusion of Ptarmigan B Roadless Area into the Ptarmigan Peak Wilderness Area, as recommended in the White River National Forest Land and Resource Management Plan.

Robert H.S. French, Chair

5-30-06
Date

COR679



PTARMIGAN B

Feet
0 800 1,600 3,200

1:18,316

NORTH

Legend
- Summit County Roadless Areas
- Parcel
- Headgates
- Paved Road
- Unpaved Road
- Trail

USFS Management Areas are shown in transparent colors and labeled in green text. Management area and roadless area descriptions are from White River National Forest data sets.

COR679

ROADLESS AREA: Tenderfoot Mountain **ACREAGE:** 8,378 acres (2nd largest roadless area in the County)

GENERAL LOCATION: Northern portion of the basin: east of I-70, north of Highway 6, and west of Loveland Pass.

EVALUATION CRITERIA:

USFS LAND AND RESOURCE MANAGEMENT PLAN "MANAGEMENT PRESCRIPTION"

- Special Interest Areas – Minimal Use & Interpretation; Backcountry Recreation – Non-motorized; and Forested Landscape Linkages

USFS MANAGEMENT CONSIDERATIONS (i.e. current management goals, land trades, boundary adjustments)

- The area around Loveland Pass receives a lot of user traffic in both the summer and winter. Providing for adequate parking to accommodate users at peak times remains a challenge on top of the Pass.
- It appears previous forest management prescriptions were a factor in determining and developing the southwestern boundary of the roadless area. There are a series of clear cuts and primitive roads that the southwestern boundary of the roadless area skirts.
- It is not clear why the boundary of the roadless area did not extend around I-70 (i.e. lack of roads and undisturbed area).

SUMMIT COUNTY SNAKE RIVER MASTER PLAN CONSIDERATIONS (i.e. land use designation, visibility, significant routes)

- *Land Use Designation* – Open Space/Natural Resource/Recreation. Intended to protect and preserve lands in a predominately undeveloped state while providing for one or more of the following community benefits: buffers, view corridors, access to trails, trailheads, water bodies, or national forest areas, and dispersed or developed recreational facilities or passive recreational activities.
- *Visibility* – The majority of the property is not visible from observation points along I-70, Swan Mountain Road, Hwy 6, and Montezuma Road. The most visible areas are the northwestern portion of the property (adjacent to I-70) and the southeastern portion of the property (adjacent to Hwy 6).
- *Significant Routes* — None

ADJACENT LAND USES AND OWNERSHIP PATTERNS

- I-70 borders the roadless area to the northwest, and Highway 6 borders the roadless area to the southeast.

ENVIRONMENTAL AND WILDLIFE CONSIDERATIONS (i.e. unique ecosystems, wetlands, slope)

- Slopes 30% or greater, wetlands, and numerous streams.
- Division of Wildlife representatives indicate the proposed roadless area would not negatively affect their ability to manage wildlife.

OTHER (i.e. legal, infrastructure, unique issues)

- The Division of Water Resources identifies three head gate features located near the western side of the Eisenhower Tunnel. Two head gates are owned by Adolph Coors Company and are not in the roadless area. Another head gate is owned by CDOT and is possibly located within the roadless area. A fourth head gate is owned by Larry Ziruolo and is in the roadless area.

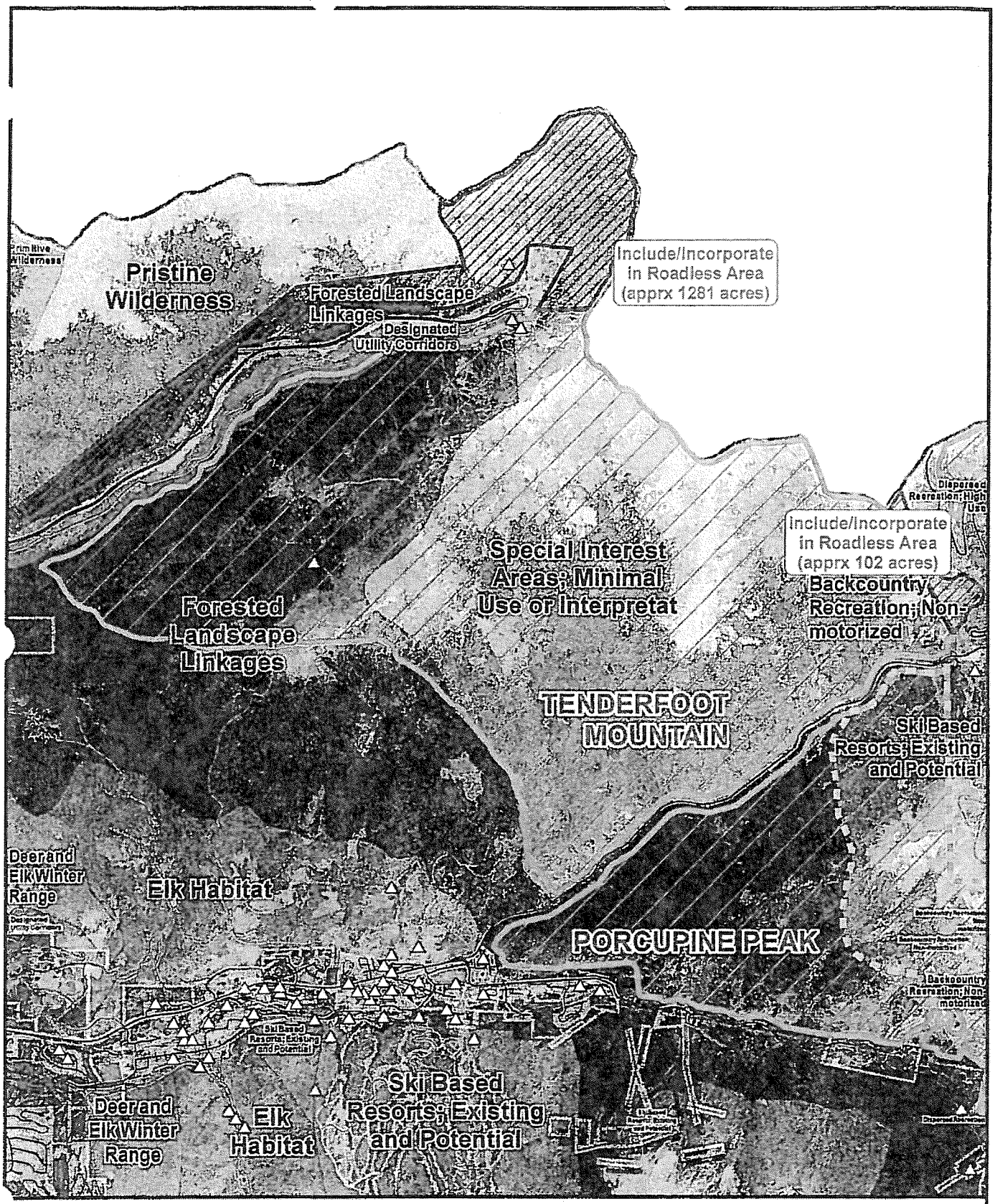
RECOMMENDATIONS:

- The inventoried roadless area should be designated as roadless.
- It is suggested to expand the boundary of the roadless area approximately 1,281-acres north and west around I-70 to incorporate lands within the boundaries of the identified Special Interest Areas – Minimal Use or Interpretation and Pristine Wilderness management prescriptions (excluding areas already designated as part of the Ptarmigan Peak Wilderness Area). The expanded boundary should provide an adequate buffer for possible expansion of the Interstate.
- The eastern boundary of the roadless area (west of Loveland Pass) should also be extended to match the boundary of the U.S. Forest Service Backcountry Recreation – Non-Motorized management prescription, thus adding approximately 102 acres to the roadless area designation.
- In the context of the "Respect Existing Rights" guiding principle, recognize the legal right to access and maintain the Coors Company, CDOT and Ziruolo head gate features.

5-30-06

Robert H.S. French, Chair — Date

COR079



TENDERFOOT MOUNTAIN

NORTH

Feet
0 2,600 5,200 10,400

1:56,351

Legend
- Summit County Roadless Areas
- Parcel
- Headgates
- Paved Road
- Unpaved Road
- Trail

USFS Management Areas are shown in transparent colors and labeled in green text. Management area and roadless area descriptions are from White River National Forest data sets.

CoR679

ROADLESS AREA: Porcupine Peak **ACREAGE:** 8,745 acres (largest inventoried roadless area in the County)

GENERAL LOCATION: Eastern portion of the Snake River Basin, situated between Highway 6 and Montezuma/Peru Creek Road

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EVALUATION CRITERIA:

USFS LAND AND RESOURCE MANAGEMENT PLAN "MANAGEMENT PRESCRIPTION"

- Ski-based Resorts – Existing & Potential; Backcountry Recreation – Non-motorized; and Forested Landscaped Linkages, Dispersed Recreation

USFS MANAGEMENT CONSIDERATIONS (i.e. current management goals, land trades, boundary adjustments)

- There are numerous mining claims that are depicted as in-holdings within the roadless area, and these mining claims have been excluded from the roadless area boundary. Access to these backcountry mining claims may be needed in the future, and these access routes would cut through the current boundary of the roadless area.
- The roadless area surrounds Arapahoe Basin Ski Area on three sides. The roadless area boundary may need to be modified to reflect the ski area expansion or the existing ski-based resorts management prescription.
- The Peru Creek drainage experiences a mix of motorized and non-motorized uses.

SUMMIT COUNTY SNAKE RIVER MASTER PLAN CONSIDERATIONS (i.e. land use designation, visibility, significant routes)

- *Land Use Designations* – 1) Open Space/Natural Resource/Recreation - intended to protect and preserve lands in a predominately undeveloped state; 2) Ski Area - the Ski Area designation has been assigned to several areas of private lands within ski area boundaries. The intent of the designation is to allow uses typically associated with ski areas while limiting the impacts of these uses and maintaining the area's alpine character; 3) Backcountry - the interspersed mining claims in the roadless area have a Backcountry designation and are identified as sending areas for TDRs.
- *Visibility* – The western half of the property is highly visible from observation points along the major travel corridors in the Snake River Basin (in this case, primarily Hwy 6 and Montezuma Road). The western portion of the property contains areas visible from 5-15 points, 15-30 points and 30 + points. The majority of the eastern portion of the property is not visible from observation points.
- *Significant Routes* - Chihuahua Gulch Trail, and Argentine North Fork Trail (both non-motorized). Designating the area as roadless would not affect the ability to manage continued use of the identified significant routes.

ADJACENT LAND USES AND OWNERSHIP PATTERNS

- Highway 6 borders the roadless area on the west, and Montezuma Road, the Snake River and Peru Creek border the roadless area on the south.
- Chihuahua Gulch Road and Ruby Gulch Road extend into the roadless area from the south, and have been excluded from the roadless area boundary.

ENVIRONMENTAL AND WILDLIFE CONSIDERATIONS (i.e. unique ecosystems, wetlands, slope)

- *Environmental Constraints* – Slopes 30% or greater, wetlands, some lakes and streams.
- Division of Wildlife representatives indicate the proposed roadless area would not negatively affect their ability to manage wildlife.

OTHER (i.e. legal, infrastructure, unique issues)

- The Division of Water Resources identifies a number of head gate features located and peppered throughout the eastern portion and along the southern boundary of the roadless area. Vidler Water Company owns a majority of these head gates.
- The Summit County Open Space Program has acquired several in-holdings within proximity to the roadless area. The County's Program continues to work toward acquiring more of these claims.

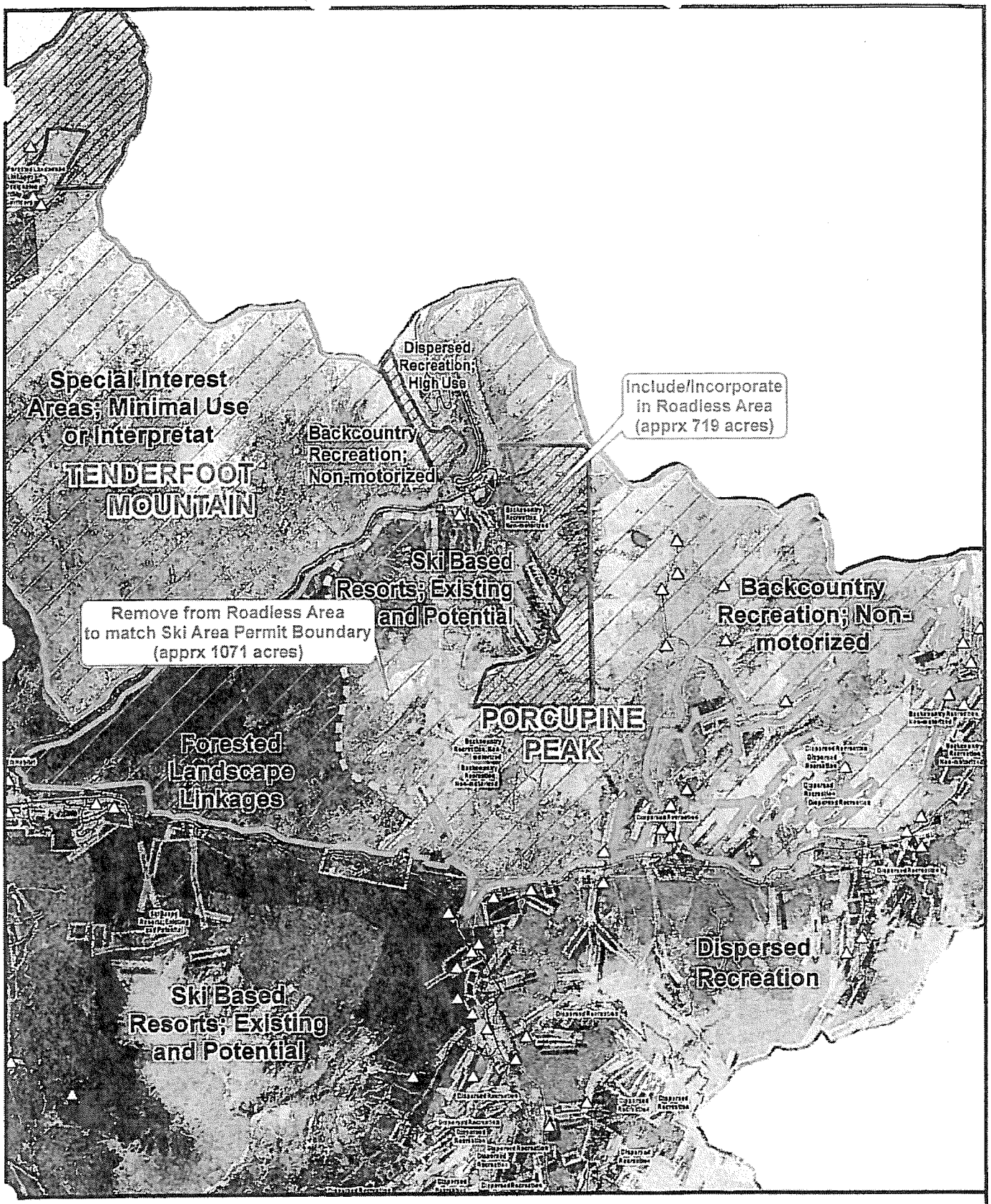
RECOMMENDATIONS:

- The inventoried roadless area should be designated as roadless.
- The boundary of the roadless area should be modified to remove approximately 1,071 acres of land that is within the U.S.F.S. Ski Based Resorts – Existing & Potential management prescription from the roadless area designation, and to incorporate approximately 719 acres of land that is within the U.S.F.S. Backcountry – Non-motorized management prescription into the roadless area boundary.
- In the context of the "Respect Existing Rights" guiding principle, recognize 1) the legal right to access and maintain head gate features, and 2) the ability to access privately owned in-holdings.

Robert H.S. French, Chair

5-30-06
Date

COR-79



PORCUPINE PEAK

Feet

0 2,625 5,250 10,500

1:61,622

NORTH

Legend

- Summit County Roadless Areas
- Parcel
- Headgates
- Paved Road
- Unpaved Road
- Trail

USFS Management Areas are shown in transparent colors and labeled in green text. Management area and roadless area descriptions are from White River National Forest data sets.

COR679

ROADLESS AREA: Tenmile **ACREAGE:** 6,383 acres

GENERAL LOCATION: Eastern portion of the Ten Mile Basin, Peak 2 south to Peak 10, situated between I-70 and ridge of Tenmile Range.

EVALUATION CRITERIA:

USFS LAND AND RESOURCE MANAGEMENT PLAN "MANAGEMENT PRESCRIPTION"

- Backcountry Recreation – Non-motorized
- Dispersed Recreation
- Ski-Based Resorts – Existing & Potential
- Designated Utility Corridors – Existing & Potential

SUMMIT COUNTY TEN MILE MASTER PLAN CONSIDERATIONS (i.e. land use designation, visibility, significant routes)

- *Land Use Designation* – National Forest (Placed on USFS lands intended to be used for public use and to be protected from development other than recreational uses).
- *Visibility* – Exceptional visual importance.
- *Significant Routes* – Wheeler National Recreation Trail, Continental Divide National Scenic Trail, and Colorado Trail (summer trails). Designating the area as roadless would not affect the ability to manage continued use of the identified significant routes.

ADJACENT LAND USES AND OWNERSHIP PATTERNS

- The Tenmile Range runs along the eastern portion of the roadless area, and I-70 and Highway 91 are located to the west of the roadless area.
- The "SKY Chutes" and other avalanche hazard areas are located within the boundaries of the roadless area.

ENVIRONMENTAL AND WILDLIFE CONSIDERATIONS (i.e. unique ecosystems, wetlands, slope)

- Slopes 30% or greater, streams and some wetlands.
- Division of Wildlife representatives indicate the proposed roadless area would not negatively affect their ability to manage wildlife.

OTHER (i.e. legal, infrastructure, unique issues)

- The Division of Water Resources identifies a head gate (Robert Eckles) possibly located in the northern portion of the roadless area. It appears to be situated on the roadless area boundary.

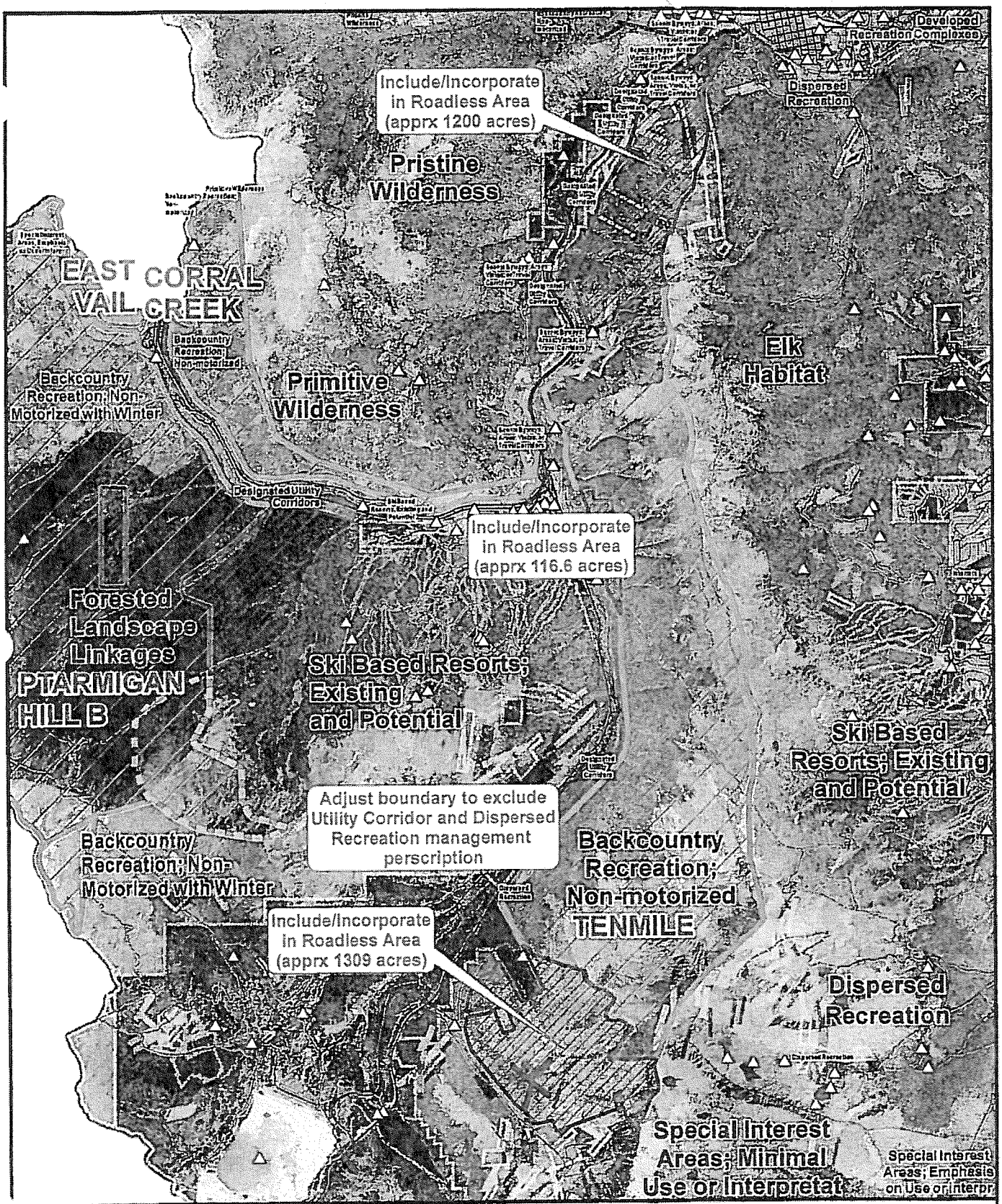
RECOMMENDATIONS:

- The inventoried roadless area should be designated as roadless.
- Consider extending the boundary of the roadless further north, south and west: extend north to encompass the Peak One area and recognize U.S. Forest Service land trades (following the Backcountry Recreation – Non-motorized management prescription); extend south to Mayflower Gulch Road while excluding privately held mining claims; and extend west to match the Backcountry Recreation – Non-motorized management prescription boundary. The recommended expansion/extension would incorporate approximately 1,200 acres to the north, approximately 1,309-acres to the south, and approximately 116.6 acres to the west in the Tenmile Roadless Area (approximately 2,625.6 acres total).
- In the context of the "U.S. Forest Service Edge Mapping/Mapping Errors" guiding principle, reconfigure the edge mapping errors of the roadless area boundary to: follow the "Backcountry Recreation – Non-motorized" management prescription; have the eastern boundary follow the top/ridge of the Tenmile Range; and exclude the Utility Corridor and Dispersed Recreation management prescriptions.
- In the context of the "Respect Existing Rights" guiding principle, recognize the legal right to access and maintain the Robert Eckles head gate feature.

Robert H.S. French, Chair

5-30-06
Date

COR679


Developed Recreation Complexes
Dispersed Recreation
Include/Incorporate in Roadless Area (apprx 1200 acres)
Pristine Wilderness
EAST CORRAL VAIL CREEK
Backcountry Recreation; Non-motorized
Backcountry Recreation; Non-Motorized with Winter
Primitive Wilderness
Elk Habitat
Designated Utility Corridors
Include/Incorporate in Roadless Area (apprx 116.6 acres)
Forested Landscape Linkages
PTARMIGAN HILL B
Ski Based Resorts; Existing and Potential
Ski Based Resorts; Existing and Potential
Adjust boundary to exclude Utility Corridor and Dispersed Recreation management perscription
Backcountry Recreation; Non-Motorized with Winter
Backcountry Recreation; Non-motorized
TENMILE
Include/Incorporate in Roadless Area (apprx 1309 acres)
Dispersed Recreation
Special Interest Areas; Minimal Use or Interpretat
Special Interest Areas; Emphasis on Use or Interpr
TENMILE
Feet
0
3,750
7,500
15,000
1:79,283
NORTH
Legend
Summit County Roadless Areas
Parcel
Headgates
Paved Road
Unpaved Road
Trail
USFS Management Areas are shown in transparent colors and labeled in green text. Management area and roadless area descriptions are from White River National Forest data sets.

COR679

ROADLESS AREA: Ptarmigan Hill B **ACREAGE:** 7,709 acres

GENERAL LOCATION: Western portion of the Ten Mile Basin.

EVALUATION CRITERIA:

USFS LAND AND RESOURCE MANAGEMENT PLAN "MANAGEMENT PRESCRIPTION"

- Forested Landscape Linkages; Backcountry Recreation – Non-motorized with Winter Motorized; Backcountry Recreation – Year Round Motorized; and Ski-Based Resorts – Existing & Potential

USFS MANAGEMENT CONSIDERATIONS (i.e. current management goals, land trades, boundary adjustments)

- There is a 160-acre in-holding of National Forest System land, which has been excluded from the roadless area boundary. This site was purchased by the County and eventually traded to the Forest Service. The parcel could be included in the roadless area boundary.
- The southeastern portion of Ptarmigan B Roadless Area extends into the USFS "Ski-Based Resorts – Existing & Potential" management prescription boundary and circumvents much of Guller Gulch. It is understood that during the Forest and Resource Management Plan planning process it was considered to include/recognize a portion of Guller Gulch as part of the ski area expansion boundary. However, due to wildlife issues or concerns (the area serves as a significant wildlife movement corridor), Guller Gulch was not assigned a ski based resort management prescription. Instead, to recognize potential expansion of the ski area, the Ski Based Resorts – Existing & Potential management prescription was extended further west to include the Jacques Peak area.

SUMMIT COUNTY TEN MILE MASTER PLAN CONSIDERATIONS (i.e. land use designation, visibility, significant routes)

- *Land Use Designation* – National Forest (Placed on USFS lands intended to be used for public use and to be protected from development other than recreational uses).
- *Visibility* – The southeastern portion of the property is designated as exceptional visual importance (Jacques Ridge and Jacques Peak). The remainder of the property is not assigned a visual rating.
- *Significant Routes* – Shrine Pass (summer trail), Wilder Gulch (summer and winter route), Searle Pass Trail (a portion of this trail is a summer and winter route, and another portion is winter use only), Stafford Gulch (summer and winter route), Continental Divide National Scenic Trail (summer and winter route), Colorado Trail (summer and winter route), Jacques Peak (summer trail). Designating the area as roadless would not affect the ability to manage continued use of the identified significant routes.

ADJACENT LAND USES AND OWNERSHIP PATTERNS

- Surrounded by National Forest System lands. Generally bordered by Eagle County on the west, and I-70 and Copper Mountain Ski Area on the east.

ENVIRONMENTAL AND WILDLIFE CONSIDERATIONS (i.e. unique ecosystems, wetlands, slope)

- Slopes 30% or greater, wetlands and streams.
- Division of Wildlife representatives indicate the proposed roadless area would not negatively affect their ability to manage wildlife.

OTHER (i.e. legal, infrastructure, unique issues)

- The Division of Water Resources identifies a head gate (Colorado Water Conservation Board) located in the western portion of the roadless area.
- There is an area known as "Sugar Hill Ridge" and existing trails west of Copper Mountain base area along I-70. This area is permitted by the USFS to be used for horseback riding, snowshoeing tours, and nordic skiing activities.

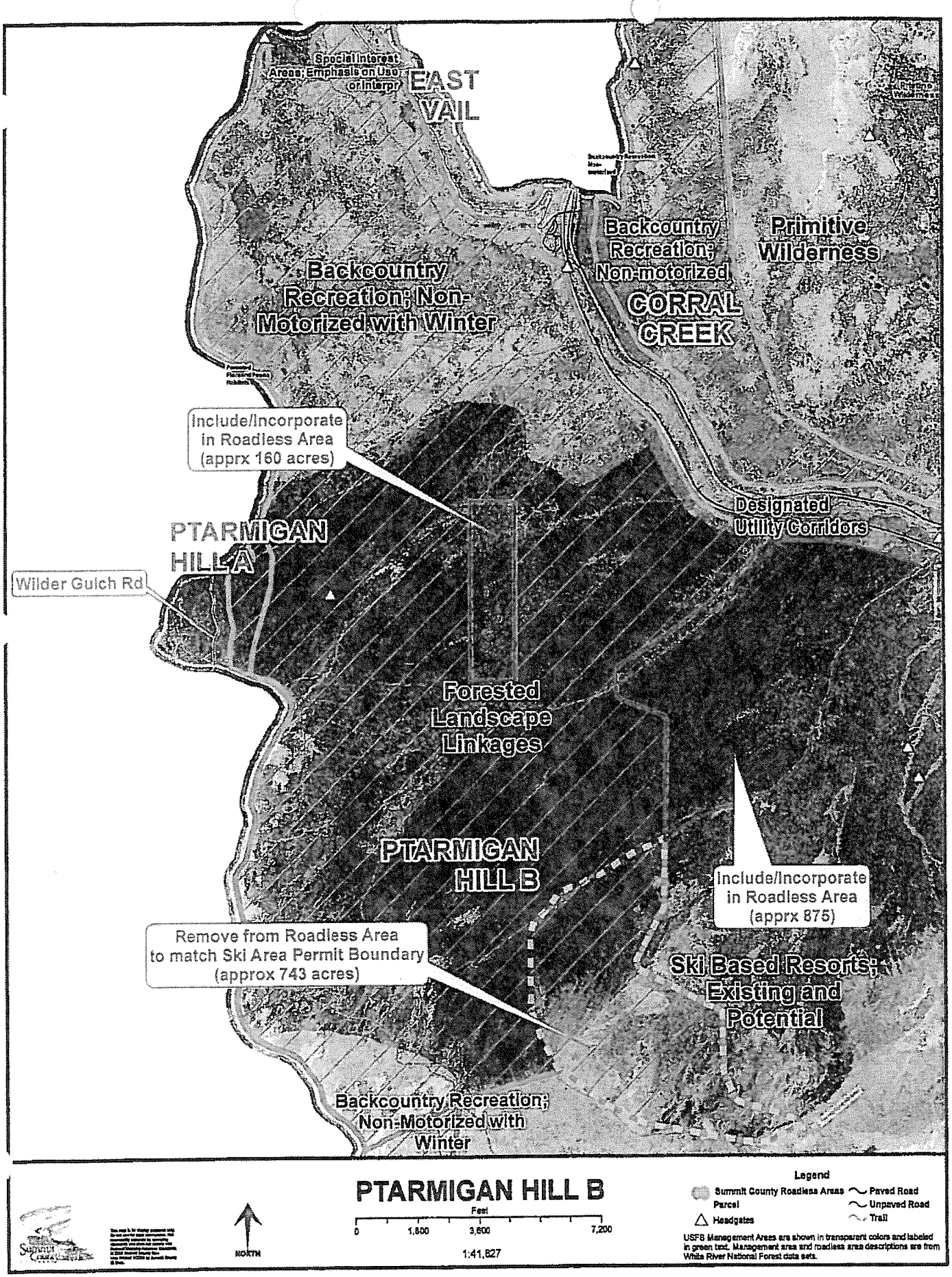
RECOMMENDATIONS:

- The inventoried roadless area should be designated as roadless.
- The 160-acre in-holding parcel excluded as part of the inventoried roadless area should be included in the roadless area.
- Adjust the roadless area boundary: reconfigure the boundary to exclude the Ski Based Resorts – Existing and Potential Management Prescription (Jacques Peak Area), and extend the boundary to include the Guller Gulch area to I-70 (following the Forested Landscape Linkages management prescription).
- In the context of the "Respect Existing Rights" guiding principle, recognize the legal right to access and maintain the Colorado Water Conservation Board head gate feature.

Robert H.S. French, Chair

5-30-06
Date

CoR679


Special Interest Areas; Emphasis on Use or Interpr
EAST VAIL
Backcountry Recreation; Non-motorized with Winter
Backcountry Recreation; Non-motorized
CORRAL CREEK
Primitive Wilderness
Include/Incorporate in Roadless Area (apprx 160 acres)
Designated Utility Corridors
PTARMIGAN HILL A
Wilder Gulch Rd
Forested Landscape Linkages
PTARMIGAN HILL B
Include/Incorporate in Roadless Area (apprx 875)
Remove from Roadless Area to match Ski Area Permit Boundary (approx 743 acres)
Ski Based Resorts; Existing and Potential
Backcountry Recreation; Non-Motorized with Winter
PTARMIGAN HILL B
Feet
0
1,800
3,600
7,200
1:41,827
NORTH
Legend
Summit County Roadless Areas
Parcel
Headgates
Paved Road
Unpaved Road
Trail
USFS Management Areas are shown in transparent colors and labeled in green text. Management area and roadless area descriptions are from White River National Forest data sets.

COR679

ROADLESS AREA: Hoosier Ridge **ACREAGE:** 6,057 acres

GENERAL LOCATION: Southern portion of the Upper Blue Basin, east of Highway 9

EVALUATION CRITERIA:

USFS LAND AND RESOURCE MANAGEMENT PLAN "MANAGEMENT PRESCRIPTION"
- Backcountry Recreation – Non-motorized; Research Natural Areas

USFS MANAGEMENT CONSIDERATIONS (i.e. current management goals, land trades, boundary adjustments)
- A couple privately owned mining claims/inholdings located within the roadless area have not been excluded. There is a mining claim on the western portion of the roadless area, which has been excluded from the roadless area boundary.
- The southern boundary of the roadless area could be modified so that it is flush with the Summit County – Park County line, and avoids the designated utility corridor.

SUMMIT COUNTY UPPER BLUE BASIN MASTER PLAN CONSIDERATIONS (i.e. land use designation, visibility, significant routes)
- *Land Use Designation* – Open Space/Natural Resource/Recreation: placed on lands intended for passive open space uses, resource extraction (i.e. timber harvest) uses, and development and dispersed recreational uses. The land use designation would not affect the ability to manage the inventoried roadless area.
- *Visibility* – Visibility ranges from areas that are visible from 1-10 observation points to areas that are visible from 100 + observation points.
- *Significant Routes* – There area a number of non-motorized winter trails in the area. In addition, the Fredonia Gulch road is a non-motorized significant summer and winter route. Designating the area as roadless would not affect the ability to manage continued use of these significant routes.

ADJACENT LAND USES AND OWNERSHIP PATTERNS
- Red Mountain is located within the roadless area.
- The Town of Blue River borders the roadless area on the northwest.
- Most of the western edge of the roadless area is abutted by subdivisions on unincorporated lands (39 Degrees North, Valley of the Blue, Daisy Subdivision, Tordal Estates, Alpine Breckenridge). The private properties located in the unincorporated areas have been assigned Platted Residential, Residential 1, Transition 10, and Rural 20 Master Plan Land Use Designations.
- Fredonia Gulch Road and CR 676 extend into the roadless area from the west, and have been excluded from the roadless area boundary.

ENVIRONMENTAL AND WILDLIFE CONSIDERATIONS (i.e. unique ecosystems, wetlands, slope)
- Slopes 30% or greater, wetlands, lakes and streams.
- Division of Wildlife representatives indicate the proposed roadless area would not negatively affect their ability to manage wildlife.

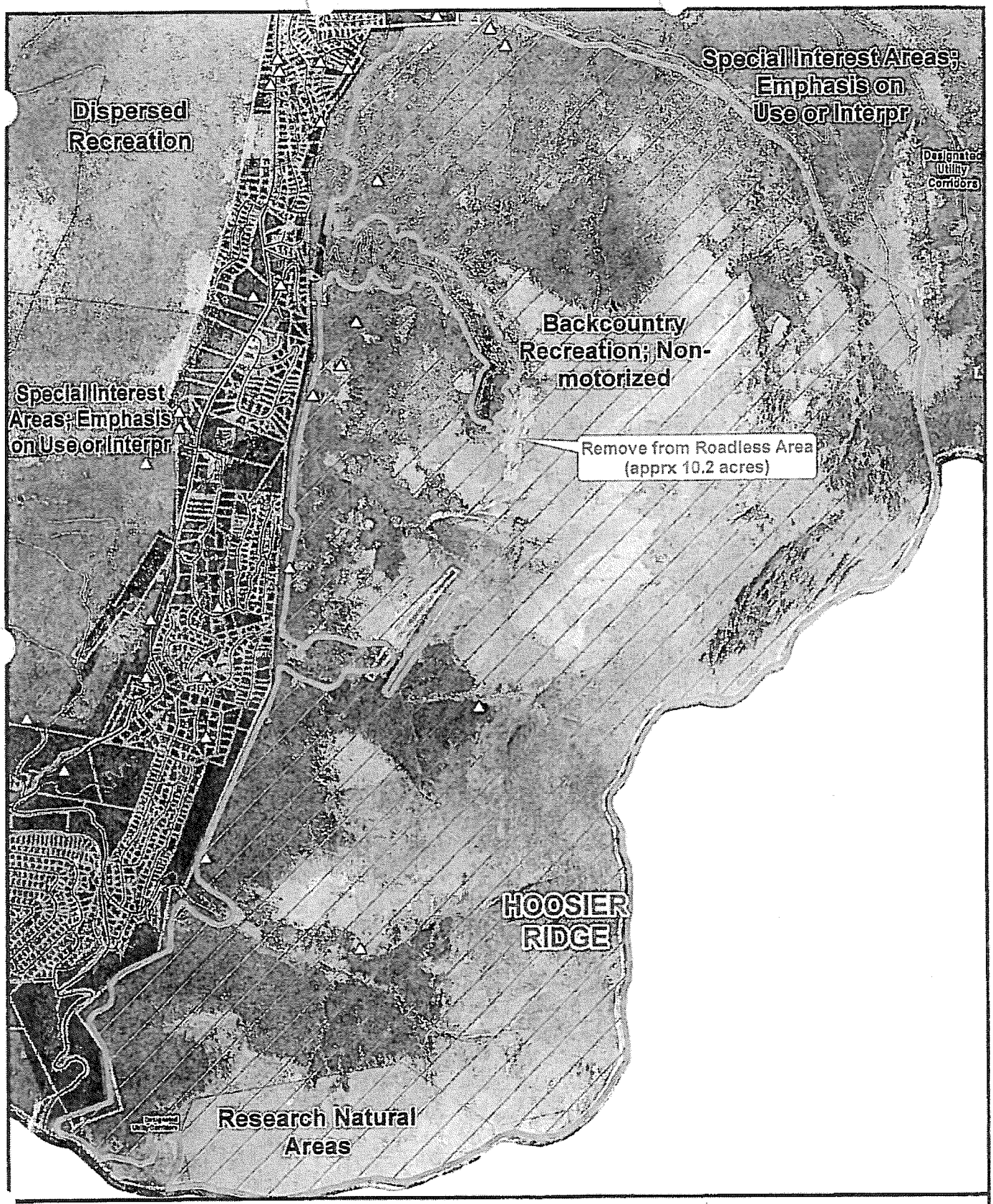
OTHER (i.e. legal, infrastructure, unique issues)
- The Division of Water Resources identifies possibly 10 head gate features located in the roadless area. Most of these area located along the western boundary of the roadless area.

RECOMMENDATIONS:
- The inventoried roadless area should be designated as roadless.
- In the context of the "U.S. Forest Service Edge Mapping/Mapping Errors" guiding principle, the southern boundary of the roadless area could be modified so that it is flush with the Summit County – Park County line and avoids designated utility corridors.
- The privately owned mining claims/in-holdings just east of the terminus of Fredonia Gulch Road should be excluded from the roadless area, and the "cherry stems" that buffer the Fredonia and Hunter Road should be expanded/extended east to show access to the respective privately held in-holdings.
- In the context of the "Respect Existing Rights" guiding principle, recognize 1) the legal right to access and maintain head gate features (particularly the City of Colorado Springs), and 2) the ability to access privately owned in-holdings.
- It the context of the "Buffering/Wildland Urban Interface Areas" guiding principle, it should be noted a specific buffer should be established to protect subdivisions that abut the western portion of the roadless area.

Robert H.S. French

5-30-06
Date

COR679



HOOSIER RIDGE

Feet

0 1,375 2,750 5,500

1:32,582

NORTH

Legend

- Summit County Roadless Areas
- Parcel
- Headgates
- Paved Road
- Unpaved Road
- Trail

USFS Management Areas are shown in transparent colors and labeled in green text. Management area and roadless area descriptions are from White River National Forest data sets.

COR680.

From: Truckey, Mark [markt@townofbreckenridge.com]
Sent: Thursday, July 14, 2011 4:28 PM
To: COcomments
Cc: Grosshuesch, Peter
Subject: Comments on Colorado Roadless Rule DEIS
Attachments: Roadless area Town letter to FS 7-14-11.PDF

Please see the attached comments from the Town of Breckenridge on the Colorado Roadless Rule DEIS. Thank you.

Mark Truckey, AICP
Assistant Director of Community Development
PO Box 168
Breckenridge, CO 80424
(970) 453-3184
markt@townofbreckenridge.com

SUSTAINABLEBRECK
http://www.sustainablebreck.com

COR680

TOWN OF
BRECKENRIDGE

July 14, 2011

Colorado Roadless Area Review Team
U.S. Department of Agriculture, Forest Service
P.O. Box 1919
Sacramento, CA 95812

Re: Submission of Comments on Proposed Colorado Roadless Rule and Revised Draft EIS

Dear Colorado Roadless Area Review Team:

The Town of Breckenridge hereby respectfully submits our comments and recommendations on the Proposed Colorado Roadless Rule and Revised Draft EIS. The Town has limited the geographic scope of its comments to the Hoosier Ridge roadless area, which is the only roadless area in the Upper Blue Basin, the drainage basin within which the Town of Breckenridge lies. Recognizing the significant implications that the Proposed Rule will have on local land management needs within our community, we ask that our comments and suggestions be thoroughly evaluated and seriously considered by the Roadless Area Review Team.

Exceptions in Plan Language

The Town commends the Forest Service and its Colorado Roadless Area Review Team for taking steps to protect millions of acres of roadless areas within the state of Colorado. We appreciate the attempts to involve different stakeholders in this decision-making process.

Specifically, we are very supportive of the language in the Plan that provides exceptions for tree-cutting to reduce wildfire hazards. Because of the mountain pine beetle outbreaks, there is much forest management work that needs to occur to mitigate wildfire risk on the forests surrounding our community. The Summit County Wildfire Protection Plan addresses these wildfire risk issues and the private lands directly to the west of the Hoosier Ridge roadless area are defined "focus areas" mapped in the Plan.

In addition to the exceptions already included in the Proposed Rule for forest management activities, we suggest that an exception also be provided in both standard tier and upper tier roadless areas for post-wildfire watershed protection efforts (e.g., the ability to construct water quality protection structures). If a wildfire occurs in the Upper Blue Basin, the loss of vegetative ground cover may result in major erosion episodes that could greatly increase sediment loading in area streams and lakes. The results could impact water quality and threaten the ability of water bodies such as Goose Pasture Tarn (the Town of Breckenridge's primary water source) to provide a safe water supply for area residents. Having the ability, in the aftermath of a wildfire, to construct water quality structures such as sediment retention ponds is critical in order to ensure a safe and reliable water supply for the residents and businesses of Breckenridge and greater Summit County. The Town therefore requests that this exception be added for both standard and upper tier roadless areas.

Hoosier Ridge Roadless Area

COR680

The Town supports the standard tier roadless designation proposed for the Hoosier Ridge area under Alternative 2. We believe this best protects resource values while still allowing for necessary forest management initiatives. The Town is not supportive of the more restrictive upper tier roadless designation proposed for Hoosier Ridge under Alternative 4, because we feel it will limit our ability to address wildfire/forest management and watershed issues. The increased restrictions on tree cutting within the upper tier designation would detrimentally impact the identified need to protect the public health, safety and welfare of adjacent residents through prioritized wildfire hazard reduction efforts. If the upper tier designation is applied to Hoosier Ridge, we request that only the eastern half of the roadless area be designated as upper tier.

Regarding the boundaries for the Hoosier Ridge roadless area, we request that the privately owned mining claims/in-holdings just east of the terminus of Fredonia Gulch Road be excluded from the roadless area, and the "cherry stems" that buffer the Fredonia and Hunter Road should be expanded/extended east to show access to the respective privately held in-holdings.

In conclusion, the Town would like to thank you for the opportunity to comment and for your cooperation with us and other local governments on this important issue.

Sincerely,

Peter Grosshuesch

Peter Grosshuesch, Community Development Director

cc: John Warner, Mayor
Tim Gagen, Town Manager
Gary Martinez, Summit County Manager

COR681.

From: Adam B. Cramer [abc@leitercramer.com]
Sent: Thursday, July 14, 2011 3:08 PM
To: COcomments
Cc: mwagner@fs.fed.us; jholtrop@fs.fed.us; Jim Bedwell; Bonnie, Robert; Brady Robinson; Wade Blackwood; Greg Miller; Mark Menlove; Mark Singleton; Mike Van Abel; Craig Mackey; Jay Heeter; Phil Powers; Betsy Winter; Thomas O'Keefe; Kevin Colburn; Jason Keith; fmccarthy@winterwildlands.org; Jenn Dice; Jeremy Fancher; David Zayas; Deanne Buck; Access Director; Tom Flynn; Amy Kleiner-Roberts
Subject: Comments on the Proposed Colorado Roadless Rule
Attachments: CRR_Comments_OA_OIA_CMC_AAC_AMGA.pdf

Hello.

Attached please find comments on the proposed Colorado Roadless Rule from Outdoor Alliance, Outdoor Industry Association, The Colorado Mountain Club, The American Alpine Club and American Mountain Guides Association. We also uploaded the comments to regulations.gov.

Best regards,

Adam Cramer
Policy Architect | Outdoor Alliance

Leiter & Cramer PLLC
1707 L Street, NW
Suite 560
Washington, DC 20036
202.386.7671 (t) 202.386.7672 (f)

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COR681

OUTDOOR ALLIANCE

OUTDOOR INDUSTRY ASSOCIATION

July 14, 2011

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812
COComments@fsroadless.org

RE: Specialty Areas; Roadless Area Conservation; Applicability to the National Forests in Colorado - Proposed Rule
RIN 0596-AC74

Honorable Tom Vilsack
Secretary, U.S. Department of Agriculture
1400 Independence Ave. S.W.
Washington, DC 20250

Tom Tidwell
Chief, Forest Service
1400 Independence Ave. S.W.
Washington, DC 20250

Dear Secretary Vilsack and Chief Tidwell:

As national and major regional organizations, Outdoor Alliance, Outdoor Industry Association, American Alpine Club, American Mountain Guides Association and The Colorado Mountain Club represent the interests of the human powered outdoor recreation community and the active outdoor recreation industry in America.[i] The millions of individuals and thousands of businesses that make up our broader community treasure the kinds of experiences that Roadless Areas provide. Many of Colorado's Roadless Areas (CRA) contain world-class climbing routes, hiking and biking trails, rivers, and backcountry ski and snowshoe destinations. The quality of these resources is rooted not only in the distinctive topography, but their *setting*. For us, the management of CRAs is not an abstract policy concern; OA, OIA, CMC and AAC are imbued with and dependent on the quality recreation opportunities offered by roadless areas in Colorado. Of the six OA members, two – Access Fund and the International Mountain Bicycling Association – are headquartered in Colorado along with The Colorado Mountain Club and the American Alpine Club. OIA is headquartered in Colorado and represents 160 manufacturers, retailers and outdoor advocacy organizations across the state. This diverse and growing outdoor community and industry is drawn to Colorado for the quality of life and outdoor pursuits and represents a core component of communities and economies throughout the state.

We have reviewed the proposed Colorado Roadless Rule (CRR) and associated Draft Environmental Impact Statement (DEIS) published in the April 15, 2011 *Federal Register*. The following are our comments on the proposed rule and the DEIS. Also included are responses to USDA's "specific request for public comment" regarding: 1) specific areas within Colorado Roadless Areas that should be included in the upper tier lands including the reason for inclusion; 2) exceptions on tree cutting sale, or removal and road construction/reconstruction that should apply to upper tier lands; and 3) the effective means of managing linear facilities in Colorado Roadless Areas.

At the beginning of this process, the Obama Administration specified an unambiguous target for the Colorado Roadless Rule – the rule must offer conservation protections as strong as or stronger than the 2001 Roadless Rule. While the proposed rule is much improved from earlier efforts, the meager acreage presently in the upper tier category (562,200) precludes the proposed rule from hitting the Obama Administration's target. We feel that the adoption of DEIS Alternative #4, which is identical to the proposed rule except that it has approximately 2.6 million acres in the upper tier category, would put the Administration's target much more in reach. Including additional acreage in the upper tier as specified in our attached portfolio of candidate parcels of greatest importance to the active outdoor recreation community would improve USDA's accuracy further still.

1. *Summary of Material Improvements from the Colorado State Roadless Rule Petition.*

The State of Colorado submitted a revised petition (Colorado revised petition) for a state-specific roadless rule to govern CRAs on April 6, 2010. On July 9, 2010 we wrote to you and provided some perspectives from our community based on our initial evaluation of the revised petition. We are pleased to see that many of the concerns we expressed in these themes are addressed in the proposed rule.

First, preserving roadless area characteristics language has been modified to better focus management on conservation and stewardship of CRAs. Specifically, problematic qualifying language that was in the Scope and Applicability section of the Colorado revised petition at §294.37(f) has been removed. We also appreciate that the proposed rule's "Purpose" provision frames the various development exceptions to the CRR in the broader context of conserving roadless area characteristics.[1]

Second, insect and disease outbreak language has been made more conservative by replacing previous language with ecosystem-focused management language at §294.42(c)(3) focusing on the need to "maintain or restore the characteristics of ecosystem composition, structure and processes."[2] We also endorse the provisions of the proposed rule that keep tree cutting decisions with the Regional Forester, rather than a responsible official as was contemplated in earlier iterations of the rule.[3]

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[1] Special Areas; Roadless Area Conservation; Applicability to the National Forests in Colorado, 76 Fed. Reg. 21,272 21,288 (proposed Apr. 15, 2011) (to be codified at 36 C.F.R. pt. 294).

[2] *Id.* at 21290.

[3] *Id.* at 21289.

Third, the proposed rule incorporates fundamental elements of our suggestions for a more explicit plan for decommissioning and restoration of the roads at §294.43(d)(2) by requiring a decommissioning provision in all contracts or permits. We also endorse the revised language in this section that requires decommissioning plans be designed to "protect resources and enhance roadless area characteristics" (without a cost qualifier) rather than the previous language of the Colorado revised petition at §294.33(e)(2) to restore areas to a "condition generally consistent with the pre-existing roadless area characteristics."

2. *Opportunities to Further Improve Regulatory Language in the Proposed Rule.*

The proposed rule vests in a "responsible official" decision-making authority as to when circumstances allowing for permanent road construction exist. Given the acreage of CRAs at stake, and the value they have to both the state of Colorado and the nation, we feel that this decision-making authority should reside at least at the level of Regional Forester. Regional Foresters should also make the decisions regarding road construction or reconstruction rather than a responsible official. To this end, the term "responsible official" should be changed to "Regional Forester" in §§294.43(b) and (c).

USDA invested a significant amount of time and effort updating and adjusting the CRA boundaries for the proposed rule. While we greatly appreciate the public notice and comment provisions in § 294.47(a), given the investment in adjusting the CRA boundaries for the proposed rule, we believe that future non-administrative modifications to CRA boundaries should be conducted pursuant to rulemaking. We do not believe the 2001 Roadless Rule enabled the Chief of the Forest Service to make non-administrative border adjustments and do not understand the justification for extending this discretion in the proposed rule.

3. *The Qualitative and Quantitative Value of Outdoor Recreation Must Be Factored Into The Proposed Rule.*

While rule's preamble notes that roadless areas "help provide for a high quality of life for local residents" and the "backdrop for world-class skiing, hunting and fishing, and backcountry experiences for non-residents,"[4] the proposed rule and DEIS continue to undervalue the contribution of outdoor recreation to the state economy. Indeed, the preamble states that, "distributional effects or economic impacts are not evaluated for other economic sectors (*e.g.* timber harvest, recreation) due to evidence in Table 2 suggesting that the extent or magnitude of changes in output or services are not sufficient to cause significant changes in jobs and income for those economic sectors."[5] We do not think that this is the case.

The DEIS summarizes Colorado's economy in Table 3-53.[6] The table provides 15 industry categories along with the value of production, employment and labor income associated with

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[4] *Id.* at 21273.

[5] *Id.* at 21279.

[6] USDA FOREST SERVICE, RULEMAKING FOR COLORADO ROADLESS AREAS: REVISED DRAFT ENVIRONMENTAL IMPACT STATEMENT 288 (2011). The DEIS attributes the source of the table to Minnesota IMPLAN Group, Inc. 2008 & Colorado Department of Local Affairs, State Demography Office, 2006.

each category. The industry category "Arts, Entertainment and Recreation" is defined as follows:

> Arts, Entertainment, and Recreation include a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.[7]

While there is certainly some overlap between the "Arts, Entertainment and Recreation" industry category and the active outdoor recreation economy in Colorado, they are plainly not the same thing. First, the value of production for this industry category is approximately $4.3B, less than half of the $10 billion economic contribution of active outdoor recreation in the state.[8] Second, aspects of the active outdoor recreation economy may very well be present in numerous other industry categories cited in the DEIS, such as trade, professional services, transportation and accommodation & food services. In other words, it does not appear that the way the DEIS characterizes economic activity in the state takes into account the state's massive active outdoor recreation economy as a separate entity. This disconnect essentially prevents USDA from reconciling the relative impact of the four alternatives identified in the DEIS on this critical part of the state's economy.

As noted in our previous comments, active outdoor recreation contributes $10 billion annually to the state's economy and employs 100,000 Coloradoans.[9] In addition, the active outdoor recreation economy also generates nearly $500 million in annual state tax revenue and produces $7.6 billion annually in retail sales and services across Colorado– accounting for 4% of gross state product.[10] These figures are of the same scale as other industry categories in the DEIS and should not be made effectively irrelevant.

The world-class opportunities for active outdoor recreation in the State of Colorado, and particularly those found in backcountry Roadless Areas, represent a unique "product" that the state offers to its residents as well as visitors from across the country and around the world. We are confident that USDA can establish and incorporate reasonable methodologies for reconciling the well-established active outdoor recreation economic figures with the economic analysis in the DEIS.

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[7] *Id.* at 290.

[8] SOUTHWICK ASSOCIATES, INC. FOR THE OUTDOOR INDUSTRY FOUNDATION, STATE-LEVEL ECONOMIC CONTRIBUTIONS OF ACTIVE OUTDOOR RECREATION—TECHNICAL REPORT ON METHODS AND FINDINGS 19, 24 (2007).

[9] *Id.*

[10] *Id.*

4. *Upper Tier Section Summary*

The Specific Request for Public Comment asks for public input regarding specific areas within Colorado Roadless Areas that should or should not be included in the Upper Tier land including the reason for inclusion or exclusion. We are pleased to see the inclusion of an Upper Tier and view this as a pragmatic means of balancing narrowly defined exceptions for mining, future ski area development, and community protection zones. For this balance to be achieved, however, and a rule created that is as protective or preferably more protective than the 2001 rule, the 562,200 acres represented by the preferred alternative needs to be expanded. The preferred alternative identifies areas where road building is already prohibited in current forest plans, and this needs to be supplemented with additional acres that have important backcountry recreation value and are in need of stronger administrative protection.

To provide specific suggestions for additions to the Upper Tier beyond the preferred alternative we have completed an inventory, attached as Exhibit 3 that highlights some of the outstanding recreation areas found in CRAs. The inventory was developed with input from outdoor recreationists from across Colorado and around the country and focuses on areas located within CRAs, but which are not provided Upper Tier protection under Alternative 2. Many of these areas would be afforded protection by adoption of Alternative 4. Other areas are not included under either alternative, but strongly merit protection through Upper Tier designation.

The most noteworthy areas highly valued by our community for the backcountry recreational experiences they provide are as follows:

- The Colorado Trail, an iconic destination for mountain bikers and hikers, crossing through 26 CRAs along its 483-mile route;
- The Continental Divide Trail, which traverses Colorado's highcountry for 800 spectacular miles of its route from the Canadian border to Mexico;
- The Animas River Canyon and its tributaries, a world-famous whitewater boating destination;
- The Arkansas River Valley, home to peerless mountain biking trails and whitewater;
- The Cache La Poudre Canyon and its upper reaches, presenting outstanding opportunities for backcountry winter travel, climbing, hiking, mountain biking and whitewater boating, all within a short drive from Colorado's Front Range population centers;
- The Vail Pass area, and other tremendously popular backcountry areas for winter recreation and summer hiking in and around Colorado's Summit County.

5. *Management of Upper Tier Areas*

The Specific Request for Public Comment asks for public input on tree-cutting, sale, or removal and road construction/reconstruction as applied to Upper Tier lands. In addition to expanding the acreage as discussed above, we believe the CRR should provide stronger protection language for conservation of roadless area values and characteristics of Upper Tier lands. Specifically, a final

Colorado Roadless Rule at §294.46 should ensure that all Upper Tier lands have strict No Surface Occupancy stipulations to protect these areas from the impacts of any future oil and gas leasing and development on the defining characteristics of these areas that make them eligible for Upper Tier designation.

6. *Linear Facilities*

Prohibition of Linear Construction Zones is an important element of the CRR and an area where the Specific Request for Public Comment identified an interest in additional feedback on management. We believe certain exceptions need to be tightened. Specifically §294.44(c) states that installation of a liner facility will include "placement within existing right-of-ways where feasible," and this should be modified to "shall be located entirely within existing right-of-ways." In addition, language at §294.44(b)(2) stating that electrical power lines or telecommunication lines will be authorized in roadless areas "only if there is no opportunity for the project to be implemented outside of a Colorado Roadless Area without causing substantially greater environmental damage" is vague. We have witnessed examples of new transmission corridors cut through forested backcountry with a significant impact on backcountry values. With potential cost savings as a primary incentive and no clear standards in place, we can see how a utility might build an arbitrary justification for a route through a roadless area that results in "less environmental damage."

One critical omission from the language in § 294.44 is a reference to the treatment of Linear Construction Zones in Upper Tier areas. This distinction needs to be made if Upper Tier area designation will truly result in conservation of the highest value roadless areas. This can be achieved by modifying § 294.44 as follows:

> § 294.44 Prohibition on linear construction zones.
> (a) General. A linear construction zone may not be constructed or reconstructed in Colorado Roadless Areas except as provided in paragraphs (b) and (c) of this section.
> (b) Upper Tier Acres. Notwithstanding the prohibition in paragraph (a) of this section, a linear construction zone may only be constructed or reconstructed in Colorado Roadless Area upper tier acres if the Responsible Official determines that a linear construction zone is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty.
> (c) Non-Upper Tier Acres. Notwithstanding the prohibition in paragraph (a) of this section, the Regional Forester may authorize a linear construction zone within a Colorado Roadless Area outside upper tier acres in the following circumstances: **[insert existing regulatory content from § 294.44(b)(1)-(4)]**

We believe that our proposed language will close the loophole that currently allows linear construction zones in the Upper Tier Acres.

Conclusion

Colorado's Roadless Areas offer first-rate outdoor recreation opportunities that represent a finite resource. As our nation continues to develop and our intact landscapes become increasingly fragmented,

the value of our undeveloped public lands only increases. USDA pledged that the Colorado rule would be "as protective or preferably more protective" than the National Roadless Rule. While significant progress has been made, and the current draft is greatly improved from previous versions, the proposed Colorado Rule still falls short of this standard.

Thank you for considering these comments.

Best regards,

Brady Robinson
Executive Director, Access Fund

Wade Blackwood
Executive Director, American Canoe Association

Gregory Miller
President, American Hiking Society

Mark Singleton
Executive Director, American Whitewater

Michael Van Abel
Executive Director,
International Mountain Bicycling Association

Mark Menlove
Executive Director, Winter Wildlands Alliance

Adam Cramer
Policy Architect
Outdoor Alliance

Craig Mackey
Director of Recreation Policy
Outdoor Industry Association

Katie Blackett
Chief Executive Officer
The Colorado Mountain Club

Phil Powers
Executive Director, American Alpine Club

Betsy Winter
Executive Director,
American Mountain Guides Association

cc: Mary Wagner, *Associate Chief, National Forest System*
Joel Holtrop, *Deputy Chief, National Forest System*
Jim Bedwell, *Director Recreation, Heritage, and Volunteer Resources*
Robert Bonnie, *Senior Environment and Climate Advisor to Secretary Vilsack, USDA*

Thomas O'Keefe, PhD., *Pacific Northwest Stewardship Director, American Whitewater*
Kevin Colburn, *National Stewardship Director, American Whitewater*
Jason Keith, Esq., *Policy Director, Access Fund*
Forrest McCarthy, *Public Lands Director, Winter Wildlands Alliance*
Jenn Dice, *Government Affairs Director,International Mountain Bicycling Association*
Jeremy Fancher, Esq., *Counsel,International Mountain Bicycling Association*
David Zayas, Esq., *Director of Government Relations, American Hiking Society*
Jay Heeter, *Director of Conservation, The Colorado Mountain Club*
Deanne Buck, *American Alpine Club*

Leigh Goldberg, *Access Director, American Mountain Guides Association*
Tom Flynn, *Grasstops Fellow, Outdoor Alliance*
Amy Roberts, *Vice President of Government Affairs, Outdoor Industry Association*

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[i] Outdoor Alliance, a coalition of six national, member-based organizations includes: Access Fund, American Canoe Association, American Hiking Society, American Whitewater, International Mountain Bicycling Association, and Winter Wildlands Alliance, and represents the interests of the millions of Americans who hike, paddle, climb, mountain bike, ski and snowshoe on our nation's public lands, waters and snowscapes. Collectively, OA has members in all fifty states and a network of almost 1,400 local clubs and advocacy groups across the nation. Local clubs based in Colorado are identified in Exhibit 1.

Founded in 1989, Outdoor Industry Association (OIA) is the premier trade association for companies in the active outdoor recreation business. OIA member companies include manufacturers and retailers such as The North Face, Patagonia, L.L. Bean, Jansport, Eagle Creek, VF Outdoor, Coleman, REI, Timberland and Columbia Sportswear. OIA provides trade services for over 4000 manufacturers, distributors, suppliers, sales representatives and retailers in the outdoor industry and is the title sponsor of Outdoor Retailer, the world's largest outdoor products tradeshow. A sampling of OIA members from Colorado is included in Exhibit 2.

The Colorado Mountain Club (CMC) is the oldest outdoor education, recreation, and conservation organization in Colorado. Founded in 1912, CMC boasts 8,000 members and 14 chapters across the state. CMC offers a wide range of opportunities for the public to explore, observe, and learn about the Southern Rockies, while simultaneously leading efforts to protect the species, habitats, and wildness of our public lands.

Establish in 1902, the American Alpine Club (AAC) is dedicated to supporting American endeavors in mountain and crag environments around the world. The AAC provides benefits to members; conservation and research funding; produces the *American Alpine Journal* and houses a 60,000 volume mountaineering library and museum at its headquarters in Golden, Colorado. The AAC is the U.S. representative to the International Mountaineering and Climbing Federation.

For over 30 years, the American Mountain Guides Association (AMGA) has been dedicated to supporting the guiding community through excellence in education, standards and certification to enhance the quality of services provided to the public, while serving as a resource for accessing and protecting the natural environment. AMGA represents over 1,900 members, over 30 Accredited Guide Services, and 60 Corporate Partners. Each year the training provided by the AMGA reaches over 600,000 people through direct contact between certified guides and their clients.

Exhibit 1

Member-Based Clubs Affiliated with Outdoor Alliance Organizations in Colorado

4 Corners Climbing Coalition
Action Committee for Eldorado
Avid4 Adventure Inc.
Backcountry Snowsports Alliance
Bicycle Colorado
Big Wheel Racing
Boulder Mountain-Bike Alliance
Bouldercycling.Com / Cutting Edge Sports
Cloud City Wheelers
Colorado Fourteeners Initiative
Colorado Mountain Bike Association
Colorado Mountain Club
Colorado Plateau Mountain Bike Trail Association
Colorado Springs Climbers Alliance
Colorado Whitewater Assoc.
Colorado Whitewater Association
Colorado Youth Program
Corral Bluffs Alliance
Crested Butte Mountain Bike Assn
Denver Climbers Coalition
Dolores River Action Group
Durango Whitewater
Eco Trails / Eagle County
Flatirons Climbing Council
Friends of Arkansas River
Friends of Red Mountain Pass
Friends of the Route Backcountry
Friends of the Yampa
Grand Canyon Private Boat Association
Gunnison Trails
Headwaters Trails Alliance
Horizon Program Kayak Club
Kokopelli Bike Club
Lower Arkansas Mountain Bicycling Association
Medicine Wheel Trail Advocates
Mountain Top Cycling Club
North Colorado Climbers Coalition (NC3)
Old Spanish Trail Association
Pikes Peak Whitewater Club
Pikes Peak Whitewater Club
Pueblo Paddlers
Quiet Use Coalition
Roaring Fork Climbers Coalition
Roaring Fork Outdoor Volunteers
Rocky Mountain Bicycle Boys
Rocky Mountain Canoe Club
Rocky Mountain Field Institute
Rocky Mountain Sea Kayak Club
Rocky Mountian Canoe and Kayak Club
Routt County Riders
San Miguel Bike Alliance
San Miguel Whitewater Association
Sand Creek Regional Greenway Partnership
Singletrack Mountain Bike Adventures
Southern Colorado CRAG
Stand up for Rivers
Summit Winterlands and Trails
Team Evergreen
Team Velo Bella
The Colorado Trail Foundation
Town Of Breckenridge - Trail Planner
Trails 2000
Trails and Open Space Coalition
Volunteers for Outdoor Colorado
Western Colorado Climbers Coalition
YMCA of the Rockies

Exhibit 2

Colorado-Based Members of the Outdoor Industry Association

Aarn North America, LLC
Retailer

Acli-Mate Mountain Sports Drink
Manufacturer

Acme Distribution Centers
Associate

Adrenalin, Inc
Associate

Alien Truth Communications
Associate

Alpaca Imports
Sales Rep

Alpina Capital, LLC
Associate

American Recreation Products
Manufacturer

Backbone Media
Associate

Backcountry Access
Manufacturer

Backpacker Magazine
Associate

Bent Gate Mountaineering
Retailer

Big Agnes
Manufacturer

Big City Mountaineers
Associate

Lightware, Inc. (Seaware)
Manufacturer

LOKI
Manufacturer

Mad Dog Ranch
Associate

McGuckin Hardware
Retailer

Member Test Account
Retailer

Merchandising Matters
Associate

Millet
Manufacturer

Momentum Media PR
Associate

Montbell America, Inc.
Manufacturer

Mountain Boy Sledworks Inc.
Manufacturer

Mountain Chalet
Retailer

Mountain Shades
Manufacturer

Mountainsmith
Manufacturer

Move Sport, Inc.
Manufacturer

Bikes Belong Coalition
Associate

Bison Belts
Manufacturer

Boa Technology Inc.
Manufacturer

Boure Sportswear
Retailer

Brand Amp
Associate

Brandwise
Associate

Breckenridge Outdoor Education Center
Associate

C.A.M.P. USA
Manufacturer

Catalyst Communication Inc
Associate

Centerstone Technologies
Supplier

Chuck Latham Associates, Inc.
Retailer

Climb Axe
Retailer

Climbing Magazine/Urban Climber
Associate

Cocona Inc.
Manufacturer

Collective Licensing International, LLC
Associate

Multisport Journeys, LLC
Manufacturer

National Geographic Maps
Associate

Native Eyewear
Manufacturer

Neve Designs
Manufacturer

New Wave Enviro Products Inc
Distributer

Nite Ize / RCP Enterprises Inc.
Manufacturer

O Loves M Eco Bags
Manufacturer

Old Town Outfitters
Retailer

Onit Sports Marketing
Associate

Open Air Brands-Fenix Flashlights
Distributer

Osprey Packs
Manufacturer

Outdoor Divas
Retailer

Outlast Technologies, Inc.
Manufacturer

Outward Bound
Associate

Paragon Guides, Inc.
Retailer

Colorado Kayak Supply
Retailer

Colorado Yurt Company
Manufacturer

Cool Sets, Inc
Retailer

Crescent Moon Snowshoes, Inc.
Manufacturer

Dave Nielsen, Ltd
Manufacturer

Deuter USA Inc
Manufacturer

Dohm-Icebox, LLC
Manufacturer

Dynafit
Manufacturer

Eco Vessel
Manufacturer

Elevated Sales Group
Sales Rep

Explorersweb, Inc.
Associate

Factory Design Labs
Associate

Fishpond Inc.
Manufacturer

Flylow Gear
Manufacturer

Folding Kayak Adventures, LLC
Retailer

Peak Exposure
Associate

Phil & Teds/Mountain Buggy
Distributer

Pine Needle Mountaineering
Retailer

Point 6 LLC
Manufacturer

Polar Bottle/Product Architects, Inc.
Manufacturer

Pulse Activewear Inc.
Manufacturer

Rab
Manufacturer

Renewable Choice Energy
Associate

RM Rafts
Retailer

Sales Guys /Dachstein
Supplier

Salida Mountain Sports
Retailer

Scarpa North America Inc.
Manufacturer

Sea to Summit Inc.
Manufacturer

SeasonFive
Manufacturer

Serac Adventure Films
Associate

Franklin Retail Solutions
Associate

Garfield County
Associate

Geopalz
Retailer

GG Recreational Resources
Sales Rep

Gibbon-Slacklines
Manufacturer

GoLite
Manufacturer

Great Plains Mountain Stuff
Sales Rep

Great Trango Holdings Inc/Stonewear Designs
Manufacturer

Headsweats
Manufacturer

Hestra Gloves LLC
Manufacturer

Hi Altitude Sales & Consulting
Sales Rep

High Point Ventures
Sales Rep

Honey Stinger / EN-R-G Foods, Inc.
Manufacturer

Icelandic Design
Manufacturer

Insight Designs
Retailer

Shadescapes USA
Manufacturer

Sharp End Publishing, LLC
Retailer

Sherpani Alpina
Manufacturer

Sid Factor Seven
Associate

Sierra Designs
Manufacturer

Skirt Sports, Inc
Manufacturer

Slumberjack
Manufacturer

SmartWool
Manufacturer

Smoky Anderson Inc.
Sales Rep

SOLKOA Inc
Retailer

SOS Outreach
Associate

Sport Hansa Distribution LLC
Distributer

Spot Bouldering Gym LLC
Associate

Station 5
Supplier

Taos Mountain Outfitters
Retailer

JAX Mercantile Company
Retailer

Katies Bumpers
Manufacturer

Kelty Pack Co.
Manufacturer

Leave No Trace (Center for Outdoor Ethics)
Associate

Leisure Trends Group
Associate

Ute Mountaineer, Ltd.
Retailer

V Five, Inc. Dba Lefever Building Systems
Associate

Vectra Bank of Colorado
Associate

Verde PR & Consulting
Associate

Vision Graphics
Associate

Voormi
Manufacturer

Wagner Custom Skis
Retailer

Teko, LLC
Manufacturer

The Trailhead, Inc.
Retailer

Trespass USA
Manufacturer

Unfinished Furniture Expo
Retailer

United States Hang Gliding & Paragliding Association
Associate

Wallaroo Hat Company, LLC
Manufacturer

The Walton Works, LLC
Associate

What's UP PR
Associate

The Wilderness Land Trust
Associate

Wind X-treme
Manufacturer

With a Twist
Manufacturer

Zeal Optics
Manufacturer

Zuke's
Manufacturer

Exhibit 3
Colorado Roadless Areas: Recreational Resources Inventory

The following sections inventory and highlight some of the outstanding recreation areas found in Colorado Roadless Areas. The inventory was developed with input from outdoor recreationists from across Colorado and around the country.

Among the most noteworthy areas are:

- The Colorado Trail, an iconic destination for mountain bikers and hikers, crossing through 26 CRAs along its 483-mile route;
- The Continental Divide Trail, which traverses Colorado's highcountry for 800 spectacular miles of its route from the Canadian border to Mexico;
- The Animas River Canyon and its tributaries, a world-famous whitewater boating destination;
- The Arkansas River Valley, home to peerless mountain biking trails and whitewater;
- The Cache La Poudre Canyon and its upper reaches, presenting outstanding opportunities for backcountry winter travel, climbing, hiking, mountain biking and whitewater boating, all within a short drive from Colorado's Front Range population centers;
- The Vail Pass area, and other tremendously popular backcountry areas for winter recreation and summer hiking in and around Colorado's Summit County.

The inventory focuses on areas located within CRAs, but which are not provided Upper Tier protection under Alternative 2. Many of these areas would be afforded protection by adoption of Alternative 4. Other areas are not included under either alternative, but strongly merit protection through Upper Tier designation.

The inventory also includes some areas where recreational activities may take place outside of the designation, but where the quality of the outdoor experience is dependent upon protection of the CRA, for example where the viewshed from atop a climbing area or within a river corridor is dominated by the CRA.

If every CRA with recreational resources as documented below were designated Upper Tier in its entirety, that would total approximately 1,592,500 acres. The areas we have indentified represent an increase of 1,327,400 additional acres over Alternative 2, and an increase of 446,800 additional acres over Alternative 4.

In the inventory that follows, areas are grouped by National Forest. Where a recreation area includes portions within multiple National Forests, the resource is grouped with the Forest that includes the majority of the area. The Colorado Trail and the Continental Divide Trail are included under the heading of the National Forest at their respective northern ends. The acreages provided are based on the numbers associated with the Forest Service's Google Earth layer for the Colorado Roadless Rule.

Arapaho-Roosevelt National Forest

Cache La Poudre River (Big South)

CRA: Comanche Peak Adjacent Area, 44,158 acres (17,129 acres designated Alternative 2 Upper Tier)

Status: Upper Tier under Alternative 4

The Big South section of the Cache La Poudre River is consistently described as perhaps the finest whitewater run in Colorado, and the *Whitewater of the Southern Rockies* guidebook calls it "One of the signature runs of Colorado, if not the signature run." Beginning at the outflow of the Long Draw Reservoir (at approximately 40.502821, -105.771020) and flowing north to a takeout at the Big South trailhead (approximately 40.632939, -105.807274), the river flows through a spectacular and remote forest setting. The 12-mile run is notable for its length, traveling its entire distance through an unspoiled and undeveloped setting. This world class recreational resource undeniably deserves the scenic and water quality protections of Upper Tier designation for the Comanche Peak Adjacent Area CRA.

Cache La Poudre River
Grey Rock, Monastery, Palace, climbing areas
Hewlett Gulch Trail (mountain biking)
Grey Rock National Trail (hiking)

CRA: Grey Rock CRA, 12,067 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

Grey Rock CRA contains diverse and outstanding outdoor recreation opportunities and is especially valuable because of its proximity to Fort Collins and other major population centers on Colorado's Front Range.

Grey Rock itself (40.715672, -105.292650) offers outstanding rock climbing opportunities on a spectacular granite massif, culminating in a true summit at 7613 feet. In addition, Grey Rock CRA contains classic routes at the Monastery and the Palace, as well as innumerable bouldering opportunities and other routes. The area is popular with hikers, and includes the Grey Rock National Recreation Trail. The Hewlett Gulch trail to the west of Grey Rock Mountain is a popular mountain biking attraction.

The Cache La Poudre River flows along, and in places through, the southern boundary of the CRA. These sections of the Poudre offer outstanding whitewater recreation opportunities, from the challenging Narrows section, to mellower stretches suitable for beginning boaters further downstream. These sections are runnable at a wide range of water levels, and offer whitewater recreation opportunities long after other runs in the area have dropped out.

COR681

Joe Wright Creek

CRA: Green Ridge-East CRA, 26,626 acres (9,663 acres designated Upper Tier under Alternative 2)

Status: Partially protected under Alternative 2; new proposed Upper Tier area

Joe Wright Creek (from approximately 40.6039, -105.835 to 40.633, -105.809) flows through the Green Ridge-East CRA. This creek provides an outstanding whitewater recreation opportunity especially valuable because of its accessibility from major population centers on the Front Range. Joe Wright Creek, along with the downstream Spencer Heights section of the Cache La Poudre and the nearby Big South section of the Cache La Poudre, is part of a cluster of accessible, high quality whitewater, drawing recreationists from across the state and the country. To protect the scenic aspects of this area, as well as the water quality of the downstream areas popular with kayakers, rafters, tubers, and fishermen, the entire Green Ridge-East CRA should be afforded Upper Tier protection.

Cameron Pass Area

CRA: Rawah Adjacent Area CRA, 2768 acres (478 acres Alternative 2 Upper Tier)

Status: Partially protected under Alternative 2; new proposed Upper Tier area

The Cameron Pass area, is popular with snowshoers and crosscountry skiers, and within the Rawah CRA, there are several popular routes, including the Cameron Connection and Montgomery Pass. The area features impressive scenery and reliable snowpack in winter, and is easily accessible from Fort Collins and other Front Range populations centers. While, only a small portion of this area is proposed for Upper Tier protection under Alternative 2, the entire Rawah Adjacent Area merits Upper Tier protection because of its outstanding opportunities for quiet wintertime outdoor recreation in a scenic and accessible setting.

North Saint Vrain

CRA: North Saint Vrain CRA, 11,203 acres (6540 designated Upper Tier under Alternative 2)

Status: Upper Tier under Alternative 2

The North Saint Vrain (from approximately 40.217400, -105.523000 to just downstream of the Buttonrock Reservoir) is a Front Range classic for whitewater kayakers. The run offers long, challenging rapids through the run's 9.5 miles, culminating in a spectacular granite canyon for the second half of the river. The run's granite boulder-garden character is rare in Colorado and makes this section of river a uniquely valuable recreational resource.

COR681

Berthoud Pass Area

CRA: Vasquez Adjacent Area CRA, 6,910 acres (5902 acres Upper Tier under Alternative 2); James Peak CRA, 2301 acres

Status: Upper Tier under Alternative 4

The Berthoud Pass area, formerly the site of a ski resort, has become an exceptionally popular and accessible area for backcountry skiers. Popular areas on the west side of the pass include First and Second Creek, currently proposed for Upper Tier designation, as well as the areas to the west just north of the Henderson Mine (approximately 39.769925, -105.846223). Given the extraordinary popularity of this area for wintertime outdoor recreation, however, the entire Vasquez Adjacent Area should be given Upper Tier designation. To the east side of the pass, the southwest face of Colorado Mines Peak is also a popular area for skiers. This area, within the James Peak CRA, should also be designated in the Upper Tier.

Grays and Torreys Peaks

CRA: Mount Sniktau CRA, 7771 acres; Porcupine Peak CRA, 7640 acres (White River National Forest)

Status: Partially protected under Alternative 4; new proposed Upper Tier area

Located at the junction of the Mount Sniktau and Porcupine Peak CRAs, Grays and Torreys Peaks (39.633507, -105.816933 and 39.642532, -105.820870 respectively) are an extraordinarily popular hiking destination. Grays Peak is the highest point on the Continental Divide in the United States. These areas should be protected through Upper Tier designation.

Grand Mesa-Uncompahgre-Gunnison National Forests

Reno/Flag/Bear/Deadman Trail

CRA: Granite Basin CRA, 25,519 acres (9,265 designated Upper Tier under Alternative 2)

Status: Upper Tier under Alternative 4

This classic mountain bike loop is often described as one of the best rides in the Crested Butte area. The ride begins on FS Road 740 at the Deadman Gulch trailhead (approximately 38.874710, -106.798100), and winds its way northeast, before turning south and entering the Granite Basin CRA at approximately 38.862435, -106.764001. From there, it continues south to approximately 38.834046, -106.761181 before turning west-northwest, and ultimately back to Road 740. While a portion of the CRA to the south and west of the trail is designated Upper Tier under Alternative 2, that area should be expanded to, at minimum, include this outstanding recreational resource.

Trail 401

CRA: Schofield Pass CRA, 875 acres

Status: New proposed Upper Tier area

This 14-mile loop mountain bike ride through the heart of the Schofield Pass CRA is often described as the best ride in Colorado. From the Judd Falls trailhead (approximately 38.965970, -106.993920), the ride follows Gothic Road towards Schofield Pass for approximately 4.5 miles before turning east into the CRA for a long singletrack descent through fields of wildflowers and aspen groves. This world-famous outdoor recreation resource should be given Upper Tier protection.

Doctor Park

CRA: Matchless Mountain CRA, 26,999 acres

Status: Upper Tier under Alternative 4

Doctor Park is a third classic Crested Butte area mountain bike ride. The trail can be ridden as a loop, beginning with an approximately 8 mile ride from the North Bank Campground up Spring Hill Road (CO Road 744), or as a shuttle, eliminating the road portion of the ride. The off-road portion of the ride begins on trail 554 at approximately 38.825250, -106.727410 and heads south through the Matchless Mountain CRA to finish back at North Bank Campground (approximately 38.730317, -106.757728). This scenic, classic, and accessible resource deserves Upper Tier protection.

Flowing Park
Kannah Creek

CRA: Kannah Creek CRA, 34,594 acres

Status: Upper Tier under Alternative 4

Flowing Park mountain bike trail begins off road A S-52 4/10 at approximately 38.955451, -108.102321. The trail heads to the southwest and makes a loop through the southern half of the Kannah Creek CRA with a western tip at approximately 38.898482, -108.180681. Because of the trail's high elevation, it offers relief from summer heat, and it is popular with crosscountry skiers in wintertime.

Kannah Creek trail begins off G S Road at approximately 38.960921, -108.230813 and can be ridden as an out-and-back to approximately 38.944459, -108.161071. This trail offers technical singletrack in a high elevation setting.

These areas are valuable components of the Fruita and Grand Junction area's world class trail network, and should be protected with Upper Tier designation.

Blue Creek Trail

CRA: Long Canyon CRA, 17,165 acres

Status: Upper Tier under Alternative 4

The Blue Creek trailhead is located off the west side of FR 402 (Divide Road), just south of FR 408 (Dominguez Road) at approximately 38.619371, -108.667270. The trail, open for hiking, horseback riding, and mountain biking, runs west for five miles, before ending at trail 643, Leonard's Ridge trail. Running through the heart of the Long Canyon CRA, this area should be protected through Upper Tier designation.

Atkinson Bench Trail

CRA: Johnson Basin CRA, 11,943 acres

Status: Upper Tier under Alternative 4

The Atkinson Bench Trail winds its way north-south from approximately 38.503037, -108.600933 to approximately 38.483946, -108.585470. The 4.4-mile long trail approximates the western boundary of the Johnson Basin CRA. Flowing through scenic groves of aspen, the trail is popular with hikers, mountain bikers, and horseback riders.

Ruby Fork Anthracite Creek
Anthracite Creek

CRA: Horse Ranch Park CRA, 3,880 acres; Munsey/Erickson CRA, 3,511 acres (2,632 acres designated Upper Tier under Alternative 2)

Status: Partially protected under Alternative 4; new proposed Upper Tier area

Ruby Anthracite and Anthracite Creek are small streams flowing off the west side of Kebler Pass offering opportunities for steep-creek whitewater kayaking. The upper section of the Ruby Fork begins of CR 12 (Kebler Pass Road) at approximately 38.862800, -107.163000. The creek from there runs to the north-northwest through the Horse Ranch Park CRA before joining Anthracite Creek on the northeast side of Marcellina Mountain and turning west into Anthracite's Dark Canyon. The Dark Canyon section passes through the Munsey/Erickson CRA, and often begins with a hike in on FT 836, beginning just off Kebler Pass Road at approximately 38.911454, -107.232498. The section ends at Erickson Campground (approximately 38.954404, -107.271062). These areas should be preserved through Upper Tier designation for the Horse Ranch Park and Munsey/Erickson CRAs.

Pike-San Isabel National Forests

Mount Elbert

CRA: Mount Elbert CRA, 22,090 acres

Status: New proposed Upper Tier area

Mount Elbert, at 14,440, is the highest mountain in Colorado and the second highest point in the Lower 48. The summit is accessible via a number of straightforward and popular routes. This iconic and significant attraction should be protected by Upper Tier designation for the Mount Elbert CRA.

Clear Creek of the Arkansas
Lake Creek
Twin Lakes Loop Trail

CRA: Elk Mountain-Collegiate North CRA, 32,069 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

Clear Creek of the Arkansas includes a classic whitewater run beginning at 38.9833, -106.44 and ending at 39.0067, -106.323. This section flows between two portions of the Elk Mountain-Collegiate North CRA, and deserves the crucial water quality and viewshed protections of Upper Tier designation. This is a popular river with locals and visitors, and a classic training ground for the area's more challenging runs, as well as a spectacular resource in its own right because of its continuous rapids and beautiful scenery.

Lake Creek, from near mile marker 69 on Highway 82 (approximately 39.081500, -106.537000) to the Willis Gulch picnic area near the town of Twin Lakes, is the best low-volume creek run in the Arkansas River Valley. This world famous run flows off the east side of Independence Pass and through the Elk Mountain-Collegiate North CRA, where it drops through tight gorges and over spectacular falls.

The Twin Lakes loop is a popular and high-quality mountain bike ride circumnavigating Twin Lakes reservoir that includes sections of the Colorado Trail and the Continental Divide Trail.

Lake Creek and Clear Creek of the Arkansas are world class recreational resources that contribute to Buena Vista's reputation as one of the greatest whitewater boating towns in the country, and the Twin Lakes trail is yet another aspect to the fantastic outdoor recreation opportunities present in the Arkansas River valley. These outstanding resources draw visitors from around the world and merit protection through Upper Tier roadless designation for the Elk Mountain-Collegiate North CRA.

The Colorado Trail

CRA: Green Mountain, Lost Creek East, Lost Creek West, Jefferson, Tenmile, Ptarmigan Hill B, Ptarmigan Hill A, Holy Cross, Mount Massive, Elk Mountain-Collegiate North, Elk Mountain-Collegiate South, Kreutzer-Princeton, Mount Antero, Chipeta, Agate Creek, Starvation Creek, Antora Meadows/Bear Creek, Cochetopa Hills, Cochetopa, Bristol Head, Big Buck/Kitty/Ruby, Pole Mountain/Finger Mesa, Weminuche Adjacent, San Miguel, Blackhawk Mountain, Hermosa CRAs

Status: Partially protected under Alternative 4; new proposed Upper Tier area

The Colorado Trail, running from Denver to Durango, offers an incomparable experience for hikers and mountain bikers. Over the trail's 483 miles, it passes through six National Forests and six Wilderness areas (with detours available for mountain bikes). It traverses five major river systems, and pass through eight different mountain ranges. The trail's average elevation is over 10,000 feet. The Colorado Trail is a peerless resource, drawing visitors from around the world. At minimum, the areas of the CRAs through which it passes or within the trail's viewshed should be protected through Upper Tier designation.

Monarch Crest Trail

CRA: Agate Creek CRA, 11,826 acres (Grand Mesa-Uncompahgre-Gunnison National Forest); Chipeta CRA, 28,686 acres; Starvation Creek CRA, 7,565 acres

Status: Partially protected Under Alternative 4; new proposed Upper Tier area

The Monarch Crest trail begins from a trailhead atop Monarch Pass at approximately 38.495980, -106.325500. From there, it heads south-southeast, roughly following the border between the Agate Creek and Chipeta CRAs and winding between the two. It then continues south, before entering the Starvation Creek CRA and turning east across that area. After leaving the Starvation Creek CRA, the trail turns northeast and runs just outside the northwest border of the Porphyry Peak CRA before ultimately ending at Highway 285. For a part of its length, the Crest trail overlaps with a portion of the Colorado Trail.

The Monarch Crest is a spectacular, high elevation journey, popular with hikers as well as mountain bikers. The trail covers more than 30 miles of mostly singletrack, with portions above the treeline and others running through stunning mixed forest. This world-class resource for hikers and mountain bikers should be protected by Upper Tier designation.

Kenosha Pass

CRA: Jefferson CRA, 10,902 acres

Status: Upper Tier under Alternative 4

The section of the Colorado Trail from the trailhead at Kenosha Pass (approximately 39.41293, -105.75876) to Georgia Pass (approximately 39.456525, -105.911374) is a popular section of trail with both hikers and mountain bikers, passing through the Jefferson CRA. While all of the

Colorado Trail merits Upper Tier protection, this popular section in particular should be protected through Upper Tier designation.

Grape Creek
Tanner Peak Trail

CRA: Tanner Peak CRA, 17,729 acres

Status: Upper Tier under Alternative 4

Grape Creek, from approximately 38.320400, -105.347000 north to Cañon City, offers low-volume paddling through a scenic setting, including the west side of the Tanner Peak CRA.

Tanner Peak trail (FT 1333) offers exhilarating views of the Royal Gorge, Pikes Peak, and the Sangre de Cristo Range and passes through five of Colorado's nine major ecosystems, from semi-desert to subalpine forest.

To protect these valuable recreational resources, the Tanner Peak CRA should be protected by Upper Tier designation.

South Platte River
Big Rock Candy Mountain

CRA: Sheep Rock CRA, 8013 acres

Status: New proposed Upper Tier area

Big Rock Candy Mountain (39.131375, -105.322308), at approximately 1,000 feet high, may be the largest rock formation in the Platte drainage. Big Rock Candy Mountain offers climbers a number of challenging multi-pitch routes in a relatively remote setting.

The South Platte River, through the Sheep Rock CRA to Cheeseman Reservoir, is the scenic runout for the Cheeseman Canyon section of the South Platte, an adventurous and pristine canyon enjoyed by experienced whitewater boaters. To protect these outstanding recreational resources, the Sheep Rock CRA should be afforded Upper Tier protection.

Rio Grande National Forest

Conejos River

CRA: Conejos River / Lake Fork CRA, 870 acres

Status: New proposed Upper Tier area

The Conejos river contains an approximately 6.4 mile intermediate-difficulty whitewater run (from 37.308, -106.48 to 37.227, -106.467) through a scenic setting, largely within the Conejos River/Lake Fork CRA. The run passes through an open volcanic gorge and features impressive geologic formations, including the Pinnacles, and late summer flows maintained for irrigation create recreational opportunities after other runs in the area have dropped for the season. This recreational resource should be protected through Upper Tier designation for the Conejos River/Lake Fork CRA.

Routt National Forest

Continental Divide Trail

CRA: Dome Peak, Long Park, Troublesome North, Troublesome South, Never Summer Adjacent Area, Never Summer South, Indian Peaks Adjacent Area, James Peak, Vasquez Adjacent Area, Byers Peak, Williams Fork Ptarmigan Adjacent, Bard Creek, Mount Sniktau, Burning Bear, Jefferson, Tenmile, Ptarmigan Hill B, Ptarmigan Hill A, Holy Cross, Mount Massive, Elk Mountain-Collegiate North, Texas Creek, Sanford Basin, Romley, Mount Antero, Agate Creek, Chipeta, Starvation Creek, Antora Meadows/Bear Creek, Cochetopa Hills, Cochetopa, Bristol Head, Big Buck/Kitty/Ruby, Carson, Pole Mountain/Finger Mesa, Cataract, Beartown, Turkey Creek, Treasure Mountain, Summit Peak/Elwood Pass, Chama Basin CRAs

Status: Partially protected under Alternative 4; new proposed Upper Tier area

In 1978, Congress designated the Continental Divide National Scenic Trail. This 3,100-mile backcountry route from Canada to Mexico is a spectacular pathway through an iconic American landscape, perhaps highlighted by the trail's 800-mile journey through Colorado. Along with the Pacific Crest Trail and the Appalachian Trail, the Continental Divide Trail is one of the definitive experiences for backcountry hiking in America. This invaluable resource must be protected by Upper Tier designation for the many CRAs through which it passes. At minimum, those areas immediately surrounding the trail and within its viewshed should be protected.

Rabbit Ears Pass
Rabbit Ears Peak
Fish Creek
North Fork Fish Creek
Buffalo Pass

CRA: Mad Creek CRA, 24,305 acres; Long Park CRA, 42,111 acres; Walton Peak CRA, 5,258 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

The Rabbit Ears Pass area, to the north of Highway 40 and to the west of Rabbit Ears Pass (40.384520, -106.611888) offers many opportunities for crosscountry skiing and snowshoeing in a quiet winter landscape within the Long Park CRA. The area includes wintertime routes like Bruce's Trail, Fox Curve Loop, Hogan Park Trail, West Summit Loop 1A, and West Summit Loop 1B. Rabbit Ears Peak offers spectacular views from atop its visually compelling volcanic tower.

To the south of Highway 40, popular wintertime routes exist in the Walton Peak CRA, including the North Walton Peak Loop, Par-a-lel Route, and the South Summit Loop. Walton Peak itself (40.35440, -106.6992) and the surrounding area is popular for hiking, skiing, and snowshoeing for Steamboat Springs area residents and visitors.

Fish Creek and the North Fork of Fish Creek are two steep-creek whitewater runs flowing west into Steamboat Springs from the northern part of the Long Park CRA. While the most commonly boated section of Fish Creek—from Fish Creek Falls (approximately 40.481777, -106.772260) to Steamboat Springs—is outside the boundaries of the CRA, Upper Tier designation would help to protect water quality in this outstanding small stream. The North Fork of Fish Creek is an outstanding steep creek run within the CRA itself for the approximately one-mile section above the confluence with Fish Creek.

Buffalo Pass (summit at approximately 40.532440, -106.667331) and CR 38 divide Long Park CRA to the south and Mad Creek CRA to the north. Both areas are popular destinations for backcountry skiing, particularly in the areas surrounding Soda Mountain and Buffalo Mountain.

In addition to its other many recreation opportunities, portions of the Colorado Trail and the Continental Divide Trail pass through the Long Park CRA. These valuable outdoor recreation resources should be protected through Upper Tier designation for the Mad Creek, Long Park, and Walton Peak CRAs.

San Juan National Forest

Animas River Canyon
Lime Creek
Canyon Creek
Needle Creek

CRA: East Animas CRA, 16,854 acres; West Needles CRA, 6,887 acres; Weminuche Adjacent, 23,614 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

The East Animas, West Needles, and Weminuche Adjacent Roadless Areas border the Animas River along the segment between Silverton and Rockwood, one of the nation's most outstanding whitewater runs, and the Animas, together with its spectacular tributaries, is a draw for whitewater river runners from across the state, the country, and the world.

The Animas River from Silverton to Rockwood is one of the longest whitewater runs in Colorado and flows through spectacular scenery in the heart of the San Juan mountains. Often paddled as a two-day trip, this section draws boaters from around the world. The run passes through the East Animas, Weminuche Adjacent, and West Needles CRAs.

Lime Creek, from near the intersection of Old Lime Creek Road and Highway 550 (approximately 37.720895, -107.748367) flows through three distinct gorges before entering the Animas river. These three sections include boulder garden rapids and waterfalls, including Adrenaline Falls, one of the most iconic whitewater features in the country, featured on the cover of the first edition of *Colorado Rivers and Creeks*. The run flows largely through the Weminuche Adjacent and West Needles CRAs, both of which should be given Upper Tier protection to protect this outstanding recreational resource.

Needle Creek and Canyon Creek are two Animas River tributaries entering from the east side of the river. These spectacular creeks are typically accessed from the Animas River by kayakers hiking upstream from the creeks' confluences with the Animas. Needle Creek enters the Animas at approximately 37.627637, -107.697658. Canyon Creek meets the Animas at approximately 37.521769, -107.782620. Both sections are almost entirely within the boundaries of the East Animas CRA.

Of these areas, only 2415 acres of West Needles and 599 Weminuche Adjacent are proposed for the Upper Tier in Alternative 2. In light of their backcountry recreation value and the fact that the Upper Animas attracts visitors from around the world, the 47,355 acres of these roadless areas should be included in the Upper Tier. At a minimum the following areas should be included: portions of the East Animas Roadless Area along the Animas River upstream and downstream of the confluence with Cascade Creek, Weminuche Adjacent along Lime Creek including Adrenaline Falls (37.705, -107.7519), Weminuche Adjacent along the Animas River as included in Alternative 2, and expansion of West Needles in Alternative 2 to make it contiguous with existing wilderness and include the Third Gorge on Lime Creek before it joins the Animas River.

These modifications to the proposed action are essential to protect water quality and the scenic viewshed of this world-class recreation destination.

Hermosa Creek
Hermosa Creek Trail

CRA: Hermosa CRA, 148,103 acres (63,140 acres designated Upper Tier under Alternative 2)

Status: Upper Tier under Alternative 4

Hermosa Creek (from approximately 37.6269, -107.924 to 37.4136, -107.835) is a long whitewater run north of Durango flowing through the heart of the Hermosa CRA, and the Hermosa Creek Trail, paralleling the river through the length of the CRA is an outstanding, nearly 20-mile-long section of singletrack, often described by mountain bikers with superlatives. While the west side of Hermosa Creek is currently proposed for the Upper Tier under Alternative 2, this entire area is worthy of Upper Tier protection given the value of this resource for hikers, mountain bikers, and kayakers.

South Mineral Creek
Molas Pass Area

CRA: San Miguel CRA, 64,047 acres (26,242 acres designated Upper Tier under Alternative 2)

Status: Upper Tier under Alternative 4

South Mineral Creek immediately upstream from South Mineral Campground (approximately 37.81, -107.7) is a short but classic advanced to expert level whitewater run surrounded by spectacular high mountain scenery, but relatively accessible to visitors coming from Silverton and Durango. The Molas Pass Area on the west side of Highway 550 from Molas Pass (approximately 37.737276, -107.697959) offers excellent opportunities for backcountry skiing. While much of the area surrounding Engineer Mountain to the south is designated Upper Tier under Alternative 2, the area should be expanded to include, at a minimum the areas around South Mineral Creek, the Colorado Trail, and Molas Pass.

Piedra River

CRA: Piedra Area Adjacent CRA, 40,841 acres

Status: Partially protected under Alternative 2; proposed new Upper Tier area

The Piedra River (from approximately 37.426800, -107.193000 to just north of Highway 160) offers a scenic intermediate to advanced level whitewater trip through a pristine backcountry area, including portions of the Piedra Area Adjacent CRA. While a small riverside area is proposed for inclusion in the Upper Tier under Alternative 2, the entire portion of the CRA, or at minimum, those areas closely following the river, deserve protection in the Upper Tier to protect the scenic characteristics and water quality of this run.

East Fork San Juan River

CRA: South San Juan Adjacent CRA, 34,899 acres (6252 Alternative 2 Upper Tier)

Status: Upper Tier under Alternative 4

The East Fork of the San Juan (from approximately 37.383100, -106.857000 west to highway 160) flows through the South San Juan Adjacent, a portion of which is included in the Upper Tier. Because of the outstanding recreational value of this run, the entire area should be afforded Upper Tier protection to safeguard its outstanding scenery and water quality.

West Fork San Juan River

CRA: Turkey Creek CRA, 25,303 acres (6814 Alternative 2 Upper Tier)

Status: Partially protected under Alternative 2; fully protected under Alternative 4

The West Fork San Juan River (from approximately 37.471800, -106.929000 to 37.450241, -106.910774) flows through the Turkey Creek CRA. This is the best small-creek run in the Pagosa Springs area. While portions are designated Upper Tier in Alternative 2, the designation should be expanded to include, at minimum, the areas immediately surrounding this outstanding whitewater resource.

White River National Forest

Vail Pass

CRA: Ptarmigan Hill A CRA, 13,072 acres; Ptarmigan Hill B CRA, 6,983 acres; Ryan Gulch CRA, 630 acres; Coral Creek CRA, 3,252 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

Ptarmigan Hill A and B CRAs off the west side of Vail Pass are among the most popular backcountry winter destinations in the world. This extraordinarily popular area for backcountry skiing, crosscountry skiing, and snowshoeing should be protected through Upper Tier designation.

Ptarmigan A, known locally as Ptarmigan or Acorn Creek, is a popular Nordic skiing and snowshoeing area.

Ptarmigan Hill B, known locally as Ute Pass, is largely comprised of terrain between 10,500 and 12,000 feet and offers great skiing. Its proximity to Ute Pass Road makes the area highly accessible.

Ryan Gulch, on the east side of Vail Pass and to the west of Silverthorne, is a popular local area for snowshoeing and Nordic skiing.

Coral Creek, to the north of I-70, is an exceedingly popular area for backcountry skiers that also features outstanding Nordic ski trails.

These outstanding backcountry winter recreation destinations should be protected through Upper Tier designation.

Hoosier Ridge

CRA: Hoosier Ridge CRA, 8,920 acres (2,934 acres located in Pike-San Isabel National Forest)

Status: Partially protected under Alternative 4; new proposed Upper Tier area

Hoosier Ridge CRA, just south from Breckenridge, offers some of Colorado's finest opportunities for backcountry and Nordic skiing, as well as incredible Nordic touring. The area's primitive backcountry character should be protected by Upper Tier designation.

Tenderfoot Mountain Area

CRA: Tenderfoot Mountain CRA, 8,389 acres

Status: Upper Tier under Alternative 4

The Tenderfoot Mountain CRA, particularly the higher, west-facing aspects, are a popular local backcountry skiing destination. To protect this valuable recreational resource, the Tenderfoot Mountain CRA should be given Upper Tier designation.

Porcupine Peak Area

CRA: Porcupine Peak CRA, 7,640 acres

Status: Upper Tier under Alternative 4

The Porcupine Peak area, particularly its higher elevation areas, is a popular area for backcountry skiers. This valuable resource should be protected through Upper Tier designation.

Tenmile Area
Tenmile Creek

CRA: Tenmile CRA, 6,265 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

The Tenmile area is a classic backcountry skiing destination, including the popular Sky Chutes and the Knarly Chute on the northeast side of Peak 1.

Tenmile Creek, from just off I-70 to Dillon Reservoir, flow briefly through the northernmost portion of the CRA. This is the most popular after-work whitewater run for the Summit County area. Though mostly outside the CRA, Upper Tier designation would help to protect water quality in this outstanding resource.

Tenmile CRA also is bisected by a section of the Colorado Trail and the Continental Divide Trail. To protect all of these invaluable recreational resources, the Tenmile CRA should be given Upper Tier designation.

Chicago Ridge Area

CRA: Chicago Ridge CRA, 5,098 acres

Status: Partially protected under Alternative 4; new proposed Upper Tier area

The Chicago Ridge area offers great skiing and diverse terrain for a variety of backcountry winter activities. This area should be protected through Upper Tier designation.

Piney River

CRA: Freeman Creek CRA, 967 acres; Lower Piney CRA, 13,545 acres

Status: Partially protected under Alternative 2; fully protected Under Alternative 4

The Piney River, flowing through the Freeman Creek, and Lower Piney CRAs (from approximately 39.710000, -106.423000 northwest to State Bridge on highway 131), is a long and remote-feeling whitewater run offering a high degree of adventure. To protect this whitewater gem, Freeman Creek CRA and Lower Piney CRA should be designated Upper Tier.

Grizzly Creek
Grizzly Creek Trail

CRA: Grizzly Creek CRA, 6669 acres

Status: New proposed Upper Tier area

Grizzly Creek Trail, from a trailhead (approximately 39.561031, -107.249957) just off I-70 east of Glenwood Springs, offers convenient access into the Grizzly Creek CRA. The trail is a scenic and accessible means of enjoying Glenwood Canyon, and is highlighted by waterfalls and views of colorful canyon walls, showcasing Colorado's unique geology.

Grizzly Creek itself is an occasionally-run piece of whitewater offering an interesting small-stream contrast to the high-volume sections of the Colorado downstream.

These recreational resources should be protected through Upper Tier designation for the Grizzly Creek CRA.

JUL 13 2011

COR682.

GEORGETOWN SILVER PLUME HISTORIC DISTRICT PUBLIC LANDS COMMISSION
c/o Clear Creek County Administration
Box 2000 Georgetown, CO 80444 Tel: 303 679 2309
Clear Creek County, Clear Creek Ranger District USFS, Colorado Division of Wildlife, Colorado Historical Society, Town of Georgetown, Town of Silver Plume, Historic Georgetown Inc.

July 6, 2011

Comments: Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

From: Georgetown Silver Plume Historic District Public Lands Commission
Re: Arapaho-Roosevelt National Forest, Clear Creek Ranger District, Mount Evans Loveland Pass

The Historic District Public Lands Commission (HDPLC) is a multijurisdictional commission formed to plan and manage low impact recreation development on former BLM lands within the Georgetown Silver Plume National Historic Landmark District and coordinate with recreational initiatives in the adjoining South Clear Creek and Clear Creek drainages. The members of the HDPLC are listed above. The USFS representative did not express an opinion.

At the regular meeting of the Commission on May 18, 2011 the four alternatives of the proposed Roadless Area rule were presented and discussed. It was the consensus of the Commission to support the Preferred Alternative, Alternative 2 because of the indicated Upper Tier Areas in that alternative. HDPLC member considerations included the following:

1. The Upper Tier Area on the west side of the Guanella Pass Scenic and Historic Byway protects the viewshed of the Byway, the Mount Evans Wilderness Area that is contiguous to the Byway on the East and the Waldorf Basin on the West.

2. The HDPLC would recommend enlarging that Upper Tier area on the west side of the Guanella with the inclusion of Square Top Mountain and Lakes and Smelter Gulch to the south.

3. The Upper Tier Areas to the north of the Mt Evans Wilderness Area also afford important viewshed protections to the Wilderness Area.

4. The Upper Tier Area between Gray's and Torrey's Peaks and Mount Edwards could be expanded to protect the USFS Gray's Peak Trail and the Continental Divide Trail.

5. The Upper Tier Area delineated along the I 70 corridor from Graymont to Loveland Basin on the north and south sides of the Interstate protects the scenic designation of the area by the USFS. With that in mind, sufficient area relatively adjacent to the Interstate should remain open to the possibility of a rapid transit advanced guideway system (AGS). The AGS is the Preferred Alternative in the Record of Decision for the I 70 Mountain Corridor.

Matthew D. Skeen

Matthew D. Skeen, Chairman

Matthew D. Skeen
Skeen & Skeen, P.C.
P.O. Box 218
Georgetown, CO 80444

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Colorado Roadless Rule/EIS
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City of Greeley Colorado
Great. From the Ground Up.

JUL 15 2011

John A. Kolanz
Environmental and Water Resources Counsel

July 12, 2011

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

Via U.S. and Electronic Mail

Re: Proposed Colorado Roadless Rule

To Whom It May Concern:

Recently, the United States Forest Service ("USFS" or "Service") issued a notice of proposed rulemaking to provide management direction for inventoried roadless areas on National Forest System lands in Colorado ("Proposed Rule"). 76 *Fed. Reg.* 21272 (April 15, 2011). The Proposed Rule is intended to protect roadless areas in Colorado in a manner that addresses both local and national interests. The City of Greeley ("City" or "Greeley") generally supports this approach.

Greeley obtains its drinking water from four major river basins in Colorado: the Big Thompson, the Colorado, the Laramie, and the Cache la Poudre. The Service owns considerable land within these basins. Over the years, Greeley has invested, directly or indirectly, significant money and resources into facilities located on such Forest Service lands to collect and deliver raw water to its drinking water treatment plants. The Proposed Rule has the potential to directly affect Greeley operations related to providing drinking water to its citizens. USFS specifically recognizes in its preamble to the Proposed Rule that Colorado's Roadless Areas are important sources of clean and safe public drinking water. *Id.* at 21273.

Greeley, like most Colorado cities, is struggling to secure adequate water supplies to meet future demands. As part of this effort, Greeley is in the process of permitting an expansion to the City's Milton Seaman Reservoir, which is located northwest of Fort Collins, Colorado on the North Fork of the Cache la Poudre River. The existing reservoir lies partially on land within the Roosevelt National Forest.

While Greeley plans no road construction to accommodate expansion of the reservoir, the expansion footprint extends partially into the proposed Greyrock (a.k.a. Grey Rock) Roadless Area. (See map at Attachment 1.) The City received assurances from USFS personnel at a May 26, 2011 public meeting in Fort Collins that such inundation will not trigger any prohibitions of

COR683

the Proposed Rule. Service personnel further indicated that any tree cutting incidental to such inundation would be permitted as quote incidental to the implementation of the management activity" under Section 294.42 of the Proposed Rule. Greeley agrees with this interpretation of the Proposed Rule, and asks that USFS confirm this in its response to comments on the proposal.

Greeley also has general concerns about the potential for the rule to eliminate options for future water facilities in roadless areas, particularly in Upper Tier Acres. The Colorado Statewide Water Supply Initiative has identified challenges in addressing future water supply needs across the State, particularly along Colorado's Front Range. Colorado will need to ensure that all options to meet such needs remain available for careful consideration, and not eliminated before they can be fully evaluated under a comprehensive permitting regime. (Such projects would require a special use authorization from the Service, and would typically also require a Clean Water Act Section 404 permit from the Army Corps of Engineers.)

The Proposed Rule prohibits road construction and linear construction zones in a Colorado Roadless Area with certain exceptions. One such exception is when the Regional Forester determines that "a forest road or a temporary road is needed to allow for the construction, reconstruction, or maintenance of water conveyance structure which is operated pursuant to a *pre-existing water court decree*." §§294.43(b)(1) and §§294.44(b)(1) (emphasis added).

The emphasized portion of this quoted exception is inconsistent with Colorado water law. In Colorado, water right priority rather than date of decree is controlling. As written, one can have a valid Colorado water right, the priority of which predates the final rule, that he cannot exercise in a Colorado roadless area if the decree happens to be finalized after the date of the final rule. Greeley requests that the exception cover any water rights with an appropriation date that pre-dates the date of the final rule.

Thank you for the opportunity to comment on the proposed rule. Please contact me if you have any questions or need further clarification regarding the points made in this letter.

Sincerely,

John A. Kolanz

John A. Kolanz

Attachment

cc: Jon G. Monson, Director (electronic w/attach.)
Greeley Water and Sewer Department
Nancy A. Koch, Project Manager (electronic w/attach.)
Greeley Water and Sewer Department

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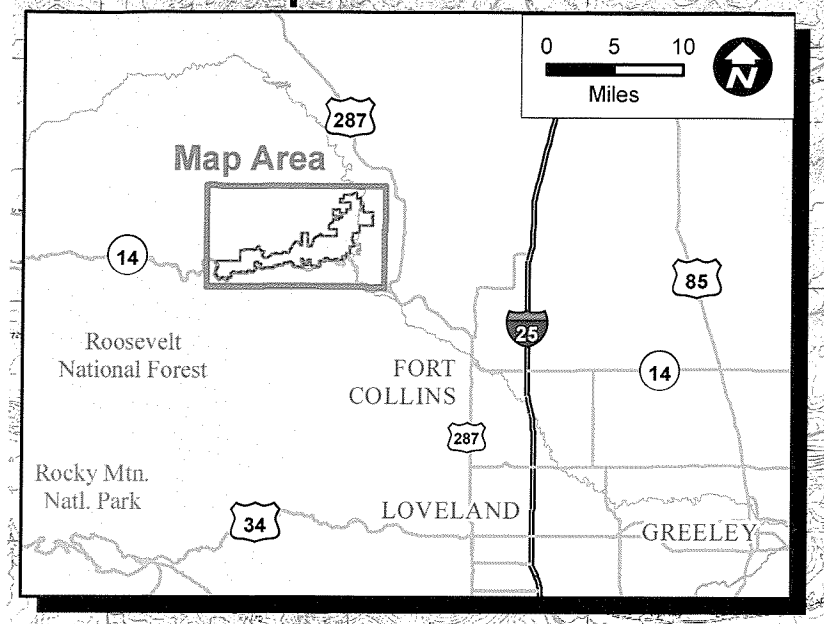
ATTACHMENT 1

Locator Map



Potential Seaman Reservoir Enlargement (53,000 AF option)

Existing Milton Seaman Reservoir (City of Greeley)

ROOSEVELT NATIONAL FOREST

Cache la Poudre River

City of Greeley

Grey Rock Roadless Area

Date: 5/4/2011 Greeley GIS, coxs
GreyRockRoadless.mxd

Legend

- 287 Federal Highway
- 14 State Highway
- Seaman Reservoir
- Potential Enlargements
- Grey Rock Roadless Area

Miles
0 0.5 1 1.5 2

JUL 15 2011

COLORADO ROADLESS RULE/EIS
PO BOX 1919
SACRAMENTO CA 95812

CO7583

COR684.

From: steve smith [steve_smith@tws.org]
Sent: Thursday, July 14, 2011 9:35 PM
To: COcomments
Subject: colorado roadless rule comments (CORRECTED)
Attachments: Colo Draft rule com 7-11-(CORRECTED).pdf

Greetings.

Please accept and carefully consider the attached comments on the Revised Draft Environmental Impact Statement for the proposed Colorado-specific roadless rule, and on the accompanying draft rule text.

PLEASE SUBSTITUTE this July 14 CORRECTED version of our comments for the similar letter--delivered July 13--from Rocky Mountain Wild et al.

Please let me know if you have any questions, requests, or instructions regarding this substitution of updated corrected comments for those we previously delivered.

Thank you.

Steve Smith
Assistant Regional Director
The Wilderness Society (for Rocky Mountain Wild et al) steve_smith@tws.org
(303) 650-5818 x106

COR684

Rocky Mountain Wild * Wilderness Workshop * Conservation Congress * Planeto Azul Hydrology * WildEarth Guardians * Geos Institute * Center For Biological Diversity * Sheep Mountain Alliance * Great Old Broads For Wilderness * Quiet Use Coalition * Colorado Environmental Coalition * San Luis Valley Ecosystem Council * Central Colorado Wilderness Coalition * San Juan Citizens Alliance * Wild Connections * High Country Citizen's Alliance * The Wilderness Society * Defenders of Wildlife

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

via e-mail: *COComments@fsroadless.org*

July 14, 2011 [*CORRECTED VERSION; PLEASE SUBSTITUTE THIS LETTER FOR SIMILAR LETTER SENT July 13.* THANK YOU.]

Dear Forest Service,

The following are the comments of the organizations described below on the **Special Areas; Roadless Area Conservation; Applicability to the National Forests in Colorado**, as described at 76 Fed Reg 21272 et seq., April 15, 2011 ("Preamble"). We also provide comments on the accompanying Revised Draft Environmental Impact Statement ("RDEIS").

The mission of **Rocky Mountain Wild**, which resulted from a merger of Colorado Wild and Center For Native Ecosystems, is to protect, connect, and restore wildlife and wild lands.

Wilderness Workshop (WW) is a 501c3 nonprofit with more than 800 members. WW works to protect and conserve the wilderness and natural resources of the Roaring Fork Watershed, the White River National Forest, and adjacent public lands. WW engages in research, education, legal advocacy and grassroots organizing to protect the ecological integrity of local landscapes and public lands. WW focuses on the monitoring and conservation of air and water quality, wildlife species and habitat, natural communities and lands of wilderness quality. WW has been advocating for protection of roadless forest lands for decades.

The **Conservation Congress** is a nonprofit formed in 2004 that works to protect and preserve National Forest lands, native wildlife species and their habitat in northern California and the Rocky Mountain region. Our Congress is a membership organization that provides a voice for the natural world of trees, wildlife, water and plants that cannot speak for itself. Our Forest Monitoring Program consists of scrutinizing projects on National Forest lands and providing comments to make them less environmentally damaging. Our main goal is protect wildlife species and their habitat, and preserve remaining roadless areas on National Forest lands.

Planeto Azul Hydrology is a small business providing affordable expertise in wildland hydrology throughout the West to those interested in conserving aquatic resources. Planeto Azul is located in Portland, Oregon but works on watershed conservation issues throughout the Western U.S.

WildEarth Guardians is a non-profit corporation with approximately 12,500 members and supporters throughout the United States, including Colorado. WildEarth Guardians' mission is to protect and restore wildlife, wild rivers, and wild places in the American West, including the national forests of Colorado. Members of WildEarth Guardians engage in outdoor recreation, wildlife viewing and other activities in the national forests of Colorado and intend to continue to do so.

Formerly the National Center for Conservation Science and Policy, the **Geos Institute** uses science to help people predict, reduce, and prepare for climate change.

The **Center for Biological Diversity** is a non-profit conservation organization with over 320,000 members and online activists. The Center works through science, law, and creative media to secure a future for all species, great or small, hovering on the brink of extinction.

Sheep Mountain Alliance is a grassroots citizen organization dedicated to the preservation of the natural environment, representing over 400 members in the Telluride Region and southwest Colorado. To this end, Sheep Mountain Alliance will provide education for and protection of regional ecosystems, wildlife habitats, and watersheds.

Great Old Broads for Wilderness is a 5,000-member national grassroots nonprofit organization (with over 1100 members in Colorado) dedicated to preserving and protecting America's roadless public lands. Today there are Broads of all ages and both genders in every state in the union making their voices heard to protect America's last wild places.

The **Quiet Use Coalition** is a non-profit organization working to create, promote and preserve quiet use areas and opportunities on our public lands and waters.

The **Colorado Environmental Coalition** inspires thousands of organizations and individuals who care deeply about Colorado. We work on a variety of issues that span the state and include: protecting our public lands, ensuring the quality of the water we drink, preserving wildlife habitat and opportunities for recreation, advocating for good transportation and growth practices, promoting common sense policies in the state legislature, and providing technology resources to other non-profits.

The mission of the **San Luis Valley Ecosystem Council** is to protect and restore the biological diversity, ecosystems, and natural resources of the Upper Rio Grande region, balancing ecological values and human needs.

The mission of the **Central Colorado Wilderness Coalition** is to protect, defend, and preserve for future generations the ecological integrity of wild places in the Pikes Peak Region of central Colorado and promote permanent protection of these areas through wilderness designation.

Founded in 1986, **San Juan Citizens Alliance** (SJCA) is a grassroots organization dedicated to social, economic, and environmental justice. We organize San Juan Basin residents to protect our water and air, our public lands, our rural character, and our unique quality of life while embracing the diversity of our region's people, economy, and ecology.

Wild Connections works to protect and restore the network of public and private roadless areas and wildlands needed to sustain biodiversity, wildlife, and wildlife habitat in the upper reaches of the Arkansas and South Platte watersheds. We achieve our goals by advocating for science-based land-use planning, educating citizens through programs and hikes, and restoring habitat.

High Country Citizens' Alliance (HCCA) is a non-profit conservation organization based in Crested Butte, Colorado. Founded in 1977, and with more than 600 members from diverse backgrounds, HCCA's mission is to champion the protection, conservation and preservation of the natural ecosystems within the Upper Gunnison River Basin. HCCA collaborates with interested and affected parties to protect public lands, endangered species, water resources, and ecological diversity, achieving goals by integrating expert analysis and scientific research with environmental education, informed debate, and policy participation.

Founded in 1935, **The Wilderness Society** is a national non-profit organization with more than 500,000 active members and supporters. The Wilderness Society's mission is to protect wilderness and inspire Americans to care for our wild places.

Defenders of Wildlife is dedicated to the protection of all native animals and plants in their natural communities. With more than 1 million members and activists, including over 31,000 members and activists in Colorado, Defenders of Wildlife is a leading advocate for innovative solutions to safeguard our wildlife heritage for generations to come.

I. **INTRODUCTION**. As in comments on previous incarnations of a Colorado Roadless Rule, we emphasize here the importance of protecting roadless areas. They provide resources of critical and inestimably high value for the United States and local areas. Roadless values were first listed as "roadless area characteristics" in the 2001 Roadless Area Conservation Rule (2001 Rule) at 36 CFR 294.11; they appear in the latest draft rule at 36 CFR 294.41. Especially important is the following characteristic:

> Habitat for threatened, endangered, proposed, candidate, and sensitive species, and for those species dependent on large, undisturbed areas of land.

Without national forest roadless areas, wide-ranging species such as lynx would not have

sufficient quality and quantity of habitat to ensure their continued existence on the landscape. The RDEIS at 197-204 discusses the impacts of roads on wildlife and plants, demonstrating that roadless areas are needed to ensure sufficient quality and quantity of habitats for wildlife, fish, and plants, especially, along with wilderness areas, to provide refugia for mid- to large-sized carnivores.

Roadless areas provide good protection for watersheds, which is very important since more than 95% of the roadless areas in Colorado overlap one or more source water assessment areas. DEIS at 153. Note the very small number of impaired stream miles in roadless areas versus non-roadless areas. DEIS at 152. See also DellaSalla et al, 2011, at 10-13 for an analysis of the importance water originating in national forest roadless areas in Colorado.

Roadless areas offer outstanding opportunities for primitive forms of recreation, such as hiking, backpacking, peak climbing, horseback riding, cross-country skiing, and snowshoeing. Roadless areas are often less crowded than designated wilderness areas.

Part of the Purpose and Need for the proposed Colorado Rule recognizes roadless values:

> Roadless areas are important because they are, among other things, sources of drinking water, important fish and wildlife habitat, semi-primitive or primitive recreation areas, and naturally appearing landscapes. There is a need to provide for the preservation of roadless area characteristics.

RDEIS at 34. See also Preamble at 21273.

The Purpose and Need further recognizes the threats to roadless areas:

> ....tree-cutting, sale or removal and road construction/reconstruction have the greatest likelihood of altering and fragmenting landscapes, resulting in immediate, long-term loss of roadless area values and characteristics and there is a need to generally prohibit these activities in roadless areas. Since the 2001 Roadless Rule was promulgated, some have argued that linear construction zones also need to be restricted.

RDEIS, id.

But even with recognition of both the value of, and threats to, roadless areas, the Forest Service has proposed a rule that would not ensure the conservation of roadless area characteristics. The Preamble states that the proposed rule "includes prohibitions on tree-cutting, sale, or removal; road construction/reconstruction; and linear construction zones, all with limited exceptions tailored to address specific issues". Preamble at 21273. We do not believe the exceptions are very limited; rather, they seem quite broad and provide a great deal of discretion to Forest Service line officers to approve projects and activities in roadless areas. While some discretion may be desirable, we believe the proposed rule would allow far too much authority for managers to approve and implement activities

that would damage or destroy roadless area characteristics.

We appreciate the improvements that have been made in the current rule over previous versions. Removal of the Currant Creek area from the North Fork Coal Area is the right decision. (This must be retained in the final rule. See section XI A below.) These lands are many miles away from any current operation, and the USFS should not accommodate potential future mines that are not even in the permitting stage. We like the upper tier concept, which would provide a higher level of protection for selected roadless areas. But even it does not go far enough in ensuring roadless area protection, and more areas need to be designated as upper tier. See section VI below for further discussion.

Overall, the current proposed rule is still not acceptable, as it simply does not ensure sufficient protection for an extremely valuable resource.

We detail our concerns with the proposed rule and the effects analysis below.

II. **THE FOREST SERVICE HAS MIS-IDENTIFIED THE NO ACTION ALTERNATIVE.** The RDEIS has the following explanation for the identification of the no-action alternative:

> **The No Action Alternative has changed from Alternative 1 to Alternative 3**
> In the DEIS, the Forest Service considered "no action" to mean that the 2001 Roadless Rule would remain in effect for IRAs in Colorado. In August 2008, after the DEIS was released, the Wyoming District Court set aside and enjoined the 2001 Roadless Rule. Colorado is under the Wyoming Court's ruling, thus the consequences of taking no action has changed. In the revised DEIS the "no action" means that IRAs in Colorado would be managed according to direction set forth in the applicable forest plan (alternative 3).

RDEIS at 31.

This statement is in error, as it leaves out a key fact. On August 5, 2009, the Ninth Circuit Court of Appeals upheld the California District Court ruling that voided the "State Petitions Rule" and reinstated the 2001 Roadless Rule. This ruling applies nationwide and supersedes the Wyoming court ruling. The Tenth Circuit has not yet ruled on the appeal of the Wyoming court's decision enjoining the 2001 Rule. A decision is expected soon and, importantly, the current Presidential Administration is defending the validity of the 2001 Rule in this pending Tenth Circuit litigation. Until the court rules, the prevailing court ruling is the Ninth's Circuit's decision, and the 2001 Rule is in effect nationwide, except for Idaho. In other words, if no action is taken, i. e., a Colorado Roadless Rule is not approved, the 2001 Rule would determine what projects and activities could occur in national forest roadless areas within Colorado, pending a decision by the Tenth Circuit.

This mis-identification of the no-action alternative badly skews the analysis of impacts of

alternatives 1, 2, and 4 in the RDEIS by making them seem to have a much greater impact compared to no action than they really would have. This is especially true for the analysis of impacts of roadless area protection on coal mining jobs and related contributions to the economy. See RDEIS at 300-301. Using the wrong no action alternative even causes the Forest Service to propose not to apply prohibitions on road construction and logging in alternative 1 until a Colorado Rule becomes effective. See, e. g., RDEIS at 50 (all activities); 129-130 (roads for coal leases); 136, 138 (roads for oil and gas leases) and F-1 (roads and logging for ski area development). These prohibitions are in effect now because the 2001 Rule is in effect now. A Secretarial directive also requires that certain types of projects inside a roadless area be reviewed by his office.

III. **THE RDEIS DOES NOT ANALYZE A SUFFICIENTLY PROTECTIVE CONSERVATION ALTERNATIVE**. Under the Council on Environmental Quality Regulations implementing the National Environmental Policy Act, agencies must "[r]igorously explore and objectively evaluate all reasonable alternatives". 40 CFR 1502.14(a). This means the Forest Service must consider an alternative that provides a maximum, or at least a very high level, of protection for all roadless areas. Certainly, much of the public comment on the draft 2008 rule and the State of Colorado's 2009 proposal insisted on such protection. See, e. g., comments of Colorado Wild et al, dated October 21, 2008, on the then-proposed Draft Colorado Roadless Rule.

Of the two DEIS alternatives for a Colorado Roadless Rule, the one that would best conserve roadless area characteristics is alternative 4, "Colorado Roadless Rule With Public Proposed Upper Tier". It is more protective of roadless character than the other alternatives, as it would allow much less logging than alternative 2. See 294.42. However, it would still allow: roads for some oil-gas leases (RDEIS at 60); linear construction zones for a variety of facilities (294.44) that would generally be inconsistent with roadless character (see further discussion on LCZs in section IX below); ski area development with road construction (RDEIS at 236[1]); and road construction for coal mining in the North Fork coal mining area (294.43(c)(1)(ix)).

Given the importance of roadless areas (see section I above) and pubic demand for a high level of protection for them, we believe it is very important that the Forest Service analyze and fully consider an alternative that would provide the maximum protection allowed by law. Analysis of a true conservation alternative is needed to show the full range of management options for Colorado's national forest roadless areas. Without consideration of such an alternative, the NEPA analysis for the proposed rule is incomplete.

An alternative providing the maximum, or a very high level, of protection should include, though not necessarily be limited to, the following protective provisions:

--no road construction allowed for any oil-gas leases issued since the effective date of

[1] Alternative 4 is the same as alternative 2 here, in that permitted ski areas and areas with ski area allocations under the Forest Plan are removed from the roadless inventory.

the 2001 Rule (see further discussion in section VII below), and no surface occupancy stipulations for any future oil and gas leases;

--no roads for coal mining on any leases issued after the effective date of the 2001 rule;

--linear construction zones are prohibited;

--ski area development or expansion, or at least roads for such activity, are prohibited;

--exceptions to the prohibitions on logging are much more limited than in the draft rule (see section IV below); and

--a ban on mining of mineral materials (see section XIV below).

IV. THE PROPOSED RULE PROVIDES OVERLY BROAD EXCEPTIONS TO THE PROHIBITION ON LOGGING.

The exceptions to the prohibitions on logging in roadless areas are described at 36 CFR 294.42. In non-upper tier areas, exceptions would allow logging in the "community protection zone" (CPZ), which extends up to 1.5 miles from at-risk communities. 294.42(c)(1), 294.41. Approximately 25 percent of the total roadless acreage is within 1.5 miles of at-risk communities. RDEIS at 108. In other words, one-fourth of Colorado's national forest roadless acreage would be at risk from logging under this provision. On the Arapaho-Roosevelt, Pike-San Isabel, and White River National Forests, 35 percent or more of the roadless acreage is within this 1.5 mile zone and would thus be at risk. Id. Given the very loose definition of "at-risk community", this is not especially surprising.[2]

This is considerably more than is needed to protect communities from wildfire. Cohen, 1999 and 2000, showed through experiments that no structure, even one made entirely of wood, will ignite from even a very hot fire at a distance greater than about 30 meters. (This is the "home ignition zone" - HIZ). For safety, cutting for some beyond the HIZ might be desirable, even where such activity entered a roadless area. However, we do not see how cutting 1.5 miles away from structures at risk would ever be necessary.

It is argued that removing fuels over a long distance from areas at risk, such as that proposed in the Draft Colorado Rule, is necessary to prevent ignitions from burning embers, which break off from crown fires and start new fires (known as "spot" fires). See RDEIS at 103. Such embers can fly a considerable distance, thus to fully protect

[2] The definition of this term in the proposed rule (294.41) is tied to the definition in the Healthy Forest Restoration Act (HFRA, 16 U.S.C. 6511 (1)). HFRA in turn refers to the Federal Register notice of January 4, 2001 (66 Fed Reg 751 et seq,), containing definitions and a list of at-risk communities. Note that at-risk communities include "interface" communities, which can have as few as 3 structures per acre; and "intermix" communities, which can have as few as one structure per 40 acres. Id. at 753. The list of at-risk communities in Colorado in this notice is so broad that the lead author of these comments, who has traveled extensively in the portions of Colorado with national forest land over the last 30 years, has never heard of a majority of them.

structures from spot fires, all trees would have to be removed from large areas around every structure. That would cause unacceptable impacts to wildlife, watershed, scenery, etc., and would also not be practical economically or logistically. Even if it could be accomplished in an environmentally and economically acceptable manner, cutting 1.5 miles from structures at risk would provide at best only a minor level of additional protection, compared to treatment in the HIZ.

As Cohen notes, the best protection for structures is treatment on and immediately adjacent to the structures, such as firewise measures, including a non-flammable structure, no vegetation adjacent to or overhanging any structures, and locating firewood piles some distance away from structures. Stated another way, whether a structure ignites is much more dependent on the flammability of the structure itself and its immediate surroundings, not on what fuel exists more than 30 meters away. If a structure has well-maintained defensible space around it, burning embers landing on the structure or surrounding land will not have anything to burn.

Most logging in roadless areas under the proposed rule would have to meet the following condition: "one or more of the roadless area characteristics will be maintained or improved over the long-term". 294.42(c). What is "long-term"? And would logging be acceptable if it maintained and/or enhanced one roadless area characteristic but degraded or eliminated one or more other such characteristics? For example, logging in roadless areas might be intended to protect public drinking water sources, but would damage many other roadless area characteristics, such as wildlife habitat, undisturbed soil, water and/or air; naturally-appearing landscapes; and reference landscapes.

In almost all cases, logging would damage some roadless area characteristics. We believe it is likely that this damage would exceed any benefit in most cases, especially since conifer trees do not grow rapidly in the relatively harsh environment of most roadless areas in Colorado, and thus recovery from logging would be slow. This is a good reason to severely limit exceptions to the prohibitions on logging in roadless areas.

The draft rule provides the following additional limitation on cutting, selling, or removing timber from the portions of roadless areas within the CPZ:

> Projects undertaken pursuant to paragraphs (c)(1)(i) and (ii) of this section will focus on cutting and removing generally small diameter trees to create fuel conditions that modify fire behavior while retaining large trees to the maximum extent practical as appropriate to the forest type.

294.42(c)(1)(iii).

This limitation is appropriate but irrelevant to the current situation in many roadless areas in Colorado. The greatest perceived need for logging in roadless areas would most likely be in areas on the Routt and White River National Forests that have experienced a high level of mortality in stands dominated by lodgepole pine. In such areas, all dead and dying trees are typically removed to reduce fuels. Also, mature lodgepole pine trees in

any stand tend to be about the same diameter. Thus this direction to retain larger trees would not apply. This is noted in the Preamble:

> In forest types such as lodgepole pine, trees may be dead or dying, regardless of size, and may need to be removed....

Preamble at 21277.

Finally, this limitation is applied only "to the maximum extent practical", meaning the local manager could decide not to apply or to only minimally apply it, even where there were large trees that could be retained.

Logging could occur outside the CPZ, i.e., even more than 1.5 miles from at-risk communities if

> The Regional Forester determines tree-cutting, sale, or removal is needed outside the community protection zone where there is a significant risk that a wildland fire disturbance event could adversely affect a municipal water supply system or the maintenance of that system. A significant risk exists where the history of fire occurrence, and fire hazard and risk indicate a serious likelihood that a wildland fire disturbance event would present a high risk of threat to a municipal water supply system.

294.42(c)(2).

This would allow almost unlimited logging within roadless areas, as there is no limitation on how far into roadless areas such logging could be done. Since many watersheds contain one or more roadless areas, a large amount of logging could be done under this provision.[3] The EIS needs to estimate how much logging might be done for watershed purposes. Notably, there is no such estimate in RDEIS Table 3-2 on p. 83, though the Table contains estimates of logging for other purposes.

Though the limitation on logging (focus on small trees, retain large trees) in the CPZ also applies to this provision (see 294.42(c)(2)(i)), the areas where this provision would be most likely to be applied are probably those dominated by dead and dying lodgepole pine, similar to CPZ logging. Thus this limitation would be no more likely to be invoked than it would be for logging within the CPZ.

It must be noted here that logging can and does damage watersheds. It seems likely that to protect a watershed from possible fire would require removal of a significant portion of the vegetation in the watershed, risking a damaging change to the hydrologic regime from removal of too much vegetation. It is also not clear, as is further discussed below, how

[3] The RDEIS states at p. 153 that "[m]ore than 95% of the roadless areas in Colorado overlap one or more source water assessment areas, watersheds identified by the State around public surface and groundwater supply sources...". (Citation omitted.)

logging could be conducted far into roadless areas when roads would only be allowed one-half mile into such areas.

The fact that such projects using this exception to the prohibition on logging "are expected to be infrequent" (294.42(c)(2)(ii)) provides no enforceable limitation on its use.

Yet another exception to the prohibition on logging is potentially even broader:

> Tree-cutting, sale, or removal is needed to maintain or restore the characteristics of ecosystem composition, structure and processes. These projects are expected to be infrequent.

294.42(c)(3).

This appears similar to a provision in the 2001 Rule, under which infrequent logging of generally small-diameter trees is allowed:

> to maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period.

36 CFR 294.13(b)(1)(ii) (2001); emphasis added.

Note that this exception to the prohibition on logging is much more qualified in the 2001 Rule than in the proposed Colorado Rule. Under the former, its use is limited to roadless areas where ecosystems are outside the range of natural variability or could move there without treatment, especially due to unnatural proliferation of small trees:

> The intent of the rule is to limit the cutting, sale, or removal of timber to those areas that have become overgrown with smaller diameter trees.

Preamble to 2001 Rule, 66 Fed Reg 3257, January 12, 2001; emphasis added.

This condition exists in part of the ponderosa pine type on the northern Front Range of Colorado, some of which is in roadless areas. We do not oppose responsible use of this provision to restore the natural composition and structure of these forests. However, under the proposed Colorado Rule, logging under this provision is not limited to situations such as this where its implementation may be desirable.

The vague language of section 294.42(c)(3) could be interpreted to allow almost unlimited logging. Indeed, though it is not specified in the proposed rule itself,

> Included in this exception is the ability to treat insect and disease outbreaks to maintain and restore characteristics of ecosystem composition, structure and

> processes [even though t]he specific exception for prevention and suppression of insect and disease outbreaks has been removed.

RDEIS at 32-33.

Given the area of insect infestation across Colorado's national forests, including many roadless areas, this provision could be used to justify many acres of logging within roadless areas. Thus this provision would allow much too much vegetation manipulation, just like the other exceptions to the prohibition on cutting, selling and removal of trees from roadless areas. We note that logging to suppress or prevent insect infestations has been questioned by scientists, as summarized in Black et al., 2010. Finally, stating that projects implemented under this provision are expected to be infrequent provides no enforceable limitation on its use.

The allowance for logging a long way from communities at risk is clearly not needed. The fact that the rule contains such provisions is even more mysterious in light of the fact that road construction would be allowed only in the first ½ mile of the CPZ. 294.43(c)(1)(vi) and (vii). How would logging be conducted for a distance of an additional mile in the CPZ (or in the cases of watershed protection or ecosystem maintenance/restoration, an unlimited distance), without roads, i. e., with no easy way to remove the fuel that was cut? The RDEIS states that

> Removal of trees to reduce hazardous fuels or reduce the spread of forest diseases or insects is often economically feasible only if a road system is present.

RDEIS at 90. See also id. at 94, which states that costs of operation increase substantially with the distance of a project from a road. And id. at 110 states that "[c]ritical locations within roadless areas may not be treated if the area cannot be accessed by roads".

Cutting and leaving the material on site would seldom be appropriate, as this would create easily-ignitable fuel, risking wildfires and contradicting the goal of treatment to reduce the threat of fire. Similarly, burning the material would be risky because there would be no easy way to fight the fire if it escaped prescription. Also, if stands dominated by dead and dying trees were cut, there would likely be too much fuel to burn without damaging soils and watershed.

Helicopter logging could be done, but it is hard to imagine this would occur very often because it is so expensive. The product value of the wood, if any, is not likely to be even close to the amount needed to recoup expenses of copter use for any given project. Cable logging over a long distance (more than several hundred yards) is also not realistic because of cost and the difficulty of setting it up in a remote location.

For ground-based hazardous fuel reduction, the RDEIS at 82 notes that skid distances greater than 1000 feet are rare. Log forwarders, masticators[4], or other mechanical equipment could be used (see id.), but that would mean repeated passes on paths, which would in effect become roads. Such paths or roads would traverse rugged terrain, sometimes at high altitude where the growing season is short. Thus they might be difficult or impossible to restore.

In any case, logging would likely leave skid trails, slash piles, trash, and other effects, and cause a major degradation and loss of roadless area characteristics, at least in the short- to mid-term (up to 30 years). It could also lead to the introduction and spread of noxious weeds into roadless areas, which currently have a lower risk of courting invasive species because of less disturbance compared to roaded areas. RDEIS at 98; see also Gelbardi and Harrison, 2005. The cost of weed treatment in remote areas, where there is no road access, is high. RDEIS at 99.

In short, logging is not needed a long distance from at-risk communities, and such logging could seldom if ever be done in an economical and environmentally acceptable manner. But if it was implemented, it would degrade and destroy roadless area characteristics. Under alternative 2, hazardous fuel reduction treatments are expected to occur on 5300 acres of Colorado roadless areas annually. RDEIS at 83. Cutting for other reasons brings the projected total to 5800 acres annually. That is a significant amount of roadless area to be degraded by logging.

We thus recommend that the final Colorado Rule have considerably stronger restrictions on logging and road construction in roadless areas. We believe that the maximum distance for such activities in roadless areas should be no more than one-quarter mile from the roadless area boundary, and that more than a half mile from the boundary is clearly more than is needed or justified.

The proposed rule's definition of "at-risk community" must be modified in order to restrict and concentrate fuels treatments (and attendant road-building) to properly enhance the safety of such communities. Specially, the draft rule's reliance on the definition included in the Healthy Forest Restoration Act (HFRA)—which includes essentially three different, potentially conflicting, definitions of at-risk community. In particular, and at the least, the HFRA definition includes a long list of supposed community names, many of which either do not exist or are not clearly located. That portion of the HFRA definition—and the list of community names in particular—must be removed from the final rule.

[4] Lodgepole pine and spruce-fir forests are said to "have too much biomass to use masticators to achieve management objectives". RDEIS at 93-94. Id. at 110 states that 8-10 inch diameter trees are the largest than can be masticated.

V. THE PROPOSED RULE WOULD ALLOW TOO MUCH ROAD CONSTRUCTION IN ROADLESS AREAS.

A. ROADS DAMAGE AND DESTROY ROADLESS AREA CHARACTERISTICS. By definition, road construction (and in some cases, reconstruction) damages and/or destroys roadlessness and roadless area characteristics. Any Colorado Rule must provide only minimal exceptions to the general prohibition on road construction and provide for complete obliteration, to the extent practical, of any non-permanent roads that are constructed.

The effects of roads on watersheds is well known. For example, see RDEIS at 181-184 for a description of the effects of roads on aquatic resources. Thus, "[r]eduction of road density is one of the best watershed restoration treatments that can be used to improve watershed and stream health". RDEIS at 155. By implication, not building roads would keep watersheds intact. Note how few miles of streams in roadless areas are in an impaired condition, compared to non-roadless areas. See RDEIS at 153 – compare tables 3-23 and 3-24. Keeping roadless watersheds in high functioning condition is important because a high percentage of such areas have threatened, endangered, and sensitive aquatic species, especially on four of Colorado's national forests. RDEIS at 180. These watersheds also provide source water for a large part of the population of Colorado and other states.

Using primarily "temporary" roads will not significantly reduce impacts. For example, temporary roads have most of the impacts of permanent roads on wildlife. RDEIS at 200. Thus temporary roads may not be easy to restore. Roads traversing rugged terrain would require a high standard of construction for safe use for the intended activity.[5] This will undoubtedly include use of cuts, fills, and culverts for some road segments. Roads with any of these features can substantially impact watersheds.

Roads for oil, gas, and coal leases may be on the landscape for many years, as long as minerals are being produced. Such roads would have to be regularly maintained, making them more difficult to remove. In general, any cuts and fills used in road construction cannot be easily removed without unleashing sediment into streams. Removal of culverts would cause similar problems. The earth movement required for either of these restoration activities would necessitate the use of heavy equipment and would facilitate the introduction and spread of noxious weeds. See Gelbardi and Harrison, 2005. Roads increase the likelihood of human-caused fire ignitions.[6]

In short, constructing roads for the purposes allowed under the proposed rule would lead to a permanent loss of roadless area characteristics because some areas with roads could not be fully restored to the pre-roaded condition. Even where they could be restored, roadless area characteristics would be lost for the time the roads were used and for part of the recovery period. Under alternative 2, the proposed rule, 16 miles of road is projected

[5] RDEIS p. 125 hints that oil and gas development in roadless areas would require activity, including road construction, in rugged terrain.

[6] See USDA Forest Service, 2000a, at 3-115, 3-116.

to be constructed in Colorado roadless areas annually. RDEIS at 87. This is a clear indication that the proposed rule would not sufficiently protect roadless areas.

B. DO NOT ALLOW ROADS FOR WATER PROJECTS. The proposed rule would allow permanent roads to be constructed for water conveyance structures in non-upper tier areas. 294.43(c)(1)(iv). The definition of "water conveyance structures" includes "dams and reservoirs". 294.41.

The location of such facilities themselves in roadless areas, along with associated roads, would fragment wildlife habitat, disturb soils, and potentially impair streams. Certainly, any new roads proposed in association with such water facilities would fragment habitat, further eroding roadless characteristics and conditions. Moreover, proposed water facilities associated with existing conditional water rights likely would have primary infrastructure located outside roadless areas. Correspondingly, any roads associated with such new facilities should be built only outside roadless areas.

The Forest Service should prohibit roads for such facilities. It is likely that any facilities needed to exercise water rights could be located outside of roadless areas. For example, if some entity had a right for water in a stream within a roadless area, a dam or diversion structure could be built downstream and outside of the roadless area. If any roads are needed for constructing water conveyance structures, they should be temporary ones.

Interestingly, the RDEIS assumes that all roads constructed in roadless areas would be temporary (p. 84), even though the proposed rule allows permanent roads for water conveyance structures.

C. DO NOT ALLOW ROADS FOR MINERAL LEASES LET SINCE THE 2001 RULE BECAME EFFECTIVE. The proposed rule would allow roads for mineral leases let right up to the time a Colorado Rule becomes effective. 294.13(c)(1)(viii). This is simply inappropriate. Many existing oil and gas leases within CRAs were issued after implementation of the 2001 Rule while that Rule was clearly in effect. Despite the fact that the 2001 Rule clearly prohibits road construction and reconstruction and provides no exception for oil and gas development, many of these leases were issued without stipulations prohibiting road construction on their roadless portions. Leases issued within roadless areas after implementation of the 2001 Rule were issued in conflict with that Rule and in violation of the law and agency regulations. The Forest Service simply cannot let this mistake go uncorrected. The Forest Service must explicitly indicate that road construction will not be permitted within roadless portions of these leases or the agency must cancel the leases. See Section VII below. Either way, the EIS cannot simply assume development of these leases will proceed and road building within CRAs will be authorized.

The RDEIS effects analysis is seriously and illegally flawed in regard to the existing oil and gas leases in IRAs. The Forest Service incorrectly claims that Alternative 1: 2001

Roadless Rule will allow oil and gas development on 67,600 acres of IRAs that are leased without no surface occupancy stipulations. 2008 DEIS at 117. This error is an unfortunate consequence of the Forest Service's failure to acknowledge that the existing oil and gas leases were issued in violation of the Roadless Rule and that they are currently covered by the national injunction specifically prohibiting road construction and other oil and gas activities in IRAs that are inconsistent with the Roadless Rule.[7]

D. REDUCE ROAD CONSTRUCTION ALLOWED FOR OIL AND GAS LEASES. Under alternative 3, approximately 11 miles of road would be constructed annually for oil and gas activities. RDEIS at 87. Under alternatives 2 and 4, road construction would be 9 miles annually.[8] In other words, the proposed rule (alternative 2) and alternative 4, the latter with much more "upper tier" acreage than alternative 2, would not provide much protection against roads for oil and gas activities in roadless areas. Any Colorado Roadless Rule needs to provide a much higher level of protection than the proposed rule would do.

Though they would have to be "temporary" roads under the proposed rule (294.43(c)(1)(viii)), roads for oil and gas activity can be used for decades, as long as the lease(s) they serve is/are still producing. Well pads are also constructed, which are areas up several acres in size that are cleared of vegetation to make way for drilling equipment.. Waste material from drilling is often produced and deposited on the cleared area. This makes areas drilled for oil or gas very hard to restore to natural conditions. This means that areas which host such activity are not likely to have roadless area characteristics restored.

Roads must not be allowed on "gap" leases in roadless areas. See detailed discussion in subsection C above and section VII below.

E. PROHIBIT ROADS FOR COAL MINING. The undersigned believe that road construction for coal mining in roadless areas is inappropriate. Under alternatives 2 and 4, construction of 52 miles of road is predicted in roadless areas over 15 years. RDEIS at 86, 125. As with road constructed for other purposes, roads to support coalmining would degrade roadless character.

Though these roads "would be temporary and must be decommissioned" (RDEIS at 86), "[s]ome roads may remain on the landscape for the duration of mining in a particular area or lease" (Id. at 125). That could be a decade or more. Thus degradation of roadless area characteristics would still occur, since higher-standard road construction would likely be needed for at least the longer-duration road segments, making full restoration difficult or

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[7] See Final Injunction Order, Feb. 6, 2007, People of the State of California et al. v. United States Department of Agriculture. No. 3:05-cv-03508-EDL ("The Forest Service is enjoined from approving any surface use of a mineral lease issued after January 12, 2001, that would violate the Roadless Rule....")

[8] RDEIS p. 126 provides a different set of figures covering an unspecified time period. There are greater, but still relatively slight, differences between the alternatives in this table.

impossible. See subsection A above. Also, decommissioning of any roads allowed must be defined to mean full removal, or obliteration, of the roads, as is discussed in subsection F below. To maintain roadless area characteristics, it is much better not to build roads in the first place.

It is especially important to not allow any road building in the Currant Creek area. This is discussed in more detail in section XI below.

F. DEFINE ROAD DECOMMISSIONING TO MEAN OBLITERATION, AND REQUIRE IT FOR ALL ROADS AND LINEAR CONSTRUCTION ZONES. Any roads constructed in roadless area would, by definition, destroy roadless area characteristics. Thus any roads constructed or reconstructed under a Colorado Roadless Rule should be removed to the greatest extent possible, giving the best chance to restore roadless character. We are thus pleased to see that decommissioning of roads and restoration of the landscape is required:

> when it is determined that the road is no longer needed for the established purpose, or upon termination or expiration of a contract, authorization, or permit, whichever is sooner. Require the inclusion of a road decommissioning provision in all such contracts or permits. Design decommissioning to stabilize, restore, and revegetate unneeded roads to a more natural state to protect resources and enhance roadless area characteristics.

294.43(d)(2); emphasis added.

Notably, the above provision does not explicitly require decommissioning of roads used for leases. This word needs to be added to the above-quoted section.

Also, "decommissioning" is not defined in the proposed rule. The RDEIS at 56 repeats the last sentence of the rule section quoted above. "Stabilize, restore, and revegetate" does not require the removal of culverts, bridges, cuts, or fills.

RDEIS Appendix H does state that:

> [Decommissioning] treatments must be designed and implemented to completely eliminate the road by restoring natural contours, hydrology, and vegetation through mechanical and/or natural means within a reasonable time period.

RDEIS at H-5. However, the above language is not reflected in the rule.

The Forest Service Manual defines decommissioning as follows:

> Decommissioning includes applying various treatments, which may include one or more of the following:
>
> a. Reestablishing former drainage patterns, stabilizing slopes, and restoring vegetation;
>
> b. Blocking the entrance to a road; installing water bars;
>
> c. Removing culverts, reestablishing drainage-ways, removing unstable fills, pulling back road shoulders, and scattering slash on the roadbed;
>
> d. Completely eliminating the roadbed by restoring natural contours and slopes; or
>
> Other methods designed to meet the specific conditions associated with the unneeded roads.

FSM 7703.2 (2); emphasis added. Similar language appears at RDEIS H-5.

Under this definition, decommissioning could mean merely closing a road without actually removing any of it, allowing it to naturally become revegetated. However, this would likely allow at least all-terrain vehicle and motorcycle usage for a decade or more, as well as foot and horse traffic for at least that period.[9] Requiring "obliteration", under which the road is totally removed from the land, is more appropriate. Note that the 2001 Rule required obliteration of roads used for mineral leases when the road was no longer needed or when the lease terminated or expired. 2001 Rule at 36 CFR 294.12(b)(7).

A definition for "decommissioning" is needed in section 294.41 of the Colorado Rule. It should require complete obliteration of the road when possible, considering the environmental impacts. In other words, restoring cuts and fills or removing culverts should not be done if such action would cause more damage than not restoring, AND if the road can still be effectively closed and at least partially restored, e. g., by placement of effective barriers and re-establishment of native vegetation.

Cost, by itself, should not be a factor in determining whether a road constructed or reconstructed inside a roadless area should be fully obliterated. Roadless area characteristics are extremely valuable, and thus must be conserved, and where necessary, restored. The cost of obliteration or maximum restoration must be considered in the design of any road. Proponents of logging and mineral extraction projects within roadless areas ought to wholly bear the costs of restoration. Such costs ought to be bonded for restoration at the time any proposed development is permitted.

All linear construction zones should be completely obliterated. The requested definition of obliteration (see above) should also apply to LCZs. The "reclamation plan" required as

[9] Even a well-revegetated roadbed is still an obvious path. Without restoring original contours or establishing dense stands of trees of at least sapling size, a road can still be used for travel.

part of any authorization for an LCZ (294.44(c)) should require obliteration, subject to minimizing damage, as for roads. (See discussion above.)

G. CHANGE DEFINITION OF "AT-RISK COMMUNITY". In order to restrict road-building associated with fuels treatments undertaken in the name of community safety to areas truly adjacent to communities, the proposed rule's definition of "at-risk community" must be modified. Specially, the draft rule's reliance on the definition included in the Healthy Forest Restoration Act (HFRA)—which includes essentially three different, potentially conflicting, definitions of at-risk community. In particular, the HFRA definition includes a long list of supposed community names, many of which either do not exist or are not clearly located. That portion of the HFRA definition—and the list of community names in particular—must be removed from the final rule.

VI. EXPAND THE ACREAGE IN THE UPPER TIER DESIGNATION AND INCREASE PROTECTION FOR THESE AREAS.

One fundamental problem with the draft rule is that it lacks the consistent protective vision implicit in the 2001 Rule. This is highlighted in the Draft Rule's reliance on a patchwork of forest plans to determine lands proposed for 'upper tier' protection. The upper tier is described (§ 294.41 Definitions) as:

> Colorado Roadless Area Upper Tier Acres: A subset of Colorado Roadless Areas identified in a set of maps maintained at the national headquarters office of the Forest Service where not all exceptions for tree-cutting, sale, or removal and road construction/ reconstruction would apply in order to provide a higher level of protection.

294.41.

But the proposed upper tier lands are identified through a flawed approach, relying on forest plans ranging from nine to 27 years in age (or on more recent work around plan revisions on two forests):

> This alternative [proposed rule] designates 562,200 acres as CRA upper tier acres. These areas were identified in forest plans, or during forest plan revision processes, as areas where tree-cutting and road building restrictions would be appropriate.

RDEIS at 14.

A primary purpose of the 2001 Rule was to provide consistent management for all our roadless national forests. Unfortunately the proposed rule does not even provide consistent protection across the state, but instead takes a piecemeal approach to identifying, and ultimately protecting, our most important backcountry.

In the upper tier lands, road-building is more tightly limited (generally as provided for by valid, existing rights, other laws, and treaties), and then only if meeting certain requirements.

> *Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, a road may only be constructed or reconstructed in Colorado Roadless Area upper tier acres if the Responsible Official determines that: (1) A road is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty. (2) For any road construction/reconstruction authorized pursuant to this provision, the Responsible Official must determine: (i) Motorized access, without road construction is not technically feasible; (ii) When proposing to construct a forest road, that a temporary road would not provide reasonable access; and (iii) Within a native cutthroat trout catchment or identified recovery watershed, whether road construction will diminish, over the long-term, conditions in the water influence zone and in the native cutthroat habitat.

294.43 (b).

In general this provides a level of protection somewhat stronger than the 2001 Rule, and certainly stronger than what would apply to other Colorado Roadless Areas. However, at least two exceptions remain that must be eliminated in a final rule. Surface occupancy for oil and gas development would be allowed in upper tier lands. And linear construction zones would be allowed in upper tier lands, as they would across all of Colorado's national forest roadless areas, as noted in the RDEIS at 55:

> The exceptions under which LCZs would be allowed are described in Table 2-10 under this alternative. The descriptions include some minor paraphrasing from the Colorado Roadless Rule for readability in this EIS. Readers may refer to the published rule language for additional detail. All exceptions are applicable to the CRA upper tier acres.

In addition to the no road building provisions for future oil and gas leases, all upper tier lands should include a No Surface Occupancy stipulation that cannot be waived, modified, or excepted. All linear construction zones should be prohibited in upper tier lands other than for existing rights, and as further limited in the proposed rule. Roadless lands were first proposed for an 'upper tier' in the 2010 revised state petition. The idea developed from discussions at the Roadless Area Conservation National Advisory Committee (RACNAC). It was a key component of the Idaho Roadless Rule, the only other state-specific roadless rulemaking. In Idaho roughly one-third of the state's roadless national forests were placed into a category more protective than the 2001 Rule. See 36 CFR 294.23(a) and 73 Fed Reg 61479, October 16, 2008.

The addition of an upper tier is an improvement over earlier versions of the proposed Colorado rule. And the current proposal includes more lands than the state identified in its 2010 petition, moving in the right direction.

> The 2010 [State] Petition contained 257,000 upper tier acres. Based on the Secretary's direction, acres were added such that there are now 562,200 upper tier

> acres in this proposed rule. These areas were selected to become upper tier based on their roadless characteristics, and that they were already designated for higher levels of protection in either draft or final forest plans.

Preamble at 21274.

At first glance, the higher acreage does seem to reflect the direction suggested by Secretary of Agriculture Thomas Vilsack when he discussed the 2010 Petition:

> The Obama Administration is committed to the protection of roadless areas on our National Forests as these areas are vital for conservation of water resources, for wildlife and for outdoor recreation...
>
> ...As the Forest Service prepares a draft environmental impact statement for this petition, I have asked that the agency analyze the potential of adding significantly to the number of acres receiving a higher level of protection than the 2001 rule. I'm confident that working with the Governor and with the public, we will craft a final rule that is, on balance, at least as protective of roadless areas—and preferably more protective—than the 2001 Roadless Rule.

Release No. 0167.10, April 6, 2010.

On closer scrutiny, however, the proposed rule fails to meet this commitment. In addition to *weakening* protections on most of Colorado's roadless areas (see Section IV, above) the proposed rule fails to place a significant amount of roadless lands into a more protective category. Thus, on balance, the resulting rule—if enacted as proposed—would guide management of Colorado's roadless national forests to a much lower standard than the 2001 Rule.

Under the draft rule the proposed upper tier protections are somewhat of a parlor trick as they already exist for the identified lands in current forest plans (with exceptions for the GMUG), and would exist—at least until plan amendment or revision—if *only* the forest plans directed management, i.e. under alternative 3 (see RDEIS Appendix B). Further, since the FS can amend and revise its plan to make it more protective than the roadless rule, this is not a new direction given to the agency; it is only recognition of what is already decided.

But the agency was not necessarily looking for roadless characteristics when developing forest plans. On the GMUG, for instance, the 2005 inventory work on which the upper tier proposal rests was done for the plan's wilderness recommendations—and thus left out many roadless areas found suitable and capable of wilderness protection, but not available due to other management concerns. In many cases, these concerns are not related to roadless management or to protecting the values that exist and are worthy of the strongest administrative protections. Instead, areas with incredible wildlife values, important watersheds, and high quality recreation are not proposed for upper tier protection, essentially due to non-roadless conflicts such as snowmobiling or mountain-biking.

For forests with the most stale management plans, the situation is even worse. Written when the list of sensitive species was much different or didn't exist; crafted more than a decade before a national Roadless Rule was even contemplated; developed when the science of conservation biology was much less developed; and when backcountry recreation was not the force on public lands it is today; national forests like the Pike-San Isabel, Rio Grande, and Routt have upper tier proposals that are embarrassingly low.

Rather than adding significantly to roadless lands "receiving a higher level of protection than the 2001 rule" the draft rule proposes no land for upper tier on the Pike-San Isabel National Forest and only .02% of the Inventoried Roadless Areas on the Rio Grande National Forest. The Routt National Forest has, by comparison, a relatively generous upper tier designation of 6% of IRAs (RDEIS at 52). When compared with the total lands identified for potential upper tier protection in either alternative 2 or alternative 4, these numbers look even worse. Indeed, about two-thirds of the state's national forest IRAs (over 2.8 million acres) are identified, in either or both of alternatives 2 and 4, for upper tier protection but only 13% are included for such in the proposed rule (alternative 2). (See RDEIS at 61. Combined acreage for upper tier proposed in one or the other alternative derived from GIS analysis of USFS data).

The concept behind the upper tier has merit. Given that the proposed rule includes lands removed to facilitate resort development around ski areas; exceptions for new roads for coal mining; and additional discretion to treat fuels up to a one and a half miles or more inside roadless areas; it is critical to ensure that a significant acreage of Colorado's roadless areas are protected from this array of activities that degrade or destroy roadless values.

Considering the values of these lands—for wildlife, watersheds, backcountry recreation and other purposes—the 'upper tier' needs both significantly more acreage and strengthened protections. All the 2.8 million acres identified in either alternative 2 or alternative 4, and some additional lands, should be placed into an 'upper tier' category, to help make a final rule 'on balance' as protective as the 2001 Rule. Moreover, the two exceptions to upper tier protections, noted above, need to be eliminated in a final rule. We will be submitting, under separate cover, a detailed list of roadless lands that should be included in the upper tier, as invited in the Federal Register notice:

> The Agency is particularly interested in receiving public input regarding specific areas within the CRAs that should or should not be included in the upper tier lands including the reason for the inclusion or exclusion (see RDEIS, Appendix B and map packet); and what exceptions to the prohibitions on treecutting, sale, or removal, and road construction/reconstruction should apply to upper tier lands.

Preamble at 21275.

We will note here, however, one area that should be placed in the upper tier—the former Priest Mountain Inventoried Roadless Area (as proposed). The proposed rule is correct to remove the Currant Creek portion of this IRA from the North Fork coal mining area.

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Now the agency should protect the important wildlife values of the entirety of the Currant Creek and Flattops/Elk Park Colorado Roadless Areas with this top level of protection. The differences between proposed and potential upper tier, comparing alt. 2 and 4 on the individual forests, highlights the variances among the state's forest plans. (The GMUG proposal is based on the 2005 unfinished forest plan and the San Juan's is based on its 2007 draft revised forest plan.)

ABLE 1: Upper Tier Acres by Alternative

Compared to total IRA acres by forest

NATIONAL FOREST	ALT 2 *% of IRAs*	Upper Tier *Acres*	ALT 4 *% of IRAs*	Upper Tier *Acres*	TOTAL IRA ACRES	PERCENT DIFFERENCE *Proposed (Alt 2) from Alt 4*
Arapahoe Roosevelt	41.9%	149,700	56.3%	198,500	352,500	-24.6%
rand Mesa ncompahgre unnison	17.2%	182,700	51.5%	544,900	1,058,300	-66.5%
Manti La Sal	0.0%	0	70.0%	7,700	11,000	-100.0%
Pike San Isabel	0.0%	0	46.9%	312,900	667,300	-100.0%
Rio Grande	0.0%	100	61.1%	323,500	529,200	-100.0%
Routt	5.5%	24,600	81.8%	362,000	442,300	-93.2%
San Juan	22.5%	122,200	88.7%	482,000	543,600	-74.6%
White River	13.0%	83,000	59.8%	382,700	639,500	-78.3%
Total All NFs	13.3%	562,300	61.7%	2,614,200	4,243,600	-78.5%

Table compiled from RDEIS at 48, 52, and 61

The proper approach to ensuring a final rule is at least as protective as the 2001 Rule, especially given the array of ways in which the proposed Colorado rule is demonstrably weaker, would be to first consider the values an upper tier should protect—based on current, updated, and significant information, taking the requisite 'hard look'—and then to protect those values in place, where they exist on all the state's roadless lands. Considering the values of these lands—for wildlife, watersheds, backcountry recreation and other purposes—the 'upper tier' needs both significant expansion and strengthened protections.

Based on wildlife values, including habitat, migratory routes, adaptation needs, and Division of Wildlife data, as well as sportsmen feedback, hunting and angling groups submitted detailed information on additional lands that should be included in an upper tier. These recommendations became the basis of Alternative 4 in the RDEIS, which proposes 2.6 million acres of lands for this level of protection.

While we support the inclusion of the alternative 4 upper tier lands in a final rule, we note that several key areas that are proposed for upper tier protection in alternative 2 are not identified in alternative 4. We maintain that all the identified lands (over 2.8 million

acres) and others that we will recommend under separate cover warrant this level of protection.

We do note that the USFS alternatives 2 and 4, from which our own recommendations are based, did not correlate these lands with fuel treatment areas around communities, which should probably be adjusted to account for areas close in to at-risk communities. Although the majority of lands we are recommending for upper tier protection do not fall into this category—particularly given that the final rule should limit this exception to no more than .25 miles—in places where this situation exists, the USFS should carefully consider boundary modifications for upper tier lands to ensure that they do not overlap areas genuinely needing fuel reduction treatments.

To craft a rule for Colorado's national forests that protects these areas as well as the 2001 Rule, it must have a consistency relative to its purpose. This draft rule does not, particularly as it relates to the proposed 'upper tier,' which instead provides this level of protection to a paltry number of acres of Colorado national forest roadless areas and would allow new linear facilities and oil and gas drilling even in these upper tier lands. The upper tier must be expanded and the provisions must be strengthened to give these lands the protection they warrant.

VII. **THE RDEIS MUST ADDRESS "GAP" LEASES AND PROTECT THE ROADLESS AREAS SO LEASED.**

A. THE RDEIS MUST CONSIDER INVALIDATION OR APPROPRIATE STIPULATION OF GAP LEASES. NEPA requires agencies to analyze a reasonable range of alternatives. 40 CFR 1502.14. This includes analysis of reasonable alternatives not within the jurisdiction of the lead agency. Id. The RDEIS analysis fails to analyze alternatives invalidating or appropriately stipulating gap leases. This analysis also fails to consider the potential impacts of gap lease invalidation or appropriate stipulation of those leases within alternatives.

Gap leases are gas leases let after implementation of the 2001 Roadless Rule that overlap with inventoried roadless areas and either do not have stipulations prohibiting tree cutting and road construction/reconstruction at all, or contain stipulations barring those activities as long as the 2001 Rule remains effective. Leases without stipulations prohibiting tree cutting and road construction were issued in conflict with the 2001 Rule, and this must be cured to protect roadless areas. As discussed previously (section V C above), the gap leases are currently covered by the national injunction specifically prohibiting road construction and other oil and gas activities in IRAs that are inconsistent with the Roadless Rule.[10] Leases issued with stipulations tied to the fate of the 2001 Rule must not be presumed developable, as the RDEIS does.

[10] See Final Injunction Order, Feb. 6, 2007, People of the State of California et al. v. United States Department of Agriculture. No. 3:05-cv-03508-EDL ("The Forest Service is enjoined from approving any surface use of a mineral lease issued after January 12, 2001, that would violate the Roadless Rule....")

This is a significant issue, given that tree cutting and road construction could proceed on more than 67,600 acres of roadless lands covered by gap leases without affirmative agency action. See 2008 DEIS at 117. Such action would contravene the agency's attempt to protect roadless areas and roadless area characteristics.

There is no question that gap leases were let in conflict with the 2001 Rule. For example, Alternative 1: Provisions of the 2001 Roadless Rule, which simply retains provisions of the 2001 Rule, prohibits road construction on leases issued after implementation of a Colorado rule.[11] Nonetheless, analysis of that alternative assumes all existing leases would be developed.[12] If road construction on future leases would violate the provisions of the 2001 Rule, road construction on gap leases would also violate provisions of that Rule.[13] Here the agency is simply turning a blind eye to a problem that it created rather than looking at reasonable alternatives to resolve the problem.

To comply with NEPA, any FEIS must consider the potential impacts of invalidating gap leases. To comply with agency regulations and other laws, any final Colorado Roadless Rule must require that gap leases issued without appropriate stipulations prohibiting tree cutting and road building will be invalidated or brought into compliance with the 2001 Rule.

B. THE FEIS SHOULD EXPLICITLY AVOID GRANDFATHERING INVALID OIL AND GAS LEASES. If the Forest Service intends to leave the fate of gap leases with the 2001 Rule, then the agency ought to make it clear that any Colorado Rule will not grandfather those rights. Many gap leases were issued in conflict with the 2001 Rule, as discussed above, and should not be explicitly or implicitly ratified in the Colorado Roadless Rule. Unfortunately, the RDEIS is not so clear. For example, in discussing Alternative 1, the document "would not revoke, suspend, or modify any permit, contract, or other legal instrument authorizing occupancy and use of National Forest lands issued before the effective date of the final Rule." RDEIS, at 11. While it may be implied, the agency should specifically state that "Alternative 1 would not revoke, suspend, or modify any valid and enforceable permit, contract, lease, or other legal instrument..." This minor clarification is important. The Forest Service should not give the impression that illegal gap leases will be grandfathered by a new Colorado Roadless Rule.

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[11] *See for example* RDEIS Table 2-13 at 68: "Road construction is prohibited on leases within IRAs issued after (the effective date of the Colorado Rule)."

[12] *See* RDEIS, at 300: "Economic impacts displayed in Table 3-59 are substantially larger than those presented in the DEIS. Impacts attributable to oil and gas are very similar to those estimated in the DEIS for alternatives 2, 4, and 3. However, impacts under alternative 1 are nearly three times larger. In the DEIS, the 2001 rule was in effect and severely limited the leasing of roadless acres. In the RDEIS, the 2001 rule is no longer in effect in Colorado and leasing of these lands has already occurred. Limitations on road activity for future leases would not occur until a Colorado rule is in effect. Leases awarded prior to the decision can be developed according to lease stipulation under any alternative, resulting in much higher projections of drilling and production under alternative 1 than estimated in the DEIS."

[13] *See for example* RDEIS at 138: "Any lands leased in an IRA, after the effective date of the Colorado Roadless Rule, would prohibit road construction or reconstruction but would otherwise be available for development as described in future programmatic leasing analyses or a site-specific analysis prepared pursuant to NEPA."

C. THE RDEIS MISSTATES AGENCY AUTHORITY TO CANCEL AND FURTHER STIPULATE EXISTING OIL AND GAS LEASES. The RDEIS states that "a lease...becomes an irretrievable commitment of resource; a lease cannot be cancelled by the government, except by due process when the lessee does not meet the terms and conditions of the lease." RDEIS at 117-118. In fact, the government has broad authority to cancel leases. Relevant regulations provide that "leases shall be subject to cancellation if improperly issued." 43 C.F.R. 3108.3(d). Caselaw confirms that leases issued in violation of applicable laws, regulations, and rules will be subject to administrative cancellation.[14] Further, every BLM lease reserves in the agency authority to impose reasonable measures to minimize adverse impacts on other resource values, including restricting the siting of lease activities.[15]

Understanding this authority is critically important. In order to effectively protect roadless areas and roadless area characteristics in Colorado, the Forest Service and the BLM must take affirmative steps to ensure that leases issued in roadless areas after implementation of the 2001 Roadless Rule are not developed in violation of that Rule. The proposed Colorado Rule and the RDEIS completely ignore this problem and agency authority to resolve it.

Either the Colorado Rule must specifically prohibit road construction and reconstruction on all leases issued since January 2001 or the Forest Service must separately impose those stipulations on each lease in roadless areas in order to be sure the Colorado rule does not create this gap in roadless protection.

VIII. **FULLY PROTECT ALL ROADLESS AREAS FROM THE POTENTIAL IMPACTS OF OIL-GAS ACTIVITIES.**

A. WITHDRAWAL OF ROADLESS AREAS FROM AVAILABILITY FOR OIL AND GAS LEASING IS NECESSARY TO PROTECT ROADLESS CHARACTERISTICS. Both the 2001 Rule and the Colorado Roadless Rule aim to prevent fragmentation and degradation associated with road building on the remaining unroaded portions of our National Forest. The Rules seek to protect high quality soil, water, and air; sources of public drinking water; diversity of plant and animal populations; habitat for listed, threatened, proposed, sensitive, and candidate species, as well as habitat for those dependent on large swaths of undeveloped land; primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation; reference landscapes; natural appearing landscapes with high scenic quality; among others.

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[14] *See for example* Boesche v. Udall, 373 U.S. 472, at 495 (holding that Secretary of Interior has broad authority to cancel leases administratively based on pre-lease factors).

[15] *See* Section 6 of BLM's standard lease form, Form 3100-11. Note that lease notices also reiterate that BLM leases are subject to "reasonable measures" as necessary to "minimize adverse impacts" to land uses and other resource values not otherwise addressed in lease stipulations at the time operations are proposed.

With regard to oil and gas development, the proposed Colorado Rule would prohibit temporary or permanent road construction and reconstruction associated with development of oil and gas leases within CRAs. While this is necessary to ensure protection of roadless areas and roadless characteristics, it does nothing to constrain extensive and isolating development around the edges of roadless areas. In areas with high gas potential, directional drilling activities aimed at development of underground mineral resources are beginning to surround the roadless area.

Take for example a recently approved 71-well oil and gas development on West Mamm Creek, about 9 miles south of Rifle, Colorado. About six pads were authorized on a private inholding within the Mamm Peak IRA/CRA. Roadless lands were stipulated with NSO, but minerals were available for lease. By BLM's own admission: "the adjacent NFS land would be subject to direct and indirect impacts to wildlife as a result of intensive oil and gas activities."[16] Deer and elk winter range, elk calving areas, a stream with populations of Colorado River Cutthroat Trout, and the Battlement Lynx Analysis Unit were among wildlife values to be impacted. Impacts include: surface disturbance associated with new pad development and road construction, industrial levels of noise pollutions, substantial air emissions, increased potential for contamination of West Mamm Creek, and, depending on issuance of a Special Use Authorization, year-round road maintenance (e.g., plowing in the winter) on FS Road 818, which would facilitate entry of coyotes and other predators into lynx habitat. Here is a telling diagram from the West Mamm Master Development Plan:[17]

[16] USDOI Bureau of Land Management, Colorado River Field Office, *West Mamm Master Development Plan*, June 2010, http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/69474_FSPLT2_023245.pdf (accessed 7/29/10), at Executive Summary – 1.

[17] Id., at 54.

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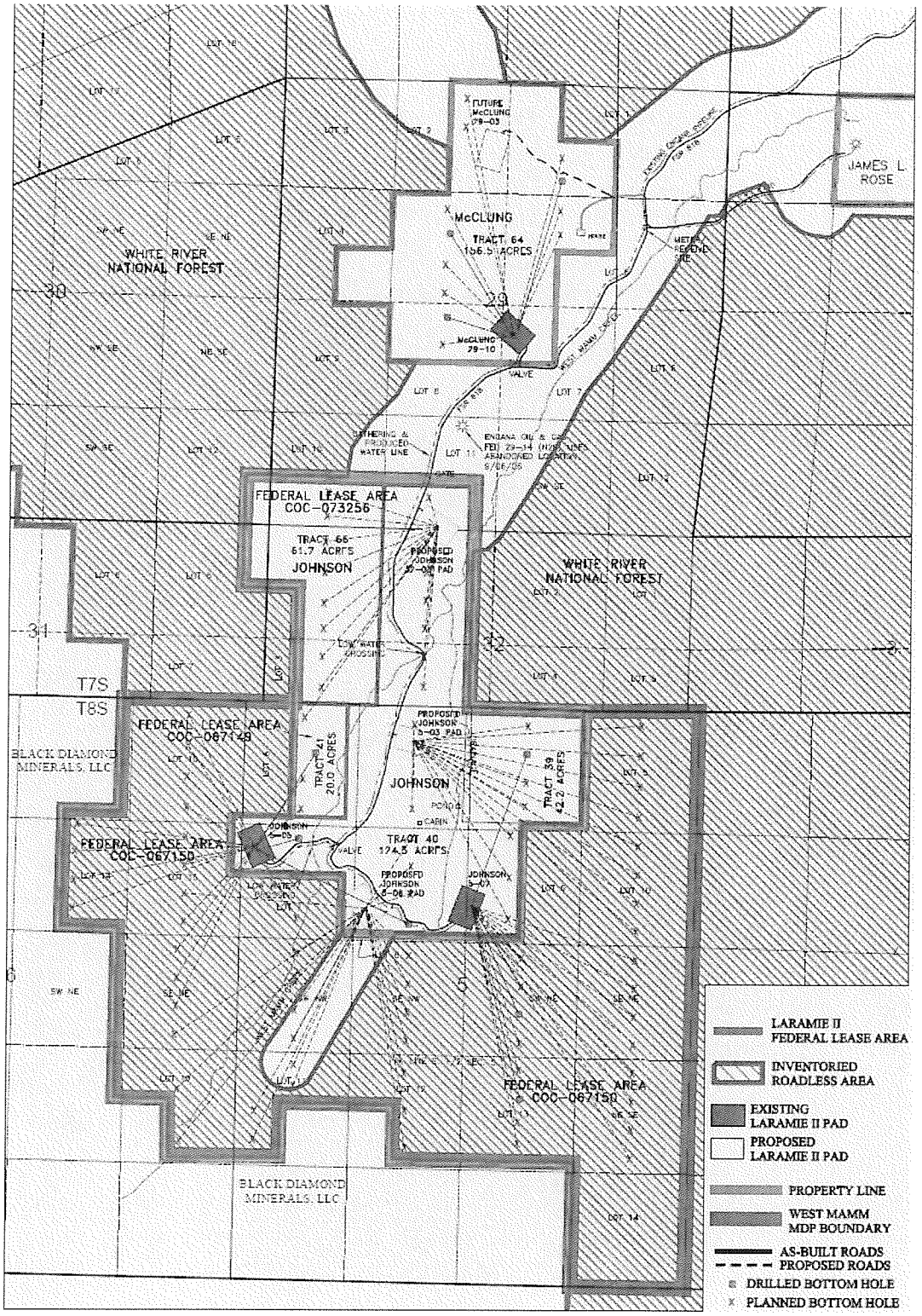
McCLUNG
TRACT 64
156.5 ACRES
FUTURE McCLUNG 29-03
McCLUNG 29-10
JAMES L. ROSE
WHITE RIVER NATIONAL FOREST
FEDERAL LEASE AREA COC-073256
TRACT 65
61.7 ACRES
JOHNSON
PROPOSED JOHNSON 5-03 PAD
WHITE RIVER NATIONAL FOREST
T7S
T8S
FEDERAL LEASE AREA COC-067149
BLACK DIAMOND MINERALS, LLC
TRACT 41
20.0 ACRES
JOHNSON
TRACT 39
42.2 ACRES
FEDERAL LEASE AREA COC-067150
TRACT 40
174.5 ACRES
PROPOSED JOHNSON 5-08 PAD
JOHNSON 5-07
FEDERAL LEASE AREA COC-067150
BLACK DIAMOND MINERALS, LLC
LARAMIE II FEDERAL LEASE AREA
INVENTORIED ROADLESS AREA
EXISTING LARAMIE II PAD
PROPOSED LARAMIE II PAD
PROPERTY LINE
WEST MAMM MDP BOUNDARY
AS-BUILT ROADS
PROPOSED ROADS
DRILLED BOTTOM HOLE
PLANNED BOTTOM HOLE

Since the surface disturbing activities associated with this project were on private lands, the federal agencies did not have authority to impose protective timing stipulations to reduce impacts. This project clearly shows that when roadless areas are available for leasing, there can be development up to the edges of those IRAs, and roadless values will thus be impacted, in some cases severely,.

Simply put, prohibitions on road construction and reconstruction, even NSO stipulations, fail to adequately protect the myriad of values roadless rules were implemented to preserve. NSOs and prohibitions on road construction essentially condone development right up to roadless area boundaries. In the long-term, anything less than a withdrawal of these areas from availability for mineral leasing will simply serve to isolate individual roadless areas; reduce air and water quality; reduce the diversity of plant and animal populations by paving the way for entry of invasive species and non-native competitors; reduce the utility of habitat for listed, threatened, proposed, sensitive, and candidate species, as well as for those dependent on large swaths of undeveloped land; undermine the natural appearance and high scenic quality of CRAs; and reduce opportunities for primitive and semi-primitive recreation. The FS should consider withdrawing these areas from availability for oil and gas leasing.

B. IF ROADLESS AREAS ARE NOT WITHDRAWN FROM MINERAL LEASING, ALL FUTURE OIL AND GAS LEASES MUST INCLUDE NSO STIPULATIONS. Oil and gas pads and associated development pose many of the same threats to roadless area characteristics as road construction and timber production. For example, well pads with tanks, pits, and vehicle traffic degrade air and water quality, disturb soils, fragment habitat, eliminate primitive and semi-primitive recreational opportunities, and degrade scenic quality. Nonetheless, prohibitions on road building and tree-cutting in the proposed rule do nothing to prohibit these activities within roadless areas leased for oil and gas development.

Protection of critical roadless values requires prohibitions on all surface-disturbing activity, not just road construction and reconstruction. All roadless areas should be protected with NSO stipulations for future oil and gas leases. At the very least, upper tier areas must be protected with NSO stipulations. In all cases, exceptions, waivers and modifications to these NSO stipulations must not be allowed. The current language at 294.46(a) would allow waivers, exceptions, and modifications as long as no road construction resulted.

C. THE RDEIS UNDERESTIMATES POTENTIAL AIR QUALITY IMPACTS ASSOCIATED WITH OIL AND GAS DEVELOPMENT IN ROADLESS AREAS. The RDEIS projects oil and gas development in 34 roadless areas with high development potential. The analysis estimates 144 miles of new road construction and reconstruction and 686 new wells will be developed in the coming 15 years. RDEIS at 136. The analysis projects 1,275 total acres of disturbance. Id. The analysis ignores the fact that the lion's share of anticipated development will take place on the GMUG and White River National

Forests in roadless areas that are proximate to one another and within a shared airshed. These areas are already seeing degraded air quality from oil and gas development. Projected increases in oil and gas development combined with regulatory changes virtually guarantee future air quality violations in these areas.

In a March 27, 2008 Federal Register Notice, EPA announced that it had revised the National Ambient Air Quality Standard ("NAAQS") for ozone down to 0.075 parts per million and created a new rounding convention so that 0.076 parts per million is above the new NAAQS.[18] EPA is now proposing to tighten that limit to a range of 0.06 and 0.07 ppm to align with the level scientists say is needed to safeguard against increased respiratory diseases, particularly in children and the elderly.[19] The EPA expects to finalize the new NAAQS in July 2011.[20] Under the proposed standards, a number of regions in the Rocky Mountain West that have never exceeded or violated the ozone NAAQS are expected to do so. Based on recent monitoring, Colorado Department of Public Health and the Environment (CDPHE) found that Mesa and Garfield Counties could violate the EPA's proposed ozone NAAQS. The current 3-year average of the fourth highest ozone values is 0.067 ppm in Mesa County and 0.064 ppm in Garfield County.[21] If EPA's final ozone NAAQS is set as low as 0.060 ppm, these counties would be considered in violation. Coincidentally, these are two of the counties with roadless areas most likely to be impacted by oil and gas development.

The EPA and States have made clear that ozone is a concern when it comes to oil and gas drilling and production activities. EPA is in the process of reviewing and revising the following new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAP) under sections 111 and 112 of the Clean Air Act (CAA): the NSPS for Equipment; Leaks of VOC from Onshore Natural Gas Processing; (40 CFR part 60, subpart KKK); the NSPS for Onshore Gas Processing; SO2 Emissions (40 CFR part 60, subpart LLL); the NESHAP for Oil and Natural Gas Production Facilities (40 CFR part 63 subpart HH); and the NESHAP for Natural Gas Transmission and Storage Facilities (40 CFR part 63, subpart HHH).

Finally, a recent study in the *Journal of Air and Waste Management* highlights the clear potential for oil and gas development to negatively affect regional ozone concentrations in the western United States, including several treasured national parks and wilderness areas in the Colorado.[22] The study concludes that accelerated energy development in this part of the country will worsen existing problems and further degrade regional air quality.

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[18] 73 Fed Reg 16436, available here: http://www.epa.gov/fedrgstr/EPA-AIR/2008/March/Day-27/a5645.pdf (accessed 7/29/10).

[19] 75 Fed Reg 2938, available here: http://www.epa.gov/air/ozonepollution/fr/20100119.pdf (accessed 7/29/10).

[20] *See* U.S. EPA, Declaration of Regina McCarthy (Dec. 8, 2010), available at http://www.epa.gov/glo/pdfs/20101208declaration.pdf (last viewed May 5, 2011).

[21] *See* CDPHE ozone table, available at http://www.colorado.gov/airquality/html_resources/ozone_summary_table.htm (last viewed May 5, 2011).

[22] Marco A. Rodriguez, "Regional Impacts of Oil and Gas Development on Ozone Formation in the Western United States," *Journal of Air and Waste Management* 59 (September 2009): 1111-2. Available here:

All of this new information must be analyzed by BLM and the FS in an air quality analysis prior to authorizing any new oil and gas development.

Despite the extent of oil and gas development anticipated within Colorado roadless areas in the coming 15 years, and despite the fact that the vast majority of it will occupy the same airshed, the RDEIS concludes:

> Based on the projected land management activities under the alternatives, atmospheric emissions within roadless areas are not anticipated to directly, indirectly, or cumulatively increase to a level that would be likely to exceed state or federal air quality standards. This is because the amount and geographic extent of impacts from dust particulate, volatile organic compounds, and other emissions from projected activities in roadless areas would be relatively low, localized, and of short duration. They would not likely accumulate in the lower atmosphere in significant concentrations or linger for long periods of time. In addition, those infrequent or short-duration emissions would not likely create visibility impairment or public health hazards in high-sensitivity areas such as schools, hospitals, airports, or residential areas.

RDEIS at 160. This simply doesn't add up. The FEIS needs to take a hard look at potential air quality impacts associated with alternatives and take affirmative actions to reduce impacts.

D. ANY FINAL COLORADO RULE MUST CONSTRAIN OIL AND GAS DEVELOPMENT TO PROTECT CLASS 1 AIRSHEDS. Roadless areas anticipated to experience oil and gas development are proximate to important Class I airsheds already impacted by oil and gas development. The RDEIS admits "existing visibility impairment" in these areas. RDEIS at 158. The analysis goes on to project further degradation, saying "given the energy development in the West it is anticipated that the visibility impairment may increase." Id.

This is significant, as the Clean Air Act (CAA) imposes on "the Federal Land Manager and the Federal official charged with direct responsibility for management of such lands an affirmative responsibility to protect the air related values (including visibility) of any such lands within a Class I area." 42 U.S.C. § 7475(d)(2)(B); 40 C.F.R. § 51.166(p)(2). CAA further "declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I federal areas which impairment results from manmade air pollution." 42 U.S.C. § 7491(a)(1).

In the RDEIS, the FS completely ignores analysis of any alternative or action that would constrain development of existing rights and protect valuable Class I airsheds from

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http://www.wrapair.org/forums/amc/meetings/091111_Nox/Rodriguez_et_al_OandG_Impacts_JAWMA9_09.pdf (accessed 7/29/10).

further degradation. Cancellation of gap leases issued in conflict with the 2001 Rule would constitute an affirmative action to protect air related values in Class I airsheds.

IX. RESTRICT THE ALLOWANCE FOR LINEAR CONSTRUCTION ZONES TO VALID EXISTING RIGHTS.

A. THE PROPOSED RULE ALLOWS TOO MANY EXCEPTIONS TO THE PROHIBITION ON LINEAR CONSTRUCTION ZONES, RENDERING THE PROHIBITION MEANINGLESS. The proposed Colorado Rule introduces a new term to describe road-like features associated with construction of pipelines, utility lines, or similar facilities: the "linear construction zone", or LCZ. According to the RDEIS, Chapter 1

> An LCZ is a temporary linear area of surface disturbance over 50-inches wide that is used for motorized transport by vehicles or construction equipment to install a linear facility" which "includes pipelines, electrical power lines, telecommunications lines, ditches and canals.

RDEIS at 33.

The LCZ allowance derives from the Tenth Circuit Court's ruling in the Bull Mountain pipeline case.[23] The allowance seeks to address a real threat to roadless lands under the 2001 Rule (gas pipelines), as well as an applied threat (other 'linear features'), but in so doing introduces new allowances for construction of utility lines and water conveyances (in addition to pipelines) across roadless lands, with little guidance or clear parameters on when or how such construction might occur. See 294.44.

The average miles of disturbance associated with construction of LCZs is exactly the same for Alternative 1: Provisions of the 2001 Rule, Alternative 2: Proposed Colorado Rule, and Alternative 4: Colorado Roadless Rule with Public Proposed Upper Tier.[24] This indicates that, despite bold public statements by FS officials about closing the "Bull Mountain loophole," the agency really created a prohibition but now proposes to render it meaningless with exceptions.

The agency must prohibit LCZs in roadless areas or at least constrain the breadth of exceptions to ensure that this well-intentioned prohibition actually provides meaningful protection for roadless areas and roadless characteristics.

B. ALL LCZ ALLOWANCES SHOULD BE LIMITED TO EXISTING RIGHTS. In the proposed rule, the LCZ exception is contemplated for construction of oil and gas pipelines, telecommunication lines, electrical lines, and water conveyances. Slightly different standards apply to each type of LCZ. See 294.44(b) (1) – (3). Oil and gas

[23] Wilderness Workshop v. United States BLM, 531 F.3d 1220 (10th Cir. Colo. 2008).
[24] RDEIS, Table 3-8, at 88.

pipelines are discussed below in more detail. A 'decision tree' is proposed to guide approval of transmission and telecommunication lines. And water conveyances attached to a valid court decree existing at the implementation date of a final rule would be approved without any significant guidance.

The LCZ exception would be better expressed as <u>two</u> exceptions rather than three. The two exceptions would be granted in exercise only of existing rights. One exception would be specific to oil and gas pipelines. The other would be applicable more generally to linear facilities necessary in exercise of other valid existing rights. Along with limiting use of LCZs to existing rights, the agency should require that any LCZ through a roadless area (including for water conveyances) be pursued only if an alternative route would cause 'substantially greater environmental damage.'

<u>The final rule should specify</u>: *"No linear construction zones will be allowed in Colorado Roadless Areas except for oil and gas pipelines as noted at___ ; or to exercise a valid, existing right if no other less environmentally-harmful route is available."*

C. THE LCZ EXCEPTION APPLICABLE OIL AND GAS PIPELINES MUST BE LIMITED TO EXISTING RIGHTS. The proposed rule's clarification on when oil and gas pipelines could be built (addressing the real threat in the Bull Mountain decision) is stated in the RDEIS at Table 2-13 as:

> The construction of pipelines for the purposes of transporting oil or natural gas through a CRA where the source(s) and destination(s) of the pipeline are located exclusively outside of a CRA shall not be authorized.

RDEIS at 72.

Under the proposed rule, new oil and gas pipelines would be allowed only in the following cases, essentially an explicit recognition of existing lease rights:

> Where the Regional Forester determines a linear construction zone is needed to allow for the construction or reconstruction of a pipeline associated with an oil and gas lease that allows surface use within a CRA or the construction or reconstruction of a pipeline needed to connect to infrastructure within a CRA from outside a CRA where such a connection would cause substantially less environmental damage than alternative routes.

DEIS at 71, Table 2-13.

The added parameters of when an oil or gas pipeline would be allowed, and the inclusion of the 'decision tree' (gauging which route would cause substantially less environmental damage) are both welcome. Nonetheless, the proposed Rule does not prohibit construction or reconstruction of oil and gas pipeline LCZs for <u>new</u> leases issued after implementation of the Colorado Roadless Rule. This is <u>not acceptable</u>. LCZs should be a

tool to facilitate development of existing rights only and must not be allowed to mar roadless areas indefinitely.

D. ANY COLORADO RULE MUST CLARIFY CRITERIA USED TO DETERMINE PLACEMENT OF LCZs. The Forest Service must establish clear criteria to determine if a route will cause "substantially less environmental damage" or, conversely, would cause "substantially greater environmental damage". Like the tighter parameters on gas pipelines specifically, this 'decision tree' is a product of the state's 2010 petition. And, while the concept of undertaking this analysis and requiring that environmental harm be weighed as a deciding factor has merit, the reliance on this tactic begs an obvious question—what constitutes 'substantially less' and 'substantially greater' environmental damage? Nowhere is this metric explained or even defined. Failure to define such critical terms is a recipe for management difficulties and litigation.

In spite of the uncertainty wrought by the undefined, unexplained "substantially less (or greater) environmental damage" the DEIS relies heavily on this device, employing it for two of the three instances of allowable LCZs':

> Authorize electrical power lines or telecommunication lines within CRAs only if there is no opportunity for the project to be implemented outside of a CRA without causing substantially greater environmental damage.

294.44(b)(2).

The USFS must provide more guidance on how to define 'less' and 'greater' environmental damage. What data will it use (specific species; habitat connectivity; watershed function; healthy vegetation)? And, what will be the public mechanism by which stakeholders and others can provide input and information, and gauge the agency's decision and rationale?

The RDEIS indicates that this determination will be made in some sort of NEPA document, but offers no other direction, guidance, or parameters:

> Construction or an LCZ, with Regional Forester determination, based on a site-specific NEPA analysis, is allowed for the construction, reconstruction, or maintenance of existing or future authorized electrical power lines and telecommunication lines where it has been determined such utility lines cannot be located outside of a CRA without causing substantially greater environmental damage.

RDEIS, Table 2-13, at 71.

The final Colorado Rule must clarify: that the proper level of NEPA for construction of an LCZ in a roadless area is expected to be an EIS; the metrics by which "substantially less (or greater) environmental damage" will be determined; and that other than to

exercise valid, existing rights—and according to the parameters for oil and gas pipelines—LCZs should be expressly prohibited in all 'upper tier' lands.

X. **PROTECT THREATENED AND ENDANGERED WILDLIFE AND PLANTS.** Colorado Roadless Areas are known to host or have suitable habitat for six species of wildlife listed as threatened under the Endangered Species Act (DEIS at 191), one wildlife species proposed for such listing (id.), and one listed and one proposed plant species (id. at 164-165). One species, Canada lynx, could occur in 307 roadless areas, and another, Mexican spotted owl, could occur in 32 roadless areas. DEIS at 192. Critical habitat for the Preble's meadow jumping mouse occurs in six roadless areas, and for Mexican spotted owl, critical habitat exists in nine roadless areas. DEIS at 191.

The listed species receive formal protection under the Endangered Species Act. Also the 2001 Roadless Rule, currently in effect, provides some protection by considerably limiting activities that could harm these species or their habitat. Selection of any alternative other than alternative 1 could subject all of the listed and proposed species to increased risk of habitat degradation or destruction because much more activity that could harm species would be allowed under alternative 2, 3, and 4. For example, the greatly increased allowance for logging under alternatives 2 and 4 in non-upper tier areas could fragment habitat for lynx and/or Mexican spotted owl. The more protective the roadless rule, the better the chance that ESA-listed and candidate species can survive and recover to full viable populations.

In any case, the Forest Service must consult with the Fish and Wildlife Service under section 7 of the Endangered Species Act on the possible effects of a Colorado Roadless Rule on listed and proposed species and critical habitat.

XI. **LIMIT THE IMPACTS OF COAL MINING IN ROADLESS AREAS.**

A. MAINTAIN THE INTEGRITY OF THE CURRANT CREEK ROADLESS AREA. We are very pleased to see that the Currant Creek roadless area is no longer included in the North Fork Coal Mining Area. See RDEIS at 33 and Map 13. This roadless area: is remote, with difficult access and travel; is important deer fawning and elk calving ground; has deer and elk winter range; and is highly utilized by black bears in fall. Profiles of Colorado Roadless Areas (2008 DEIS Appendix) at 66-67. About one-third of the area also has steep oak brush canyons, presenting a vegetation type that is not very prevalent in Colorado's roadless area. Id. and 2008 DEIS at 131. This area is not under a coal lease. RDEIS Map 13. It is also not near any existing coal mining, thus mining here would first require a whole new mine portal, a railroad spur to transport mined coal, and a high-standard road for access.

We note with concern that the Forest expects some activity in the Grand Mesa coalfield, which includes the Currant Creek area, in the next 15 years. RDEIS at 122-123. Any coal mining in the Currant Creek CRA would be a major impact, both within and outside of

the CRA. The undersigned strongly urge the Forest Service to prohibit mining and related surface use and facilities in this area. The USFS must ensure that the North Fork mining area is not expanded beyond what is currently proposed in the draft rule

Under alternative 2 and 4, a total of 52 miles of road would be constructed in the next 15 years, with 50 miles of this in CRAs. RDEIS at 86. Some of these roads could remain on the landscape for the duration of mining (RDEIS at 125), which could be a few decades.

B. REQUIRE CAPTURING OR FLARING OF METHANE PRODUCED DURING COAL MINING. Some coal mining, with concomitant methane production, would occur under all alternatives, but much more would likely occur under alternatives 2, 3, and 4. See RDEIS at 135. The RDEIS also notes that

> Methane....is a potent greenhouse gas and capturing or flaring gas produced from the existing, as well as future, coal leases could be an important contribution to greenhouse gas reduction.

RDEIS at 129.

Coal mines in the North Fork area produce a large amount of methane, more than most other coal mines. See Elk Creek East EA at 58. Thus reducing the venting of methane into the atmosphere is very important. However, none of the alternatives propose requiring the capture or flaring of methane. We believe all alternatives should do so; the conservation alternative (see section III above) must have this provision.

If coal mining is allowed under roadless areas. facilities for capturing or flaring methane should be limited to areas already disturbed for activities related to coal mining, such as road rights-of-way and well pads. The proposed rule's requirement for this at 294.43(c)(1)(ix) should be retained.

C. THE EIS MUST ESTIMATE THE GREENHOUSE GASES LIKELY TO BE EMITTED FROM COAL MINING IN ROADLESS AREAS. Alternatives 2 and 4 would specifically allow roads to be constructed to service coal mines. The RDEIS assumes that road construction for coal mining is necessary, presumably to install methane vents:

> It was assumed that where road construction or reconstruction would be prohibited, that [coal] mining would be severely limited to the point that mining the reserves would be uneconomic.

RDEIS at 129; see also id, at 124

Under alternatives 2 and 4, about 52 miles of road would be constructed, allowing access to coal that would not be available under Alternative 1, which is the true no action

alternative. (See section II above.) Thus the EIS must disclose the impacts of this coal mining on the emission of greenhouse gases, especially methane, carbon dioxide and ozone. However, we find no estimate of these emissions in the RDEIS.

This issue is important because the difference between the amount of recoverable coal from the alternative most protective of roadless area (Alternative 1) and the least protective alternative (Alternative 3) would be 566 million tons. RDEIS at 135. The difference between alternative 1 and the proposed action (and also alternative 4) is 252 million tons. Id. Thus there would be a sizable difference in greenhouse gas emissions among the alternatives.

D. THE EIS MUST DISCLOSE THE IMPACTS OF METHANE DRAINAGE VENTS. The RDEIS estimates that three miles of road would be needed per section of land "for methane drainage purposes". Id. at 124. However, we find no estimation of the acreage that would be occupied by, or the impacts that could occur from, construction and operation of methane drainage wells. Impacts could include, but are not necessarily limited to: fragmentation and/or destruction of wildlife habitat; soil erosion, water quality degradation, air quality degradation, and introduction and spread of noxious weeds.

The 2008 DEIS estimated that methane vent wells would be "installed on pads about 0.33 acres in size", and that 10 to 20 wells are constructed per section of land. 2008 DEIS at 108. Why is there no such information in the RDEIS? Estimates of the number of drainage wells per section, their size, and possible impacts for their construction and use must be included in the FEIS.

XII. **POTENTIAL SKI AREAS MUST NOT BE REMOVED FROM THE ROADLESS INVENTORY**. Under alternatives 2 and 4, 8260 acres of land that is either in the special use permit boundaries for existing ski areas or in forest plan prescriptions that allow ski area expansion or development would be removed from the roadless inventory. RDEIS at 235. We strongly oppose this proposal. A roadless area is no less valuable just because some entity thinks all or part of it could be developed into a ski area.

Indeed, three roadless area where ski area development could occur and which would be removed from the roadless inventory are of "particular concern" for wildlife habitat. RDEIS at 209. The Williams Fork IRA/CRA, into which the Loveland Ski Area could expand, "is a critical connecting land bridge for large carnivores and other wide-ranging species across I-70". Id. Game Creek IRA/CRA, a possible expansion area for the Vail Ski Area, "is a lynx linkage area..., deer migration corridor, and elk winter range". Id. The Porcupine Creek IRA/CRA, into which Arapaho Basin Ski Area could expand, "provides a critical movement area for wildlife... and is identified as a lynx linkage area". Id.

While there are no current plans for development of these areas (id.), any such development would have a very strong adverse impact on wildlife and landscape-level connectivity. Removing them from the roadless inventory invites proposals for development. If the areas remained in the roadless inventory, at least no roads could be constructed in these areas, and thus some roadless area characteristics could be protected if ski area development was allowed.

In denying a proposal to develop the Snodgrass area as an expansion of Crested Butte Ski Area, Grand Mesa-Uncompahgre-Gunnison National Forest Supervisor Charles Richmond stated the following:

> The upper portions of Snodgrass Mountain are lynx habitat. Permanent loss of suitable lynx habitat would occur as a result of development. Effects would, we believe, be measurable, leading to an adverse effect to Canada lynx and possibly result in "take" to the species.

Letter of Charles S. Richmond to Crested Butte LLC, dated November 5, 2009 at 4.[25] Yet under the proposed rule, 900 acres of Gothic Mountain Inventoried Roadless Area would be removed from the roadless inventory. RDEIS at 235. Retaining the Snodgrass area within a roadless area would help protect the lynx habitat there.

Construction for ski area expansion does not always require construction and use of roads. See RDEIS at 233, 234. Lift towers are typically brought in with helicopters. Workers can walk in or use pack animals. Thus there is no need to remove potential ski areas from the roadless inventory.

XIII. **THE FOREST SERVICE MUST MAINTAIN AN ACCURATE, UP TO DATE ROADLESS AREA INVENTORY**. The undersigned appreciate the improvements in inventory that have occurred between the first draft of the Colorado Roadless Rule and the current draft. We are especially pleased to see that the agency has recognized many additional acres that apparently were missed in previous inventories do indeed have roadless characteristics and thus belong in the inventory. See Preamble a 21275.

However, we think there are still errors. See separate letters detailing our concerns with some of the areas not inventoried as roadless that we believe are indeed roadless.

XIV. **PROHIBIT REMOVAL OF "MINERAL MATERIALS" IN ROADLESS AREAS.** The RDEIS states that none of the alternatives would prohibit "development of mineral material sites". RDEIS at 127, 128. By "mineral materials", we assume the

[25] Mr. Richmond's decision was upheld in appeal decisions by both the Regional Forester and the Chief of the Forest Service.

Forest Service means salable, or common variety, minerals, such as sand, gravel, stone, etc, as defined at 36 CFR 228.42.

It is true, as the RDEIS, id., states, that mineral materials development is unlikely without roads, and road construction is limited under alternatives 1, 2, and 4. However, a few miles of road are expected to be built each year for fuel reduction projects and other activities. See RDEIS at 85. In such situations, it might be convenient for the road contractor to mine road base material nearby, within roadless areas. If this occurred, it would increase the impact on roadless area characteristics by destroying naturalness, and disturbing soil, and possibly water and air (the latter during mineral retrieval and removal).

Unlike locatable and leasable minerals, we believe that the Forest Service has total control of disposal of mineral materials on national forest lands under the Common Varieties of Mineral Materials Act of 1947, 30 U.S.C. 601 et seq. Therefore, prohibiting the mining and removal of mineral materials from roadless areas is well within the agency's discretion.

Language should be added to the rule to prohibit any mining or removal or mineral materials in all roadless areas, subject to valid existing rights. At an absolute minimum, such activity must be prohibited in upper tier areas.

XV. **MISCELLANEOUS ISSUES.**

Parts of Table 3-18 on p. 135 are hard to understand. The row in the "Resource" column titled "Estimated accessible recoverable coal resources in analysis area not within alternative's roadless area..." shows acreage in Colorado Roadless Areas, according to the "Comments" column. The figure for alternatives 2 and 4 should be lower than that for alternative 3, but it is much higher. This applies for the next three rows also.

Table 3-21, p. 142 has zeros for four roadless areas in the column "Acres available (includes leased areas"). All of these areas have acres leased, so the figures in the acres available column should be at least equal to the acres already leased.

Page 153 contain a mis-cite to 36 CFR 215.9 in the first paragraph under "Water Supply". This regulation deals with appeals of Forest Service project decisions.

The wide range of aquatic habitats and species in roadless areas in Colorado is said to range from 3000 to 14,000 feet. However, the lowest elevation in Colorado is approximately 3300 feet, and no roadless areas are anywhere near elevations that low. Page 190 states (likely correctly) that elevation of roadless areas in Colorado range from 7000 to 14,000 feet.

RDEIS at 240 claims that:

> In the past, roadless areas were managed as a bank for future resource development or special designation. If these areas were managed for their own inherent values, there could be less pressure to designate these lands as wilderness or as other special designations to shield the land from development. The Colorado Roadless Rule may reduce controversy and result in more stability by recognizing those roadless areas with important wilderness character and those portions of roadless areas where multiple types of recreational use could occur.

The proposed Colorado Roadless Rule would hardly reduce controversy because it is itself very controversial, due to the large amount of discretion it allows local managers to approve activities that damage roadless character. The proposed rule would greatly increase the pressure to designate roadless areas as wilderness or other legislatively declared areas because of how much destructive activity could occur under the proposed rule.

The RDEIS fails to discuss bonding requirements. Appendix H details numerous standards for road construction and decommissioning, but it fails to discuss at all the bonding requirements to ensure that decommissioning and revegetation are accomplished. The RDEIS is silent on bonding requirements altogether.

In its Economics section, the RDEIS (pp. 287 et seq.) fails to consider the non-extractive and environmental values of Colorado's Roadless Areas. These include, but are not limited to: hunting, fishing, other recreation, and ecosystem services. The latter include the values of: intact watersheds, undisturbed soils, good air quality, good water quality, and carbon sequestration. See the comments of Wild Earth Guardians. The FEIS for the Colorado Roadless Rule must analyze the non-extractive economic values of roadless areas.

CONCLUSION. The proposed Colorado Roadless Rule remains unacceptable. It does not provide anywhere near the level of protection our magnificent roadless areas deserve. It neglects to include a significant acreage of roadless areas in a category more protective than the 2001 Rule (upper tier) and would still subject these lands to linear construction zones. It would allow broad discretion for a wide range of activities that would harm roadless areas and the values they safeguard, the results of which could not be fully restored to natural conditions in many instances.

Logging and road construction must be much more restricted. We recommend allowing such activities no more than one-quarter mile from the roadless boundary inside any

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roadless area. Certainly logging beyond a half-mile is excessive, unnecessary, and inappropriate. Linear construction zones and the facilities they would make possible must be prohibited in roadless areas, especially in the upper tier areas, except for valid existing rights. Roads must not be allowed for water projects or coal mining. Currant Creek must remain off-limits to road construction for coal mining.

The analysis of potential impacts in the DEIS must use the correct no action alternative. Roadless areas where ski areas could expand or be developed must not be removed from the roadless inventory.

Sincerely,

Rocky Smith, Forest Watch Program Director
Rocky Mountain Wild
1030 Pearl #9
Denver, CO 80203
303 839-5900
rocky@coloradowild.org

Peter Hart, Conservation Analyst/Staff Attorney
Wilderness Workshop
Box 1442
Carbondale, CO 81623
970-963-3977
peter@wildernessworkshop.org

Denise Boggs, Executive Director
Conservation Congress
PO Box 2076
Livingston, MT 59047
406-222-2723
conservation@q.com

Jonathan J. Rhodes, Hydrologist
Planeto Azul Hydrology
PO Box 15286
PDX, OR 97293
jjraqua@spiritone.org

Bryan Bird, Wild Places Program Director
WildEarth Guardians
312 Montezuma
Santa Fe, NM 87501
505.988.9126 x 1157
bbird@wildearthguardians.org

Dominick A. DellaSala, Ph.D., President and Chief Scientist
Geos Institute
84 Fourth Street
Ashland, Oregon 97520
541 482-4459 x302, 541 621-7223 (cell)
dominick@geosinstitute.org

Marc Fink
Center for Biological Diversity
209 East 7th St.
Duluth, Minnesota 55805
218 464-0539
mfink@biologicaldiversity.org

Hilary White, Director
Sheep Mountain Alliance
PO Box 389
Telluride, CO 81435
970-728-3729
Hilary@sheepmountainalliance.org

Veronica Egan, Executive Director
Great Old Broads for Wilderness
P O Box 2924
Durango, CO 81302
970-385-9577
www.greatoldbroads.org

Quiet Use Coalition
Tom Sobal; Executive Director
POB 1452
Salida, CO 81201
719-207-4130
info@quietuse.org

Elise Jones, Executive Director
Colorado Environmental Coalition
1536 Wynkoop Street #5C
Denver, CO 80202
303-534-7066 main line
303-405-6704 direct
elise@ourcolorado.org

Christine Canaly, Director
San Luis Valley Ecosystem Council

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P.O. Box 223
Alamosa, CO 81101
(719) 589-1518
slvwater@fairpoint.net

John Stansfield, Director
Central Colorado Wilderness Coalition
PO Box 588
Monument, CO 80132
303-660-5849
jorcstan@juno.com

Dan Randolph, Interim Executive Director
San Juan Citizens Alliance
1022 1/2 Main Ave.
Durango, CO 81301
970-259-3583
dan@sanjuancitizens.org

Deb Overn, President
Jean C. Smith, Associate Director
Wild Connections
2309 N. Logan Ave.
Colorado Springs CO 80907
719-686-5905
jean@wildconnections.org

Matt Reed, Public Lands Director
High Country Citizens' Alliance
PO Box 1066
Crested Butte, CO 81224
(970) 349-7104
matt@hccaonline.org

Steve Smith, Assistant Regional Director, Central Rockies Office
The Wilderness Society
1660 Wynkoop St., Ste. 850
Denver, CO 80202
303-650-5818 x106
steve_smith@tws.org

Defenders of Wildlife
Peter Nelson, Director, Federal Lands Program
1130 17th Street, N.W.
Washington, D.C. 20036
pnelson@defenders.org

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COR685.

From: Jessica Trice [Trice.Jessica@epamail.epa.gov]
Sent: Monday, July 18, 2011 11:24 AM
To: COcomments
Cc: Kenneth K Tu
Subject: EPA - Colorado Roadless RDEIS comment letter
Attachments: Co Roadless Rule - RDEIS comment letter.pdf

Please see in the attachment EPA's comments on the Colorado Roadless RDEIS.

Thank you,

(See attached file: Co Roadless Rule - RDEIS comment letter.pdf)

Jessica Trice
Office of Federal Activities, NEPA Compliance Division
(202) 564-6646

COR 685

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

JUL 18 2011

Mr. Ken Tu
USDA Forest Service
Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

Dear Mr. Tu:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, *et seq.*, and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency (EPA) has reviewed the U.S Forest Service's (USFS) Revised Draft Environmental Impact Statement (RDEIS) for the proposed Colorado Roadless Rule.

This RDEIS was prepared to disclose and analyze potential environmental impacts associated with four alternatives of a state-specific rule to manage roadless area values and characteristics on USFS lands in Colorado. The Preferred Alternative (Alternative 2 – Colorado Roadless Rule), encompasses 4.19 million acres using updated evaluations to identify Colorado Roadless Area (CRA) boundaries. Management provisions include additional exceptions for tree-cutting/sale/removal and temporary road construction/reconstruction; however, 562,200 acres are identified as CRA upper tier acres where road construction and tree-cutting activities would be tightly restricted. In addition, 20,000 CRA acres are identified as the North Fork coal mining area where temporary road construction/reconstruction exceptions would apply. This alternative includes additional provisions to consider in determining conditions for inclusion in approved Surface Use Plans of Operation for proposed oil and gas leasing in CRAs.

We commend the USFS for its cooperative effort with the State of Colorado to develop a rule that provides state-specific management direction for over four million acres of roadless area in Colorado while being responsive to public comments. With a few exceptions, the RDEIS provides thorough disclosure and analysis of impacts. As a result, our primary concerns and recommendations are as follows: inclusion of limited upper tier acreage, air quality, greenhouse gas emissions associated with future coal development, aquatic resources, and environmental justice.

The proposed Colorado Roadless Rule's "upper tier" concept would provide greater protection from impacts related to road construction/reconstruction and tree-cutting/sale/removal on upper tier acreage as compared to other CRA acres. Under the Preferred Alternative (Alternative 2 – Colorado Roadless Rule), 562,200 acres would be identified as CRA upper tier acres in six of the eight covered National Forests. Under Alternative 4 (Colorado Roadless Rule with Public Proposed Upper Tier Acres), 2,614,200 acres would be identified as upper tier acres, with all eight of the covered National Forests including some upper tier designation. The substantial additional upper tier acreage of Alternative 4 would provide greater protection of roadless characteristics and less opportunity for adverse impacts to air quality and aquatic resources. Therefore, we recommend expanding the Preferred Alternative to include additional upper tier acreage.

Numerous population centers and mandatory Class I Federal areas are located near proposed CRAs where potential air emissions may be of concern. While the RDEIS provides data regarding existing visibility trends for the mandatory Class I Federal areas of the region, the remainder of the analysis area includes only a qualitative discussion of ambient air quality. Given EPA's concerns regarding air quality, we recommend that the USFS provide additional baseline data of air quality conditions in the remainder of the analysis area.

The Preferred Alternative designates the North Fork coal mining area with 19,625 acres available for leasing (of which only 4,025 acres are currently leased) and potentially 360 million tons of recoverable coal. The RDEIS includes only a qualitative discussion of GHG emissions associated with development and use of these coal resources. To consider the range of impacts resulting from each alternative's potential GHG emissions and climate change impacts, we recommend the USFS quantify and disclose projected annual and total lifetime cumulative GHG emissions, including emissions from combustion of the mined coal, resulting from potential future coal development.

Most activities resulting from the various alternatives, including road construction/reconstruction, tree-cutting/sale/removal, linear construction zones (LCZ's), and ski resort expansion, have the potential to adversely impact aquatic resources, including wetlands, streams, riparian areas, and their supporting hydrology. We recommend the Final EIS (FEIS) include a thorough characterization of existing aquatic resources and baseline conditions; including quality, quantity and location of surface waters, wetlands, streams and ephemeral drainages, and the impacts each alternative would have on these baseline conditions.

While the RDEIS provides a substantial amount of data regarding Colorado demographics, there is limited discussion of potential impacts to environmental justice communities associated with the various alternatives. We recommend the FEIS include the process the USFS used to identify low income and minority communities as well as the potential direct, indirect and cumulative environmental impacts of roadless activities on these communities.

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Based on our review, we have rated the RDEIS as "Environmental Concerns – Insufficient Information (EC-2)". As explained in this letter and the attached detailed comments, we have a number of concerns regarding potential impacts of the Preferred Alternative, as well as the level of analysis and information provided concerning those impacts. We look forward to continuing to work with you during the development of the FEIS to address these concerns. Please feel free to contact me at (202) 564-5400, or have your staff contact Jessica Trice, at (202) 564-6646, if you have any questions or would like to discuss our comments.

Sincerely,

Susan E Bromm

Susan Bromm
Director
Office of Federal Activities

Enclosure

COR 685

U.S Environmental Protection Agency
Detailed Comments – Colorado Roadless Rule RDEIS

Air quality

The RDEIS acknowledges there are no portions of the proposed roadless areas designated as non-attainment for particulate matter and that all airsheds overlapping roadless areas in Colorado meet air quality standards. However, given EPA's concerns regarding air quality, we recommend the Final EIS (FEIS) include the following additional baseline data of air quality conditions in the remainder of the analysis area:

- Identification of sensitive receptors (such as population centers and Class I and Sensitive Class II areas in the vicinity), as well as lakes and streams sensitive to acid deposition effects;
- Airshed classifications and baseline conditions for all NAAQS at nearby population centers; and
- Disclosure of any regional concerns (e.g., PM_{10}, $PM_{2.5}$ and ozone issues in the area).

Such data are readily available from the Colorado Department of Public Health and Environment (CDPHE) and/or the EPA AirExplorer web site (http://www.epa.gov/airexplorer/). Decision-makers will need to understand baseline conditions in an effort to ensure that future projects, when combined with air quality impacts from external sources, do not adversely impact the NAAQS.

Emissions Inventory: We are concerned that no emissions inventory is provided for predicted emissions that may result under the various alternatives. Tree-cutting/removal, prescribed fire, road construction/reconstruction, and coal mining activities affect air quality. The RDEIS notes that tree-cutting, sale or removal activities and fuel management activities in the analysis area would vary (increasingly more activities possible by Alternative 1, 4, 2, and 3, respectively) and would affect from 2,300 to 16,900 acres. It is unclear what percentage of these acreage estimates would include prescribed fire treatments. Since total mileage estimates for all activities do not appear to be included in the RDEIS, we recommend that estimated acreage or mileage for each potential activity and the associated emissions, by alternative, be provided in the FEIS.

Prescribed Fire: The RDEIS has a very limited discussion of prescribed fire except to acknowledge that it is often applied in conjunction with tree-cutting. The RDEIS should clarify whether additional tree-cutting and road construction will result in significantly more use of prescribed fire over increased acreage as stipulated in Alternatives 1, 4, 2, and 3, respectively.

Increased use of prescribed fire may cause degradation of air quality in the region. We appreciate that the RDEIS notes the USFS would consult with CDPHE through permitting processes prior to conducting prescribed burns. While we realize the individual burn plans would quantify expected emissions, we recommend that a best estimate of the prescribed fire acreage and potential emissions be disclosed in the FEIS. Such information is necessary to fully inform the public as well as the decision-maker to ensure protection of air quality if the prescribed burns are ultimately conducted.

We also recommend the FEIS provide more detail regarding: (1) requirements for the incorporation of the Interagency Prescribed Fire Planning and Implementation Procedures Guide (July 2008) into the site-specific burn plans designed for each prescribed burn conducted as a result of the various tree-cutting exceptions; (2) appropriate smoke monitoring techniques and mitigation (including meteorological conditions favorable for mitigating prescribed fire smoke and alternatives to prescribed

fire such as mechanical fuel reduction methods); and (3) how the public will be notified of pending burns.

Harvest-Related, Transportation-Related, and Dust-Related Emissions: Air quality in IRAs/CRAs also would be negatively impacted by emissions from heavy diesel equipment utilized for tree-cutting, idling trucks used for transportation of wood products, and dust generated from associated activities. EPA is concerned that the RDEIS does not contain an inventory of predicted emissions that would be associated with tree-cutting and associated activities that could potentially occur under each alternative. We recommend that the FEIS include such an emissions inventory.

Further, these emissions could be addressed through project-level design criteria and monitoring. Example measures that could be recommended through the state-specific rule include the following:

- Prohibit unnecessary idling of transportation trucks;
- Use low-sulfur or alternative fuels;
- Require heavy diesel equipment to use cleanest available engines or retrofits with diesel particulate control technology;
- Maintain engines;
- Require dust abatement measures and detailed plans for dust control;
- Require prompt revegetation of decommissioned roads and monitor for five years after revegetation to ensure success; and
- Monitor decommissioned roads for effectiveness of closure.

Indirect and Cumulative Impacts: Under Alternatives 2 and 4 (Colorado Roadless Rule), 1,710 acres included in IRAs were not included within CRA boundaries. The 2001 Roadless Rule did not offer the potential for expanded development of areas adjacent to permitted ski areas and allocated for ski area management in forest plans. The FEIS should clearly present the magnitude of air emissions that may result if IRA/CRA acreage would allow for ski resort residential/commercial expansion. These include associated indirect impacts to air quality resulting from onsite power sources, potential use of fireplaces and woodburning stoves, and increased traffic congestion are of particular interest. Potential mitigation measures, such as providing shuttle services and requiring gas fireplaces, may be of value to planning considerations at this early stage of the process.

We recommend that the FEIS include a discussion of likely vehicle miles traveled associated with projected increases in residential and visitor capacity, as well as the related mobile source emissions inventory. We recommend estimating mobile source emissions with EPA's MOVES2010a mobile sources emission model and re-entrained road dust emissions with use of EPA's Compilation of Air Pollutant Emission Factors (AP-42). If total emissions are substantial, then an air impact analysis presenting direct, indirect, and cumulative impacts on sensitive receptors is reasonable.

In addition, we suggest the FEIS present indirect impacts from use of harvested and/or thinned trees for fuel. For instance, if any of the harvested timber would be used as feedstock for supplying fuel at a facility that provides heat and/or power, or would be converted to wood pellets or biofuels, then we suggest a discussion of specific uses and related air quality impacts, including greenhouse gas (GHG) emissions. There may be mitigation options available to address these indirect emissions.

Additional Provisions Related to Oil and Gas Leasing: We are pleased that recent Instruction Memorandums on Oil and Gas Leasing will apply special provisions requiring environmental analyses for oil and gas leasing and in the approved Surface Use Plans of Operation. In addition, we recommend

the RDEIS acknowledge the recently signed June 23, 2011, U.S. Department of the Interior and U.S. EPA Memorandum of Understanding and its applicability to future oil and gas leasing projects in the CRA's[1].

GHG emissions

Currently, all existing coal leases in IRAs/CRAs are located in the Grand Mesa-Uncompahgre-Gunnison National Forest (GMUG). Potential for future coal development varies by alternative, and EPA's comments are directed at the differences in potential future development. Alternative 1 (2001 Roadless Rule) would effectively prohibit future leases due to prohibition of road construction; Alternatives 2 and 4 (Colorado Roadless Rule) would allow road construction for future leases in the 20,000 acre North Fork coal mining area of the GMUG; and Alternative 3 (No Action) would allow road construction for future leases in the entire analysis area. The potential acres of accessible coal resources vary greatly by alternative, resulting in a wide range of estimated accessible recoverable tons of coal in roadless areas. The RDEIS provides roadless area estimates for acres of accessible coal resources and tons of accessible recoverable coal resources, respectively, as follows:

- Alternative 1 – 5,900 acres available (all currently leased) with potentially 108 million tons of recoverable coal;
- Alternatives 2 and 4 (North Fork coal mining area) - 19,625 acres available (only 4,025 acres currently leased) with potentially 360 million tons of recoverable coal; and
- Alternative 3 – 36,900 acres available (only 5,900 acres currently leased) with potentially 675 million tons of recoverable coal.

The RDEIS includes only a qualitative discussion of GHG emissions associated with development and use of coal resources. In addition, it is unclear whether there is the potential for unmitigated methane emissions associated with future development in the North Fork coal mining area. To fully inform decision-makers and the public regarding the range of impacts resulting from each alternative's potential future coal development and associated GHG emissions and climate change impacts, we recommend analysis and disclosure of GHG emissions including:

1. Quantify and disclose in CO_2-equivalent terms the projected annual and total lifetime cumulative GHG emissions, including emissions from combustion of the mined coal, resulting from future coal development (see, https://www.epa.gov/RDEE/energy-resources/calculator.html).
2. Qualitatively discuss the link between GHGs and climate change, and the potential impacts of climate change. Estimating the level of GHG emissions from the potential future coal development associated with each of the alternatives can serve as a reasonable proxy for assessing potential climate change impacts, and provide decision makers and the public with useful information for a reasoned choice among alternatives.
3. Describe any relevant Regional, Tribal or State climate change plans or goals, as well as the extent to which USFS would reconcile, through mitigation or otherwise, its proposed action with such plans. For example, please consider the Colorado Climate Action Plan (http://www.cdphe.state.co.us/climate/ClimateActionPlan.pdf), the Western Climate Initiative (http://www.westernclimateinitiative.org), the Governor's Blue Ribbon Advisory Council on Climate Change 2007 Final Report (http://www.deq.utah.gov/BRAC_Climate/final_report.htm),

[1] The June 23, 2011 Memorandum of Understanding among the Department of Agriculture, Department of the Interior and the Environmental Protection Agency, "Regarding Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions Through the National Environmental Policy Act".

and Utah's GHG reduction goals to reduce GHG emissions to 2005 levels by 2020 (http://www.deq.utah.gov/Climate_Change/GHG.goal.htm).

4. Analyze in detail the potential means to mitigate GHG emissions and disclose potential GHG reductions associated with sure measures. EPA recommends the Final Colorado Roadless Rule require implementation of reasonable mitigations measures that would reduce or eliminate project-related GHG emissions from future coal development. In addition, we recommend adding a summary discussion of ongoing and projected regional climate change impacts relevant to the action area based on U.S. Global Change Research Program assessments and that the FEIS identify any potential need to adapt the proposed action to these effects, as well as any potential impacts from the proposed action that may be exacerbated by climate change.

Aquatic resources

We are concerned that there would be 406 fewer miles of streams protected under CRAs versus IRAs. We appreciated the RDEIS discussion related to aquatic resources; however, we recommend that USFS expand the discussion by including the following in the FEIS:

- A thorough characterization of existing aquatic resources and baseline conditions, including quality, quantity and location of surface waters, wetlands, streams and ephemeral drainages.
- Disclosure of impacts on these baseline conditions, including effects of development associated with potential ski resort expansion, that would result from activities associated with each alternative. Such impacts may include changes in surface and groundwater hydrology.
- A map and summary of all wetlands types and acreage in the analysis area and estimated wetlands acreage that would be impacted by each alternative.
- A description of any wetlands impacts, temporary and permanent, direct and indirect, past and foreseeable. Such impacts may include functional conversion of wetlands (e.g., forested to shrub-scrub); changes to supporting wetland hydrology (e.g., snow melt patterns, sheet flow, and groundwater hydrology); and wetland disturbance from grading and dredge and fill activities.

Water Quality Data: Baseline water quality data are critical particularly given proximity to the headwaters of four important rivers - the Colorado, Platte, Arkansas, and Rio Grande. To provide a baseline for future monitoring of impacts, we recommend the FEIS provide the following:

- A summary of the best available monitoring data on water quality and stream health for the analysis area, including *Escherichia coli,* nutrient concentrations, water temperatures, and turbidity data, if they exist.
- Identification of any significant gaps in data that could affect the decision and/or that may be targeted for collection under future project monitoring plans.

Impaired Waterbodies: We appreciate the RDEIS discussion related to Clean Water Act (CWA) Section 303(d) impaired or threatened waterbody segments in the analysis area. We recommend that the FEIS describe how the alternatives and resulting development might affect these waterbodies, particularly the water quality parameters causing the CWA Section 303(d) listing. Proposed activities in the drainages of CWA impaired or threatened streams must be consistent with the State's Total Maximum Daily Load (TMDL) developed for the listed waterbody. We recommend that mitigation or restoration activities be included to reduce existing sources of pollution to offset or compensate for pollutants generated under the various alternatives. In addition, we recommend that Table 3-25 be expanded to provide specifics on the TMDLs and applicable impaired stream segments.

Wetlands: Impacts to types and functions of wetlands in mountain environments are difficult or impossible to mitigate due to shorter growing seasons and low night time temperatures. To ensure that wetlands are protected to the greatest extent possible, it may be necessary to use Best Management Practices (BMPs) to protect sensitive soils, wetlands, riparian areas, meadows, stream crossings, and critical habitat.

We recommend that the FEIS describe how the USFS will show compliance with Executive Order 11990, Protection of Wetlands, including how wetlands will be identified, avoided, or ultimately mitigated at the project-specific level. We recommend a thorough discussion of impacts to wetlands and riparian habitat that may result from ski area development that would result from removal of IRA/CRA designation for those relevant acres.

To ensure that wetlands are protected to the greatest extent possible, it may be necessary to consider exclusion of tree-cutting, road construction, and LCZs in areas where wetlands would be adversely impacted. We support establishment of riparian habitat buffer zones to avoid adverse impacts to streams and riparian areas. Avoidance of tree-cutting, road construction, and LCZs in riparian areas may be necessary, as well as special protections for high quality wetland resources such as fens on the GMUG and San Juan National Forests, where these unique features are more common.

Wastewater Associated with Energy Development: We appreciate the RDEIS discussion of potential wastewater discharges associated with oil and gas operations, and recommend inclusion of similar information related to coal preparation plants. In addition, while we realize that the project-level NEPA analyses for the existing oil, gas, and coal leases most likely addressed specific details of wastewater discharges and waste rock storage, we recommend the roadless rule RDEIS discussion include a summary to better disclose baseline conditions. Such a summary might include the following:

- Estimate of water quantity used and its source;
- Percentage of wastewater disposed by surface discharge versus underground injection;
- Use of other possible disposal methods such as evaporation ponds;
- Location of waste rock piles and disposal procedures; and
- Identification of BMPs to prevent surface water and groundwater contamination.

Design Criteria and Mitigation: We support the list of design criteria for temporary road construction under Alternatives 2 and 4. We recommend expanding this list to address other potential concerns with temporary roads as well as potential concerns related to tree-cutting/fuels treatments, as follows:

- Require revegetation of all disturbed areas with native seed mix within the same growing season they are disturbed, and monitor revegetation efforts for five years to ensure success.
- Specify steps to protect range improvements (e.g., fences, water developments) from mechanical equipment used for tree-cutting/removal and prescribed burning.
- Monitor breakdown of hydrophobic soils for five years following prescribed burns.
- Develop a monitoring plan and schedule to assess the effectiveness of road decommissioning.

In addition, the use of LCZs for water conveyance systems, electrical and telecommunication transmission lines, and oil and gas pipeline varies depending on the alternative. It may be appropriate to identify requirements for project-level analyses, including disclosure of the following:

- Location and amount of disturbance proposed in wetlands (if applicable);
- Amount of wetland soil compaction expected from installation equipment;

- Location on which soil from trenching would be temporarily stored;
- Type and diameter of pipe to be installed;
- Width and depth of the necessary trenches, including locations of cutoff collars to prevent drainage along the pipes; and
- Identification of trench fill material that would be used to promote drainage (e.g., gravel).

If avoidance of wetland and riparian areas is not possible, we recommend identification of mitigation measures that would minimize the extent of wetlands impacts from these activities. Such measures include the following:

- Re-vegetate with removed shrubs and mats of herbaceous cover (carefully stockpiled on-site) and appropriate native wetland seed species as soon as possible after the disturbance. Monitor for five years to ensure successful re-vegetation of impacted montane wetland communities.
- Use bulkheads/box structures to minimize disturbance area from side casting and trench width.
- Use fabric or hay layers to protect existing vegetation from stockpiled dredged material and to mark existing contours.

Indirect and Cumulative Impacts of Potential Ski Area Expansions: EPA recommends the FEIS include information regarding the impacts from potential ski area development/expansion on ski area acres excluded from CRA boundaries. It appears that such development could substantially increase ski season and non-ski season use of the ski areas and surrounding forests. We recommend a discussion of the potential new residential and lodging units and foreseeable road and parking lot construction. In addition, we recommend inclusion of indirect impacts such as hydrologic changes and water quality impacts from erosion and contaminants caused by runoff from increased impervious surface area.

Planned and potential developments may result in the following indirect impacts to aquatic resources:

- Wetlands and riparian area impacts from up-gradient or adjacent development, grading, roads, ski terrain expansion, potential ski area facility improvements, increased year-round visitation, increased demand for hiking/biking trails and picnic facilities, and changes to hydrology;
- Water quality impacts from wastewater disposal, sediment and lawn chemicals; and
- Water quantity impacts from domestic and commercial water use, changes in stormwater runoff from new impervious surfaces, and down-cutting of streams.

We recommend discussion of how these impacts would be mitigated to protect forest resources and how implementation of such measures would be ensured at the project level.

Environmental justice

To ensure a robust analysis, we encourage the USFS to consult the Council on Environmental Quality's new posting of resources on NEPA and environmental justice at http://ceq.hss.doe.gov/nepa_information/agency_resources.html.

There may be water quality and/or air quality impacts of particular concern to local residents; therefore, EPA recommends the following:

- Disclosure of whether and where environmental justice communities are located in the analysis area, including a description of the methodology and criteria utilized to identify low income and

minority communities, the sources of data used for these analyses, and references for establishing the criteria.

- To the extent such communities are identified, a discussion of the potential direct, indirect and cumulative environmental impacts of roadless activities on these communities.
- An evaluation of the socio-economic impacts to the local communities, including any additional loading that would be placed on local communities' abilities to provide necessary public services and amenities associated with development resulting from changes in roadless area boundaries, the various exceptions to road construction and tree-cutting activities, and/or future coal mining development and ski area expansion. Such impacts may include better or worse access for subsistence hunting and gathering of fuel wood; increased housing development to meet the needs of project workers and families; burdening water, waste and wastewater handling facilities; and increased road traffic with associated dust and hazardous material spill potential. We recommend that methods to avoid or minimize such impacts be discussed in the FEIS.

COR686.

From: Peter Hart [peter@wildernessworkshop.org]
Sent: Thursday, July 14, 2011 9:18 PM
To: COcomments
Subject: Colorado Roadless Rule/RDEIS Comments
Attachments: 2011 7 14 FINAL WRNF Inventory Comments for proposed CO Roadless Rule.doc; citizens_roadless_inventory_WRNF.zip

Please find attached comments relevant to the Colorado Roadless Rule RDEIS and the proposed Colorado Roadless Rule. Also attached is a zipped folder with GIS shapefiles to supplement the comments.

Please send confirmation of receipt.

Thanks,

Peter Hart
Conservation Analyst/Staff Attorney
Wilderness Workshop
PO Box 1442
Carbondale, CO 81623
O: (970)963-3977
F: (970)963-8447
C: (303)475-4915
peter@wildernessworkshop.org
www.wildernessworkshop.org

COR686

PO Box 1442, Carbondale, CO 81623
www.wildernessworkshop.org
TEL 970.963.3977
FAX 970.963.8447

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812
Via e-mail: COComments@fsroadless.org

RE: Inadequacies of the roadless inventory

July 14, 2011

Dear Forest Service,

This letter supplements comments on the Revised Draft Environmental Impact Statement (RDEIS) and the proposed Colorado Roadless Rule submitted by Rocky Mtn. Wild, et al, on July 13th. Section XIII of those comments articulates the need for an accurate inventory. The same section references separate letters with specific details on inventory problems. This letter highlights inadequacies of the Colorado Roadless Area (CRA) inventory on the White River National Forest (WRNF). The letter also suggests improvements and additions to the inventory.

INTRODUCTION. For any rule intended to manage and protect roadless areas, it is important to have, with as much precision as possible, an accurate an updated inventory of unroaded lands. We recognize that an inventory of all of Colorado's national forest roadless areas can never be perfect, but we believe much improvement in the current inventory is needed.

In what follows, we describe deficiencies in the roadless inventory used for the proposed Colorado Rule. The boundaries, acreages, and area descriptions used to highlight deficiencies are based on extensive field surveys conducted over the past decade by volunteers following protocols developed by the Southern Rockies Conservation Alliance (SRCA). Field data was analyzed using GIS software. GIS shapefiles with SRCA roadless area boundaries are attached to these comments.

Our own area descriptions should not be considered comprehensive. We attempted to include areas where omissions of roadless acreage is most glaring, as well as some others of slightly lower significance, as capacity and time allowed. These examples are meant to

illustrate the deficiencies in the current WRNF and CRA inventories and to underscore the need for an updated inventory.

One general concern is with roadless areas that overlap two national forests. In some cases, the combined areas do not appear to have been considered in delineating CRA boundaries. By failing to consider together and combine nearby roadless areas on different national forests, the Forest Service missed good opportunities to protect habitat connectivity across managerial/jurisdictional boundaries.

We hope the Forest Service will take a hard look at the inventory gaps we highlight below and add substantial roadless acreage before finalizing a Colorado Roadless Rule. We are happy to work with the Forest Service in any way possible to ensure development and maintenance of the most accurate roadless inventory possible.

DATA SOURCES. Acreages and boundary information is based on information from the USDA Forest Service and from the Southern Rockies Conservation Alliance (SRCA). Road and trail numbers are from the 2008 Motor Vehicle Use Maps (MVUM) that were available on the National Forest web site as of October 2008. Where MVUMs were not available, road information was taken from the most up to date National Forest visitor maps, and from GIS data provided by the White River National Forest. Stream and lake information is from the National Forest visitor maps and USGS quads. Vegetation is from the Southwest Regional Gap Assessment Project. Species activities are from the Colorado Division of Wildlife's (CDOW) National Diversity Information Source. Land ownership data is from the CoMap GIS data version 6 dated April, 2007. Threatened and endangered species information is from the Colorado National Heritage Program.

A. **General Problems with the Inventory**. The White River National Forest applied standards too strictly, resulting in the exclusion of some areas altogether and exclusion of many acres of roadless lands from areas that were inventoried. For many areas, roadless boundaries were determined by delineating only those areas that were believed to be defensible as wilderness. We have made this point before, that the WRNF's roadless inventory improperly applied wilderness availability and suitability criteria during the roadless inventory process. A roadless inventory should be based purely on the facts of roadlessness, not subjective opinions about whether such an area, or a certain boundary configuration, can qualify for wilderness designation.

On the White River National Forest, areas with motorized trails and snowmobile uses were excluded from the roadless inventory, even if they contained no roads. Such areas might be difficult to manage as wilderness, but they should still be in the roadless inventory. In some cases, buffers around roads were unjustifiably large, excluding roadless acreage from the inventory.

The Forest Service must include all lands that are roadless in the inventory. We believe approximately 415,000 acres have been excluded.

Citations and quotes in the descriptions below are from the capable and available analyses of potential wilderness areas that were done as part of the forest plan revision.

B. **Areas Inventoried But Where Roadless Acreage Was Unjustifiably Excluded.**

Ashcroft Roadless Area
Aspen Ranger District
Location: South of Aspen in Castle Creek in Pitkin County
CRA Name: Ashcroft
CRA Acres: 900
2001 Name: Ashcroft
2001 Acres: 900
SRCA Name: Ashcroft
SRCA Acres: 1,300

The Ashcroft Roadless Area is adjacent to the Maroon Bells-Snowmass Wilderness. The 400-acre difference between the WRNF and CRA inventories and the SRCA inventory all lies below 10,000 feet elevation – the line the Forest Service arbitrarily selected as the eastern (lower) boundary of the roadless area, even though at one point it is 500 yards away from and 600 feet above the nearest road. The SRCA inventory started from the Castle Creek Road (Pitkin County CR 15) and took into account any spurs and structures off of the Castle Creek Road, and then properly included everything above those developments as roadless. The Forest Service must revisit this roadless area and redraw its boundaries based on the approach taken by the SRCA inventory.

Assignation Ridge Roadless Area
Sopris Ranger District
Location: Southwest of Carbondale in Pitkin County
CRA Name: Assignation Ridge
CRA Acres: 13,300
2001 Name: Assignation Ridge
2001 Acres: 13,300
SRCA Name: Assignation Ridge
SRCA Acres: 17,700

While the WRNF and CRA inventories agree with the SRCA inventory on the northern, eastern and southern boundaries, they are 1/3 to 2 miles apart on the western boundary. The difference is over their treatment of the Braderich Creek Trail, FST 3-1952.1. The Forest Service wanted to leave this locally popular mountain bike route out of a Forest Plan recommended Wilderness Area, while the SRCA inventory demarcates the actual

extent of the roadless area. To fulfill its own purposes, the CRA inventory needs to adopt the SRCA approach, which will lead to an Assignation Ridge Roadless area that is 30% larger and adjoins the Thompson Creek roadless area.

Baldy Mountain Roadless Area
Rifle Ranger District
Location: South of Silt in Mesa County
CRA Name: Baldy Mountain
CRA Acres: 6,000
2001 Name: Baldy Mountain
2001 Acres: 6,000
SRCA Name: Baldy Mountain
SRCA Acres: 7,300

The WRNF and CRA inventory boundaries contain a cherry-stem for an uninventoried trail, enlarge another to exclude a natural escarpment that looks like a road in an aerial photograph, and truncate its northern boundary at a pipeline with no road along it. The CRA inventory should correct these errors by removing the stem into the western boundary, narrowing the stem around FSR 812.1G and 812.1H, and moving the northern boundary out to FSR 8-800.1 and FSR 8-12.1

Basalt Mountain A Roadless Area
Sopris Ranger District
Location: North of Basalt in Eagle County
CRA Name: Basalt Mountain A
CRA Acres: 14,000
2001 Name: Basalt Mountain A
2001 Acres: 14,000
SRCA Name: Basalt Mountain
SRCA Acres: 14,500

The Basalt Mountain A Roadless Area is adjacent to the Basalt Mountain B Roadless Area. The CRA boundary needs to be brought back to FSR 3-524.1A in the area where the WRNF inventory boundary departs more than ¼ mile north from that road to follow the escarpment at the north end of Basalt Mountain's summit plateau.

Basalt Mountain B Roadless Area
Sopris Ranger District
Location: North of Basalt in Eagle County
CRA Name: Basalt Mountain B
CRA Acres: 7,400
2001 Name: Basalt Mountain B
2001 Acres: 7,400

SRCA Name: Basalt Mountain
SRCA Acres: 13,000

The Basalt Mountain B Roadless Area is adjacent to the Basalt Mountain A Roadless Area and the Lake Christine State Wildlife Area, and should properly be adjoined to the Red Table Roadless Area. The route separating Basalt Mountain B and Red Table (Taylor Creek Road FSR 3-510.1) is permanently closed to vehicular use and cannot be considered a road.

At its northwestern end, the CRA inventory boundary departs ¾ of a mile from the nearest road (FSR 3-524.1). The WRNF eliminated from its inventory an entire roadless area, Basalt Mountain C, which extended westward almost 2 miles from Basalt Mountain B to the national forest boundary. The SRCA inventory includes these areas; its bounds should be adopted to correct this error and give greater protection to this ecologically rich area and its critical wildlife habitat. Also, the boundary with the Red Table needs to be updated.

Berry Creek Roadless Area
Holy Cross Ranger District
Location: North of Avon in Eagle County
CRA Name: Berry Creek
CRA Acres: 8,600
2001 Name: Berry Creek
2001 Acres: 8,600
SRCA Name: Berry Creek
SRCA Acres: 8,800

The WRNF and CRA inventories exclude 200 acres around the spur road FSR 7-700W.2B. There may have been some timber thinning in this area but it is not readily apparent, and there is no reason to exclude this area from the CRA inventory, which needs to be adjusted accordingly.

Big Ridge to South Fork A Roadless Area
Blanco Ranger District
Location: South of Buford, southeast of Meeker along the northern and western boundaries of the Flat Tops Wilderness in Rio Blanco County
CRA Name: Big Ridge to South Fork A
CRA Acres: 35,400
2001 Name: Big Ridge to South Fork A
2001 Acres: 35,300
SRCA Name: Big Ridge – South Fork
SRCA Acres: 37,700
(Note: The WRNF and CRA inventories use a different boundary line between these adjacent areas than does the SRCA inventory. The SRCA boundary is a short border at

the geographic pinch point along the South Fork of the White River. The WRNF and CRA inventories extend the boundary up the opposite side of the canyon along the Cliff Lakes drainage and one of its tributaries. Acreage numbers, therefore, are not exactly equivalent.)

The southeastern boundary of Big Ridge to South Fork A is entirely adjacent to the Flat Tops Wilderness, and its southern end is adjacent to the Big Ridge to South Fork B Roadless Area.

The WRNF and CRA inventories exclude six significant portions of national forest land for reasons unrelated to actual roadlessness, such as range improvements, past timber thinning, lack of solitude, and off-road motorized travel. The SRCA boundary is based on inventoried roads and the national forest boundary, and should be used as a model for correcting the CRA boundary in the Big Ridge, Marvine Campground, Yellowhorse, Ute Creek, Crooks Park, Baily Lake, JK Ridge and Hiner Spring areas.

Big Ridge to South Fork B Roadless Area
Blanco Ranger District, with a few acres in the Rifle District
Location: Directly south of Buford. The New Castle-Buford Road (FSR 2-245) runs along its western boundary.
CRA Name: Big Ridge to South Fork B
CRA Acres: 6,000
2001 Name: Big Ridge to South Fork B
2001 Acres: 6,000
SRCA Name: Burro Mountain
SRCA Acres: 14,600

The Big Ridge to South Fork B Roadless Area is adjacent to Big Ridge to South Fork A Roadless Area. *(Note: The SRCA Burro Mountain Roadless Area boundary includes the Hiner Spring area at its southeast end, which is adjacent to the Flat Tops Wilderness Area. The WRNF and CRA boundaries include this area in Big Ridge to South Fork A, so Big Ridge to South Fork B in these inventories doesn't reach to the Flat Tops WA.)*

The Burro Mountain/Greenstreet exclusion from the Big Ridge to South Fork B Roadless Area is large enough to stand as a roadless area on its own, and is totally unjustifiable. The existence of a few off-road vehicle trails within an area in no way disqualifies it from the Roadless Inventory. We note that: the WRNF Pagoda Peak Roadless Area has a major ATV route, the Pagoda Lake Trail (FST 2-1804), running through the heart of it. The forested flanks of Burro Mountain and the mixed forest-grassland plateau that forms its summit are quintessential examples of the Flat Tops landscape – rich in beauty, solitude and forest and wildlife values.

The general boundary for the Big Ridge to South Fork B/Burro Mountain Roadless Area should be the Blair Mountain Road (FSR 601) to the south and the New Castle-Buford

Road (FSR 2-245) to the west, as is the case with the SRCA Burro Mountain Roadless Area.

Black Lake East Roadless Area
Dillon Ranger District
Location: Gore Mountains north of Silverthorne near the Green Mountain Reservoir
CRA Name: Black Lake East
CRA Acres: 700
2001 Name: Black Lake East
2001 Acres: 700
SRCA Name: Black Lake East
SRCA Acres: 1200

The Black Lake East Roadless Area is adjacent to the Eagles Nest Wilderness Area along its southwestern boundary.

The SRCA inventory found an additional 500 acres of contiguous roadless land south of McKinley Gulch and added it to the WRNF inventoried area. Terminating the boundary of the roadless area at McKinley Gulch appears to be entirely arbitrary and the CRA needs to be extended to include the entire SRCA-inventoried area.

Blair Mountain Roadless Area
Rifle Ranger District
Location: Flat Tops Mountains north of Glenwood Springs
CRA Name: Blair Mountain
CRA Acres: 500
2001 Name: Blair Mountain
2001 Acres: 500
SRCA Name: Blair Mountain
SRCA Acres: 1700

The Blair Mountain Roadless Area is adjacent to the Flat Tops Wilderness along its eastern and northern border.

The Blair Mountain Roadless area exemplifies, on a small scale, the difference between applying the "defensible boundary" principle used by the White River National Forest to inventory as roadless only those areas where the terrain itself prevents wilderness-incompatible uses such as snowmobiling and other off-road vehicle use, and inventorying roadless areas based on the existence of roads. The SRCA road-based inventory has over three times the acreage of the WRNF and CRA inventoried area. From southeast to north, the SRCA Blair Mountain Roadless Area is bounded consecutively by: the Blair Overlook (FSR 8-601.2E), Blair Mountain (FSR 8-601.1), Cow Lake (FSR 601.2F), Bench (FSR 8-647.1), FSR 647.1A, and again the 647.1 Roads.

Boulder Roadless Area
Dillon Ranger District
Location: North of Silverthorne in Summit County
CRA Name: Boulder
CRA Acres: 1,300
2001 Name: Boulder
2001 Acres: 1,300
SRCA Name: Boulder
SRCA Acres: 1,500

The Boulder Roadless Area is adjacent to the Eagles Nest Wilderness. The CRA inventory must be adjusted to follow FSR 5-1376.1 and FSR 1376.1D for the full length of its northern boundary, as the SRCA inventory does.

Budges Roadless Area
Eagle Ranger District
Location: Flat Tops Mountains north of Glenwood Springs
CRA Name: Budges
CRA Acres: 1000
2001 Name: Budges
2001 Acres: 1000
SRCA Name: Hunns Peak
SRCA Acres: 6100

The Budges Roadless Area is bordered on its west side by the Flat Tops Wilderness Area. It is a tiny remnant of the RARE II Hunns Peak Roadless Area that was partially logged during the 1980s. But the giant, standing dead beetle-killed spruce that drew loggers to the Flat Tops in the 80's are now gone – cut down or rotted. There will be no more logging on Hunns Peak for decades to come, if ever. The regrowth isn't yet marketable, and the timber roads that cut the area apart are closed, obliterated and fading into the grass. It is time to recover the area to something like its original shape. SRCA incorporated this practical vision into its inventory, and the Forest Service needs to take a closer look at what is actually happening on the ground.

At the very least, the sliver of roadless area called Budges needs to be extended south to the partially obliterated Buck Creek Road (FSR 4-463.1), more than doubling its current size. And if the State of Colorado is serious about protecting functioning roadless areas, it will take the condition of the land at face value and follow the area outlined by SRCA all the way down to Heart Lake, with a western boundary along the Dry Buck Loop (FSR 4-644.1) and the Wagon Wheel (FSR 4-6645.1) Roads, a southern boundary along the Bison Lake (FSR 640.1) and the Blair Mountain (FSR 4-601.1) Roads, and an eastern boundary along the Heart Lake (FSR 4-630.1) and Coffee Pot (FSR 600.1) Roads.

Buffer Mountain Roadless Area
Holy Cross Ranger District
Location: North of Vail in Eagle County
CRA Name: Buffer Mountain
CRA Acres: 11,000
2001 Name: Buffer Mountain
2001 Acres: 11,000
SRCA Name: Buffer Mountain
SRCA Acres: 11,600

The northern boundary of the CRA Buffer Mountain inventory needs to be corrected near the junction of FSR 7-734.1 with FSR 7-787.1. Some logging occurred in this area in the past, but this does not justify its exclusion from the roadless area, and certainly not to the extent of the WRNF inventory's exclusion.

Burnt Mountain Roadless Area
Aspen Ranger District
Location: Between the Snowmass and Buttermilk Ski Areas in Pitkin County
CRA Name: Burnt Mountain
CRA Acres: 1,600
2001 Name: Burnt Mountain
2001 Acres: 1,700
SRCA Name: Burnt Mountain
SRCA Acres: 1,900

The Burnt Mountain Roadless Area is adjacent to the Maroon Bells-Snowmass Wilderness Area. The CRA inventory boundary follows the Management Area 8.25 prescription boundary, rather than the actual ski area development or even the permit boundaries for Buttermilk and Snowmass. This needs to be corrected.

Chicago Ridge Roadless Area
Holy Cross Ranger District
Location: Northeast of Tennessee Pass along US 24 between Leadville and Minturn in Eagle County
CRA Name: Chicago Ridge
CRA Acres: 5,100
2001 Name: Chicago Ridge
2001 Acres: 5,100
SRCA Name: Chicago Ridge
SRCA Acres: 8,400

The WRNF and CRA inventories improperly exclude land to extensively buffer private inholdings and, more importantly, they remove the Ski Cooper cat-skiing area from the inventory. This is inventorying to use rather than character, and needs to be rectified.

The SRCA inventory shows how to properly protect private land and access while maximizing roadless area protection. The SRCA inventory itself needs to be updated to remove cherry-stems for FSR 7-731.1D, which has long been abandoned and allowed to grow over, and for the upper end of 7-731.1, which is fully decommissioned.

Crystal River Roadless Area
Sopris Ranger District
Location: Along the east side of the Crystal River between Carbondale and Marble in Pitkin and Gunnison Counties
CRA Name: Crystal River
CRA Acres: 6,100
2001 Name: Crystal River
2001 Acres: 6,100
SRCA Name: Crystal River
SRCA Acres: 6,300

The Crystal River Roadless Area is bounded on its east side by the Maroon Bells-Snowmass Wilderness Area. It is also adjacent to the Hay Park Roadless Area.

The WRNF and CRA inventories removed an area in Bulldog Creek beyond the end of FSR 3-310.1B from the inventory for no apparent reason. The excluded area is bounded on three sides by designated wilderness and the Crystal River Roadless Area. Only one side abuts private mining claims, and there are no roads or structures to detract from its roadless character. The CRA inventory needs to be amended to correct this omission.

Deep Creek Roadless Area
Eagle Ranger District
Location: North of Dotsero in Eagle and Garfield Counties
CRA Name: Deep Creek
CRA Acres: 9,900
2001 Name: Deep Creek
2001 Acres: 9,900
SRCA Name: Deep Creek
SRCA Acres: 14,700

The WRNF and CRA inventory boundaries for the Deep Creek Roadless Area are a confusing line that follows a road in one place and wanders across the landscape in others, not even following the obvious topographic features, such as a canyon rim, that the Forest Service commonly uses to create a "defensible boundary" for a prospective designated Wilderness Area. We see no reasonable explanation for this boundary. Forest Service policy – and common sense – deems that existing roads are appropriate boundaries for roadless areas. This is the standard that the SRCA inventory followed and that the CRA inventory needs to consistently apply.

In the case of Deep Creek the principal SRCA boundary is very straightforward – Coffee Pot Road (FSR 4-600.1) on the south and Jack Spring Road (FSR 4-618.1) on the north. The SRCA inventory does depart from its standard practice in one instance in Deep Creek by including about 1,000 acres north of FSR 4-618.1E, a closed road that the WRNF classifies as "Not Needed."

Dome Peak Roadless Area
Eagle Ranger District
Location: Southwest of Yampa, in Routt, Garfield and Eagle Counties
CRA Name: Dome Peak
CRA Acres: 12,000
2001 Name: Dome Peak
2001 Acres: 12,000
SRCA Name: Dome Peak
SRCA Acres: 12,500

The Dome Peak Roadless Area is adjacent to the Flat Tops Wilderness along its western boundary. The WRNF, CRA and SRCA inventories are largely in agreement. However, the WRNF inventory excluded a small area along the northern boundary (presumably to facilitate a future timber sale) and most of the area between the Flat Tops Wilderness and the North Derby Road (FSR 4-610). There is an irrigation ditch departing North Derby Creek near the WRNF/CRA boundary, and while this might be construed to reduce the wilderness value of this section, it in no way impairs its roadless qualities. The CRA boundary should be extended all the way to the WRNF boundary at the north edge of the Dome Peak Roadless Area, and should also include the SRCA extension in the southwest corner of the roadless area.

East Divide-Fourmile Roadless Area
Sopris and Rifle Ranger Districts
Location: Southwest of Glenwood Springs in Garfield and Pitkin Counties
CRA Name: East Divide-Four Mile Park
CRA Acres: 8,700
2001 Name: East Divide-Four Mile Park
2001 Acres: 8,700
SRCA Name: Fourmile East Divide
SRCA Acres: 10,000

The WRNF and CRA inventories exclude significant acreage in the Park Creek/Mancon Park area for no good reason. There has been logging in the Park Creek area, but not nearly to the extent of the excluded area. The roadless area boundary here needs to follow the roads – specifically FSR 3-320.1C and FSR 3-300.1P. The SRCA boundary needs to be adjusted here as well – the WRNF remapped 320.1C much further south than in the road inventory used for the SRCA boundary. And on the west side of the roadless area,

the route designated as 8-801.1M is in fact a fence line that should be absorbed into the roadless area boundary.

East Vail Roadless Area
Holy Cross Ranger District
Location: Southeast of Vail along Interstate 70 and the south side of the Vail Ski Area in Eagle County
CRA Name: East Vail
CRA Acres: 8,000
2001 Name: East Vail
2001 Acres: 8,000
SRCA Name: East Vail
SRCA Acres: 9,900

The WRNF and CRA inventory boundaries for East Vail were arbitrarily truncated at the east end of Battle Mountain. The SRCA inventory includes the entire area between the Vail Ski Area permit boundary and FSR 7-745.1, and between FSR 7-745.1 and FSR 7-770.1A down to the Shrine Pass Road FSR 7-709.1. There is no cause for the CRA inventory to exclude this large roadless acreage, with its significant wildlife and scenic value, from its inventory.

East Willow Roadless Area
Rifle Ranger District
Location: South of Silt in Mesa County
CRA Name: East Willow
CRA Acres: 7,100
2001 Name: East Willow
2001 Acres: 7,100
SRCA Name: East Willow
SRCA Acres: 8,100

The East Willow Roadless Area is adjacent to the Thompson Creek Roadless Area on the White River National Forest and to the Clear Fork and Turner Creek roadless areas on the Gunnison National Forest.

The SRCA inventory includes 1,000 acres south of the closed road FSR 8-268.1. The CRA inventory needs to look at the long-term status of this road – if it is to be decommissioned or permanently downgraded to trail status, the inclusion of the area would greatly enhance the integrity of the 100,000 plus acres of linked roadless areas in this area of vital wildlife habitat and migration corridors.

Elk Creek B Roadless Area
Rifle Ranger District

Location: Flat Tops Mountains north of New Castle
CRA Name: Elk Creek B
CRA Acres: 7200
2001 Name: Elk Creek B
2001 Acres: 7200
SRCA Name: Elk Creek
SRCA Acres: 43,600

Here the Forest Service took 40,000 acres of contiguous roadless land and turned it into a 7200-acre "roadless area" by taking the defensible boundary principle to a ridiculous extreme. The Elk Creek B Roadless Area doesn't even attempt to encompass all of the Elk Creek watershed's canyons – only their deepest and darkest parts. By strictly following the roads bounding these canyons and allowing for some 20 cherry stem spur roads in toward them, the SRCA inventory found a 43,600 acre area free of roads – an area just over six times the size of the official roadless inventory. The CRA inventory boundary needs to follow what is on the ground here, and not use the Forest Service's defensive approach to Wilderness designation. From East Elk Creek counterclockwise to Main Elk Creek the following roads form the outer boundary of the SRCA Elk Creek Roadless Area: 8-603.1, 8-603.1M, 8-651.1, 8-601.1, 8-648.1, 8-648.1C, 8-648.1B, 8-823.2B, 8-821.1E, 8-821.1, 8-821.1B, 8-601,4D, 8-601.1 (again), 8-N210.1, 2-245.1, 8-245.1.

Elliot Ridge Roadless Area
Holy Cross and Dillon Ranger Districts
Location: West of Green Mountain Reservoir in Summit and Eagle Counties.
CRA Name: Elliot Ridge
CRA Acres: 3100
2001 Name: Elliot Ridge
2001 Acres: 3200
SRCA Name: Elliot Ridge
SRCA Acres: 4700

The Elliot Ridge Roadless Area is bordered on the south by the Eagles Nest Wilderness Area. The WRNF and CRA inventories systematically exclude land on the east side of Elliot Ridge along the Upper Spring Creek Road (FSR 5-1834.1) and the Spring Creek Road (FSR 5-1831.1) that may not be pristine but are roadless. Likewise the area north of the Mahan Lake Trail (FST 1831.1A) has seen some logging activity but old logging roads are revegetated or revegetating. The area is roadless. The CRA inventory needs to accept the SRCA identified boundaries in these areas and use the actual roads along the northern boundary of the Elliot Ridge area as its own demarcations.

Fawn Creek-Little Lost Park Roadless Area
Blanco Ranger District
Location: North of Buford in Rio Blanco County

CRA Name: Fawn Creek-Little Lost Park
CRA Acres: 5400
2001 Name: Fawn Creek-Little Lost Park
2001 Acres: 5500
SRCA Name: Fawn Creek
SRCA Acres: 6900

Fawn Creek-Little Lost Park is separated from the much larger Morapos Roadless Area by Forest System Roads 2-290.1 and 2-250.2. There is a significant difference between the SRCA inventory and the WRNF and CRA inventories, as the WRNF excludes the western portion of the area due to the absence of "an identifiable and manageable boundary" for successful management as a wilderness area. The WRNF inventory also noted evidence of past mining and logging activity and was too close to existing roads and motorized activity. The CRA boundary should amend this arbitrary decision by the WRNF by extending the western boundary all the way to East Beaver-Yellow Jacket Road 2-250.2 at the northwest end, and to the Pole Patch Trail 2-2271 and the Fawn Creek Road 2-280.1 for the southern boundary.

Freeman Creek Roadless Area
Holy Cross Ranger District
Location: North of Vail in Eagle County
CRA Name: Freeman Creek
CRA Acres: 1,000
2001 Name: Freeman Creek
2001 Acres: 1,000
SRCA Name: Freeman Creek
SRCA Acres: 1,300

The Freeman Creek Roadless Area is adjacent to the Eagles Nest Wilderness Area. The SRCA inventory includes several hundred acres of wetland habitat along Freeman Creek between FSR 7-700.1 and FSR 7-701.1 that are not included in the WRNF and CRA inventories. The only plausible reason for this omission is that the Forest Service could not defend this area from snowmobile use, so it chose to pretend that it isn't roadless. For the purposes of the CRA inventory this valuable habitat needs to be added to its boundary for the Freeman Creek Roadless area.

Gallo Hill Roadless Area
Sopris Ranger District
Location: North of Marble in Gunnison County
CRA Name: Big Ridge to South Fork A
CRA Acres: 1,400
2001 Name: Gallo Hill
2001 Acres: 1,300
SRCA Name: Gallo Hill

SRCA Acres: 1,600

The Gallo Hill Roadless Area is bordered on its north side by the Maroon Bells-Snowmass Wilderness Area. The southern boundary of the WRNF-inventoried Gallo Hill Roadless Area was arbitrarily drawn back from the national forest boundary to create an irregular and inconsistent buffer between the inventoried area and adjoining private property. This boundary is contrary to agency policy and irrelevant to the purposes of the CRA inventory. The boundaries of the CRA area need to be redrawn to follow the public land boundary, as was the SRCA inventory boundary.

Game Creek Roadless Area
Holy Cross Ranger District
Location: South Vail in Eagle County
CRA Name: Game Creek
CRA Acres: 6,100
2001 Name: Game Creek
2001 Acres: 6,900
SRCA Name: Game Creek
SRCA Acres: 7,100

The CRA inventory presupposes an expansion of the Vail Ski Area into the Game Creek watershed because of a White River National Forest Plan management prescription allowing for it, and removed 800 acres from its roadless area boundary. This acreage needs to be reinstated.

Grizzly Creek Roadless Area
Eagle and Rifle Ranger Districts
Location: North of Glenwood Canyon in Garfield County
CRA Name: Grizzly Creek
CRA Acres: 6,700
2001 Name: Grizzly Creek
2001 Acres: 6,600
SRCA Name: Grizzly Creek
SRCA Acres: 43,100

The WRNF-inventoried Grizzly Creek Roadless Area is a paltry reflection of the magnificent expanse of wild land that actually exists in this southeastern corner of the Flat Tops. Reasons for the 85% reduction in acreage are not at all justified. On the western (Rifle Ranger District) side, acreage was removed to facilitate a proposed timber sale that never went through. On the Eagle RD side, the Forest Service declared that there was insufficient opportunity for solitude and that noise from Interstate 70 and the Rio Grande & Western rail line was audible throughout the area, portions of which are more than 7 miles from the interstate and most of which is more than a mile from any well-traveled road. That same district office found no such problems on the opposite side

of Glenwood Canyon, where it drew the boundary for the Little Grand Mesa Roadless Area right down to the railroad tracks.

In any event, the goal of the CRA is not to create the ideal Wilderness Area but to document the full extent of roadless lands remaining within Colorado's national forest. The SRCA inventory of the Grizzly Creek area is well suited to this purpose. The area is outlined by Interstate 70 on the south, the Forest boundary on the east, the Coffee Pot Road (FSR 4-600.1) on the north, and the Grizzly Jeep Road (FSR 8-632.1) and the Transfer Trail (FSR 8-602.1) on the west. At a maximum of 11 miles east-west and north-south, the area contains 3 Colorado Natural Heritage Program (CNHP) Potential Conservation Areas (PCAs): No Name Creek (Very High Biodiversity Significance), Grizzly Creek (High Biodiversity Significance), and Hanging Lake (Very High Biodiversity Significance). About half of the No Name and a quarter of the Grizzly Creek PCAs are covered by the CRA inventory area. Hanging Lake is 2½ miles outside of the proposed CRA.

Gypsum Creek Roadless Area

Eagle Ranger District
Location: South of Gypsum in Eagle County
CRA Name: Gypsum Creek
CRA Acres: 17,900
2001 Name: Gypsum Creek
2001 Acres: 17,900
SRCA Name: Gypsum Creek
SRCA Acres: 17,900

The Gypsum Creek Roadless Area and the Red Table Roadless Area are being managed as Recommended Wilderness by the White River National Forest. With the conversion of the road that once separated them into a trail, they are now one continuous, uninterrupted roadless area.

While the CRA inventory and the SRCA inventory cover the same number of acres, there are significant differences in the boundaries. The CRA inventory includes 900 acres west of the Suicide Mountain Jeep Road (FSR 464W.2N), which the White River National Forest lists as open to all vehicles, and instead uses the Old Man's Road (FSR 430.1B) in combination with several motorized and non-motorized trails as a boundary. The SRCA inventory of the area does not include these 900 acres but does include comparable acreage that the CRA inventory excludes by drawing its boundary to the rims of the glacial cirques on the north side of Red Table Mountain rather than following the roads along the relatively flat top of the ridge.

The SRCA members who monitor the White River National Forest have repeatedly recommended that the Suicide Mountain Jeep Trail be decommissioned and restored because it is un-maintained and very badly eroded. The point here, however, is that the

CRA inventory needs to use FSR 514 and FSR 464 along the top of the ridge as its southern boundary and FSR 464W.2N as its western boundary.

Hay Park Roadless Area
Sopris and Aspen Ranger Districts
Location: South of Carbondale in Pitkin County
CRA Name: Hay Park
CRA Acres: 11,100
2001 Name: Hay Park
2001 Acres: 11,100
SRCA Name: Hay Park
SRCA Acres: 11,700

In this case, even the SRCA inventory must be updated. All three of these inventories misclassify FDT 1957.2A, which enters the area near its northeast corner, as a road rather than the trail it its. The CRA and SRCA inventories need to be amended to reflect the true status of this route. The WRNF and CRA inventories also have a cherry-stem running southeast ½ mile past Dinkle Lake when in fact the route (FSR 3-311.1) ends at the lake.

Homestake Roadless Area
Holy Cross Ranger District
Location: South of Minturn in Eagle County
CRA Name: Homestake
CRA Acres: 4,100
2001 Name: Homestake
2001 Acres: 4,100
SRCA Name: Homestake
SRCA Acres: 4,200

The Homestake Roadless Area is adjacent to the Holy Cross Wilderness Area and to the No Name Roadless Area. The FSR 7-705.1M spur off of 7-705.1 has been permanently closed to vehicles and is now a trail. Because of this change in status, the Homestake and No Name Roadless Areas now adjoin. The CRA inventory needs to be updated to reflect this change.

Hoosier Ridge Roadless Area
Dillon Ranger District
Location: South of Breckenridge in Summit County
CRA Name: Hoosier Ridge
CRA Acres: 6,100
2001 Name: Hoosier Ridge
2001 Acres: 6,100

SRCA Name: Hoosier Ridge
SRCA Acres: 6,000

The WRNF/CRA Hoosier Ridge Roadless Area is adjacent to the SRCA-inventoried Hoosier Ridge Roadless Area on the Pike-San Isabel National Forest.

Housetop Mountain Roadless Area
Rifle Ranger District
Location: South of De Beque in Mesa County
CRA Name: Housetop Mountain
CRA Acres: 12,700
2001 Name: Housetop Mountain
2001 Acres: 12,700
SRCA Name: Housetop Mountain
SRCA Acres: 17,100

The Housetop Mountain Roadless Area adjoins the Mamm Peak Roadless Area on the White River National Forest and the Sunnyside Roadless Area on the Grand Mesa National Forest.

The WRNF inventory of the Housetop Mountain Roadless Area excludes approximately 2000 acres based on the possibility of incursions by off-road vehicles arriving through private lands with no public access easements. Such fears seem hardly justified, and furthermore, they are in no way applicable to a roadless area inventory.

There are also approximately 2000 acres of roadless national forest land between the Housetop Mountain and Mamm Peak Roadless Areas that need to be allocated to one roadless area or the other. In fact, only a non-motorized trail separates these two areas - the WRNF and CRA inventories are clearly deficient here.

The SRCA inventory includes areas excluded around the perimeter for potential, future ORV incursions and the roadless land between the Housetop and Mamm Peak Roadless Areas. The CRA inventory needs to follow suit.

Hunter Roadless Area
Aspen Ranger District
Location: Directly northeast of Aspen in Pitkin County
CRA Name: Hunter
CRA Acres: 1,100
2001 Name: Hunter
2001 Acres: 1,100
SRCA Name: Hunter
SRCA Acres: 3,000

The Hunter Roadless Area is adjacent to the Hunter-Fryingpan Wilderness Area. The WRNF inventory of this area was once again based upon what the agency considers a defensible wilderness area boundary, not a roadless area boundary. The closest road to the northern boundary of the WRNF and CRA inventoried area is ¾ mile away on the far side of the Hunter Creek Valley. The only possible threat to the inventoried area is the mountain bikers who are allowed to ride on designated trails in roadless areas, but this activity does not adversely affect roadless area characteristics and should not affect the inventory. The northern boundary of the SRCA area is formed by Pitkin County Road 20.A3 and FSR 1-130.1A, which run through Van Horn Park on the north side of Hunter Creek. This roadless area includes Hunter Creek and the remarkable willow wetlands included in the Colorado Natural Heritage Program's (CNHP) Hunter Creek Potential Conservation Area (PCA).

Since inventories were conducted by the WRNF and SRCA, Pitkin County has made a route use changes that make most of the Hunter Creek Valley a roadless area. The Smuggler Cutoff Road (Pitkin County 21.A1) has been permanently closed to four wheel traffic, making the whole north side of Smuggler Mountain and another ¾ mile of the valley floor roadless.

All three roadless area inventories need to be updated to reflect recent changes.

Little Grand Mesa Roadless Area
Sopris Ranger District
Location: East of Glenwood Springs on the south side of Glenwood Canyon in Garfield County
CRA Name: Little Grand Mesa
CRA Acres: 6,500
2001 Name: Little Grand Mesa
2001 Acres: 6,500
SRCA Name: Little Grand Mesa
SRCA Acres: 7,800

For unknown reasons, the WRNF inventory excluded approximately 1000 acres between Bear Creek and the Forest boundary 1¼ mile to the west from the inventory. There are no developments or uses within this area to justify its exclusion from the inventory, and the CRA inventory needs to correct this USFS oversight. About half of the CNHP Bear Creek PCA (High Biodiversity Value) is in the SRCA-inventoried roadless area but less than half of that segment is covered by the current CRA boundary. The Hubbard Cave PCA (General Biodiversity Value) is in all three inventories.

Lower Piney Roadless Area
Holy Cross Ranger District
Location: North of Avon in Eagle County.
CRA Name: Lower Piney

CRA Acres: 13,400
2001 Name: Lower Piney
2001 Acres: 13,400
SRCA Name: Lower Piney River
SRCA Acres: 23,500

The Lower Piney Roadless Area is bounded on the east by the Eagles Nest Wilderness Area. The WRNF and CRA inventories severely under-report the extent of roadless lands in the ecologically vital Lower Piney River-Piney Ridge region. Inventories should include the 3000 contiguous acres north of Chimney Rock between FS 753W.1 and FS 401.1E as well as the 4600 acres on the west side of the Cottonwood Peak Road (FSR 784.1) and north of the Box Canyon "Road" (FSR 7-404.1)—which disappears into the grass just north of Lost Lake. Hunters know well how rich this area is in wildlife and biologists recognize its importance too – it is an essential link between the southern and northern portions of the Gore Range and between the White River and Routt National Forests.

The CRA needs to take a hard look at the limits of the WRNF inventory and incorporate the major excluded areas identified in the SRCA inventory.

Mamm Peak Roadless Area
Rifle Ranger District
Location: South of Rifle in Garfield and Mesa Counties
CRA Name: Mamm Peak
CRA Acres: 25,400
2001 Name: Mamm Peak
2001 Acres: 25,300
SRCA Name: Mamm Peak
SRCA Acres: 26,600

The Mamm Peak Roadless Area on the WRNF adjoins the Battlements Roadless Area on the Grand Mesa National Forest. There are approximately 2000 acres of roadless national forest land in the Wallace Creek drainage between the Mamm Peak Roadless Area and Housetop Mountain Roadless Area that were excluded for no apparent reason – other than perhaps some off-road travel. Nor does the current WRNF road and trail inventory show an existing route to support the cherry-stemmed road extending from the northern forest boundary south and west up Bear Gulch. This route forms the westernmost boundary of the Mamm Peak Roadless Area. The CRA inventory boundary needs to be corrected to reflect this change in the base information and to connect these two major roadless areas.

Maroon East Roadless Area
Aspen Ranger District
Location: South of Aspen in Pitkin County

CRA Name: Maroon East
CRA Acres: 1,400
2001 Name: Maroon East
2001 Acres: 1,400
SRCA Name: Maroon East
SRCA Acres: 1,700

The Maroon East Roadless Area is adjacent to the Maroon Bells-Snowmass Wilderness Area. The WRNF and CRA inventories exclude the Maroon Bowl portion of the Highlands Ski Area. There will never be a ski lift in this high-avalanche danger, out of bounds expert-only bowl. So unless ski patrol avalanche control work isn't allowed in roadless areas, this piece of wild mountainside needs to be added to the CRA inventory. Olympic Bowl, just north of Maroon Bowl, is also excluded from the CRA inventory for no apparent reason. These areas should be added to the CRA inventory.

Maryland Creek Roadless Area
Dillon Ranger District
Location: North of Silverthorne in Summit County
CRA Name: Maryland Creek
CRA Acres: 1,500
2001 Name: Maryland Creek
2001 Acres: 1,500
SRCA Name: Maryland Creek
SRCA Acres: 1,700

The Maryland Creek Roadless Area is adjacent to the Eagles Nest Wilderness Area. There is a buffer as if for a roadway between the southern boundary of the CRA and the Wilderness boundary that needs to be corrected.

McFarlane Creek Roadless Area
Aspen Ranger District
Location: South of Aspen in Pitkin County
CRA Name: McFarlane Creek
CRA Acres: 1,400
2001 Name: McFarlane Creek
2001 Acres 1,400
SRCA Name: McFarlane Creek
SRCA Acres: 2,300

The McFarlane Creek Roadless Area is bordered on its eastern side by the Collegiate Peaks Wilderness Area. The WRNF and CRA inventory boundaries for the western side of this roadless area are generalized and incomplete. Specifically, they do not track the private inholdings along the top of Richmond Hill that actually bound the roadless national forest land on the east side of the mountain. The SRCA inventory boundary

consistently follows the Aspen Mountain Ski Area boundary, the private parcel boundaries and the Richmond Hill Road (CR 15.E). The CRA inventory boundary should do likewise, and can also eliminate an unnecessary cherry-stem in the SRCA area for the McFarlane Creek Trail, a non-motorized route where it enters the roadless area.

Meadow Mountain A Roadless Area
Holy Cross Ranger District
Location: South of Avon in Eagle County
CRA Name: Meadow Mountain A
CRA Acres: 1,600
2001 Name: Meadow Mountain A
2001 Acres: 2,100
SRCA Name: Meadow Mountain A
SRCA Acres: 2,600

The Meadow Mountain A Roadless Area is bordered on its south side by the Holy Cross Wilderness Area. The CRA inventory excludes the McCoy Park area – a cross-country ski area with no permanent roads – for no practical reason. The eastern boundary of the CRA inventory needs to be moved to the ski area road FSR 7-738.2A. There are also an additional 380 contiguous acres west of East Lake Creek documented in the SRCA inventory that need to be added to the CRA inventory to accurately reflect the roadless character on the national forest lands bordering the Holy Cross Wilderness Area.

Meadow Mountain B Roadless Area
Holy Cross Ranger District
Location: South of Avon in Eagle County
CRA Name: Meadow Mountain B
CRA Acres: 3,100
2001 Name: Meadow Mountain B
2001 Acres: 3,100
SRCA Name: Meadow Mountain B
SRCA Acres: 8,900

The Meadow Mountain B Roadless Area is bordered on its south side by the Holy Cross Wilderness Area. The WRNF clearly constructed the boundary of Meadow Mountain B to be only an easily managed addition to the Holy Cross Wilderness. This doesn't begin to reflect the true roadless nature of this critical wildlife area and scenic mountainside. The SRCA inventory boundary follows the roads, the private land, and ski area boundaries and properly shows the extent of roadless land in the area.

Morapos Roadless Areas A & B
Blanco Ranger District
Location: East of Meeker, north of Buford in Rio Blanco County

CRA Names: Morapos A and Morapos B
CRA Acres: 23,600 and 14,000
2001 Names: Morapos A and Morapos B
2001 Acres: 23,600 and 14,100
SRCA Name: Morapos (Milk Creek)
SRCA Acres: 39,000 combined.

There are no adjacent wilderness areas, but the Morapos Roadless Areas are adjacent to the 57,700 (CRA) acre Pagoda Peak Roadless Area on the Routt National Forest, which in turn is adjacent to the 9,200 (CRA) acre Pagoda Peak Roadless Area on the White River National Forest. Additionally the SRCA-inventoried Milk Creek Roadless Area is contiguous with the Morapos A Roadless Area on the west and adds 5000 acres. Altogether this roadless region is about 109,500 acres – one of the largest non-wilderness roadless areas in the state of Colorado, almost all of which is mid-elevation forest and grassland.

The SRCA inventory adds to the WRNF and CRA inventories land along the Moeller Creek Road 2-290.1 where the WRNF arbitrarily adjusted a boundary, and along the East Beaver-Yellow Jacket Road 2-250.2. It adds land that was previously logged and eliminates a few boundary cherry-stems for routes not open to large vehicle travel. The CRA inventory could be easily amended by using the above routes for the southern boundary and including all travel routes not open to full-size vehicles.

The WRNF inventory on which the CRA inventory is based separated the Morapos roadless region into two roadless areas based solely on management considerations; the SRCA inventory combines them into one.

Mormon Creek Roadless Area
Sopris Ranger District
Location: East of Basalt in the Upper Fryingpan River Valley in Pitkin County
CRA Name: Mormon Creek
CRA Acres: 3,000
2001 Name: Mormon Creek
2001 Acres: 3,000
SRCA Name: Mormon Creek
SRCA Acres: 4,400

The Mormon Creek Roadless Area is bordered by the Holy Cross Wilderness Area on its northern and eastern sides.

The WRNF inventory made unnecessary exclusions at the north end of this area for water diversion structures that might seem out of place within a designated Wilderness, but do not affect the roadless character of the area – the concrete structures were constructed via and serviced through the same underground tunnel system that channels the water under the Continental Divide to the Arkansas River. Additionally, the SRCA inventory

identified 1000+ acres of roadless land extending southward from the Mormon Creek Roadless Area along the west side of the Holy Cross Wilderness that need to be added to the CRA inventory.

North Elk Roadless Area
Blanco Ranger District
Location: South of Buford on the west side of the New Castle-Buford Road (FSR 2-245), in Rio Blanco and Garfield Counties.
CRA Name: North Elk
CRA Acres: 9,900
2001 Name: North Elk
2001 Acres: 10,000
SRCA Name: North Elk
SRCA Acres: 18,900

The North Elk Roadless Area is separated by a single road from several of the SRCA-inventoried roadless areas (Burro Mountain, Elk Creek and Three Forks) but directly adjacent to none.

Only three short segments of the WRNF/CRA Roadless Area boundary are drawn to an actual road. One shorter segment follows a private property boundary. Most of the northern boundary follows an ATV trail along the East Fork of North Elk Creek. The vast majority of this "roadless area" boundary follows canyon rims formed by the East, Middle and West Forks of North Elk Creek. A more proper and accurate roadless area boundary for the North Elk landscape would be generally bounded by: private land to the north and northwest; segments of the Widow Springs Road (FSR 2-212) and Wear Park Road (FSR 2-214) to the west; the Bar HL (FSR 2-211), Newcastle-Buford (FSR 2-245), Elk Ridge (FSR 2-248), North Elk Cutoff (FSR 2-248) Roads to the South; and the Newcastle Buford Road again to the east. A few extant and necessary system spur roads would need to be cherry-stemmed into this overall boundary.

North Independent A Roadless Area
Aspen Ranger District
Location: East of Aspen, along north side of State Highway 82 in Pitkin County
CRA Name: North Independent A
CRA Acres: 4,500
2001 Name: North Independent A
2001 Acres: 4,500
SRCA Name: North Independence A
SRCA Acres: 6,700

The North Independent A Roadless Area is bordered on its northern side by the Hunter-Fryingpan Wilderness Area. The WRNF inventory of this area created an excessive, unnecessary, and arbitrary buffer along the roads that bound the area – up to ½ mile along

the Smuggler Mountain Road (Pitkin County 21.1) at its north end, and up to ¼ mile along State Highway 82 along most of its extensive southern boundary. Additionally, it excluded all the roadless land around and east of the Lost Man Reservoir. The SRCA inventory properly documented all of this land and the CRA inventory needs to do the same.

North Woody Roadless Area
Aspen Ranger District
Location: Northwest of Aspen in Pitkin County
CRA Name: North Woody
CRA Acres: 8,500
2001 Name: North Woody
2001 Acres: 8.500
SRCA Name: North Woody
SRCA Acres: 10,000

The WRNF and CRA inventories failed to include all plainly contiguous unroaded and unlogged areas in the Woody Creek, Little Woody Creek, and Collins Creek watersheds that comprise the North Woody Roadless Area. The CRA inventory boundary needs to be extended to match the SRCA North Woody boundary in order to give a complete and accurate accounting of the actual size and shape of this roadless area.

Pagoda Peak Roadless Area
Blanco Ranger District
Location: East of Buford on Rio Blanco County border with Routt County and with the Routt NF boundary, northwest of Ripple Creek Pass
CRA Name: Pagoda Peak
CRA Acres: 9200
2001 Name: Pagoda Peak
2001 Acres: 9200
SRCA Name: Pagoda Peak
SRCA Acres: 9300

There are no wilderness areas adjacent to the WRNF Pagoda Peak Roadless Area. However, this area is contiguous with the 57,700 (CRA) acre Routt NF Pagoda Peak Roadless Area, which in turn is contiguous with the 37,700 (WR) acre Morapos A & B Roadless Areas, and the Morapos A Roadless Area is contiguous with the SRCA-inventoried 5000 acre Milk Creek Roadless Area. Altogether this roadless region constitutes 109,500 acres – one of the largest non-Wilderness roadless areas in the state of Colorado, almost all of which is mid-elevation forest and grassland.

The differences between the SRCA and WRNF/CRA acreages for the Pagoda Peak Roadless Area are due to the WRNF arbitrarily excluding land along Rio Blanco County Road 8 because it lacked what the WRNF deemed proper "wilderness" characteristics –

not because it contained roads or other man-made features. The CRA inventory should be amended to use the actual County Road 8 and any Forest System road spurs maintained for full-size vehicle use as its area boundary rather than arbitrary lines drawn by the WRNF to depict a sense of what might constitute a proper wilderness boundary.

Piney Lake Roadless Area
Holy Cross Ranger District
Location: North of Vail in Eagle County
CRA Name: Piney Lake
CRA Acres: 900
2001 Name: Piney Lake
2001 Acres: 900
SRCA Name: Piney Lake
SRCA Acres: 2,200

The Piney Lake Roadless Area is adjacent to the Eagles Nest Wilderness Area. The WRNF and CRA inventory boundaries are crudely and arbitrarily drawn to exclude over 1,000 acres of clearly roadless land, including 3 miles of Red Sandstone Creek and its tributaries, and the associated riparian areas. The CRA inventory boundary needs to be amended to correct this shortcoming, as outlined by the SRCA inventory.

Porcupine Peak Roadless Area
Dillon Ranger District
Location: East of Dillon in Summit County
CRA Name: Porcupine Peak
CRA Acres: 7,700
2001 Name: Porcupine Peak
2001 Acres: 8,700
SRCA Name: Porcupine Peak
SRCA Acres: 9,500

The Porcupine Peak Roadless Area is adjacent to the Mount Sniktau Roadless Area on the Arapaho National Forest. The WRNF inventory boundary excludes 800 acres of roadless and unpermitted land around the Arapahoe Basin Ski Area, and the CRA inventory excludes 1800 such acres.

Ptarmigan A Roadless Area
Dillon Ranger District
Location: North and east of Silverthorne in Summit County
CRA Name: Ptarmigan A
CRA Acres: 2,700
2001 Name: Ptarmigan A
2001 Acres: 2,700

SRCA Name: Ptarmigan A
SRCA Acres: 4,100

The Ptarmigan A Roadless Area is bordered by the Ptarmigan Wilderness Area along the latter's entire western boundary. The WRNF and CRA inventory boundaries fail to include 1400 acres of contiguous roadless lands further north along the western boundary of the Ptarmigan Wilderness. There is no valid reason for this exclusion in the inventory, and these lands, as shown in the SRCA inventory, must be added to the CRA in order to make it complete. The western and northern boundary of this part of the SRCA-inventoried area is formed by the same utility corridor and the same type of large ranch properties that form the western boundary of the current CRA inventory area.

Ptarmigan B Roadless Area
Dillon Ranger District
Location: North of Silverthorne in Summit County
CRA Name: Ptarmigan B
CRA Acres: 1,800
2001 Name: Ptarmigan B
2001 Acres: 1,800
SRCA Name: Ute Pass
SRCA Acres: 2,500

The Ptarmigan B Roadless Area is bordered on its southern side by the Ptarmigan Wilderness Area and by the Williams Fork Ptarmigan Adjacent Roadless Area on the Arapahoe-Roosevelt National Forest to the east. In the SRCA inventory, it is also adjacent to the Acorn Creek (Ptarmigan C) Roadless Area to the south.

The western boundary of the Ptarmigan B Roadless Area is an arbitrary line between selected USGS benchmarks ½ mile and more from the Forest boundary. All of this excluded land is just as roadless as the land included in the CRA and WRNF inventories. Additionally, there is a 1/2 –mile deep arc excluded from the northern boundary along the Ute Pass Road (CR 15) that may contain some abandoned logging roads, but no current system roads. The CRA inventory must be extended to the forest boundary on the west and the county road on the north in order to fully and accurately reflect the actual extent of this roadless area.

Ptarmigan C Roadless Area
Dillon Ranger District
Location: North of Silverthorne in Summit County
CRA Name: Ptarmigan C
CRA Acres: 900
2001 Name: Ptarmigan C
2001 Acres: 900
SRCA Name: Acorn Creek

SRCA Acres: 1,700

The Ptarmigan C Roadless Area is bordered on its eastern side by the Ptarmigan Wilderness Area, and in the SRCA inventory is also adjacent to the Ute Pass (Ptarmigan B) Roadless Area to the north.

The western boundary of the Ptarmigan C Roadless Area is an arbitrary line between selected USGS benchmarks up to ¾ mile and more from the Forest boundary. All of this excluded land is just as roadless as the included land. The CRA inventory must be extended to the forest boundary on the west in order to fully and accurately reflect the actual extent of this roadless area.

Ptarmigan Hill A Roadless Area
Holy Cross Ranger District
Location: South Vail Pass in Eagle County
CRA Name: Ptarmigan Hill A
CRA Acres: 13,100
2001 Name: Ptarmigan Hill A
2001 Acres: 13,100
SRCA Name: Ptarmigan Ridge
SRCA Acres: 13,600

The Ptarmigan Hill A Roadless Area is bordered on the east by the Ptarmigan B Roadless Area.

Ptarmigan Hill B Roadless Area
Dillon Ranger District
Location: West of the Copper Mountain Ski Area in Summit County
CRA Name: Ptarmigan Hill B
CRA Acres: 7,000
2001 Name: Ptarmigan Hill B
2001 Acres: 7,700
SRCA Name: Ptarmigan Ridge
SRCA Acres: 10,500

The Ptarmigan Hill B Roadless Area is bordered on the west by the Ptarmigan A Roadless Area. Near its southern end, the eastern boundary of the CRA departs from its shared boundary with the Ptarmigan A Roadless Area at Searle Pass, runs east-northeast up a ridge to Point 12,596 on Jacque Ridge, then northward down to the bottom of Guller Creek and thence northeast to the Forest Boundary. This excluded area of wild alpine terrain includes 700 acres prescribed in the Revised Forest Plan for ski area development plus some 2,700 acres of alpine ridges and valleys, half of which are within the CNHP Elk Mountain PCA (High Biodiversity Value). All of this acreage needs to be restored or

added to the CRA inventory in order to fully and accurately reflect the actual extent of this roadless area.

Red Dirt A Roadless Area
Eagle Ranger District
Location: North of Dotsero, off the Eagle County Colorado River Road (CR 301) in Eagle County, with a few acres at the west end in Garfield County.
CRA Name: Red Dirt A
CRA Acres: 10, 200
2001 Name: Red Dirt A
2001 Acres: 10,200
SRCA Name: Red Dirt
SRCA Acres: 12,900

The Red Dirt A Roadless Area is adjacent to the Flat Tops Wilderness along its western boundary, and to the BLM Hack Lake WSA along the western part of its southern boundary. Through the Hack Lake WSA it also connects to the Sweetwater Roadless Area on the WRNF.

The eastern boundary of the Red Dirt A Roadless Area appears to be entirely arbitrary in the WRNF and CRA inventories – it follows neither road nor watercourse nor other geographic feature of any kind. Up to that point, the southern boundary follows the Red Dirt Basin Road (FSR 4-611). The SRCA Red Dirt boundary continues to follow 611 east and then north to the Forest boundary, then along this boundary to Eagle County Road 39, northwest along 39 to the South Derby Road (FSR 4-613), then west along 613 to merge again with the WRNF/CRA boundary. *(Note: There is a forked cherry-stem along the SRCA eastern boundary for FSR 4-611.2A/2D that needs to be realigned to agree with a more recent WRNF road inventory.)*

The CRA boundary for this area needs to be readjusted to reflect the ground-based boundary drawn for the SRCA inventory. There is some evidence of logging and traces of old timber roads within this eastern extension, but nothing to deny its roadless character. There is also a significant stand (likely the largest stand on the White River) of Ponderosa Pine in the northeastern part of this extension.

The northern boundary for the WRNF and CRA inventories west of the Big Spring Road (FSR 4-618) has been drawn back from FSR 613 to follow the Lion Basin Ditch. There is no road along the ditch – the roadless area boundary should be redrawn to parallel 613 to a point where it merges naturally with the Flat Tops Wilderness Area boundary, as does the SRCA inventory boundary.

Red Dirt B (Derby) Roadless Area
Eagle Ranger District, with part of the western edge in the Blanco RD

Location: West of Burns, off the Eagle County Colorado River Road (CR 301) via CR 39. Lies in both Eagle and Garfield Counties.
CRA Name: Red Dirt B
CRA Acres: 2500
2001 Name: Red Dirt B
2001 Acres: 2400
SRCA Name: Derby
SRCA Acres: 5000

The western end of the Red Dirt B Roadless Area bounds the Flat Tops Wilderness Area. As with the eastern boundary of Red Dirt A, the eastern boundary of Red Dirt B appears to be entirely arbitrary in the WRNF and CRA inventories – it follows neither road nor watercourse nor any other identifiable geographic feature.

As with Red Dirt A, the SRCA inventory boundary follows national forest roads, the forest boundary, and in this case the boundary of a private inholding. On the north it is bounded by the Middle Derby Road (FSR 4-612) and the North Derby Road (FSR 4-610). At the eastern end it abuts the national forest boundary, then follows the private access Road 4-655 west to the private land boundary, along the northern and western edges of that parcel down to the South Derby Road 613, which it follows to the Flat Tops Wilderness boundary. The CRA Red Dirt B boundary needs to be amended to follow the same logical and identifiable borders as the SRCA-inventoried area.

Red Mountain Roadless Area
Aspen Ranger District
Location: Directly north of Aspen in Pitkin County
CRA Name: Red Mountain
CRA Acres: 6,500
2001 Name: Red Mountain
2001 Acres: 6,500
SRCA Name: Red Mountain
SRCA Acres: 6,800

The Red Mountain Roadless Area adjoins the Hunter-Fryingpan Wilderness at its eastern boundary. The WRNF and CRA inventories excluded land southwest of the Salvation Ditch on Red Mountain and left an irregular and unnecessarily large buffer around logging roads on Larkspur Mountain near the wilderness boundary.

Red Table Roadless Area
Eagle and Sopris Ranger Districts
Location: Between Basalt and Eagle in Eagle County
CRA Name: Red Table
CRA Acres: 39,100
2001 Name: Red Table

2001 Acres: 39,100
SRCA Name: Red Table
SRCA Acres: 43,200

The Red Table Roadless Area, properly mapped to show current conditions and to reflect the recent WRNF Travel Management Plan's Record of Decision, is no longer a discrete roadless area, distinct from adjacent Basalt Mountain B and the Gypsum Creek Roadless Areas. The CRA inventory boundary for the Red Table Roadless Area excludes three parts of an area that the White River National Forest has recommended for wilderness designation and is managing as such—taking management actions, for example, like closure and decommissioning of roads that formerly separated these inventoried roadless areas (see comments in Basalt Mountain B). The Gypsum Creek Roadless Area is included in this recommendation and the Red Creek Road (FSR 4-425.1) and a portion of the Red Table Road (FSR 3-514.1) have been closed to all mechanized and motorized traffic, so that these two areas are now one continuous roadless area unseparated by roads.

The excluded areas that need to be added to the CRA inventory are around FSR 4-457.1 southwest of the L.E.D.E. Reservoir, north of the Leeman Gulch Road 4-417.1, and along the wilderness section of FSR 3-514.1. Additionally, the SRCA inventory identified over 1,000 acres of contiguous roadless land southeast of the WRNF and CRA inventoried area, the majority of which is being managed as deer and elk winter range. The CRA inventory needs to be updated and extended to include all of the areas being managed as Wilderness and the additional SRCA acres in order to fully and accurately reflect the actual extent of this roadless area.

Reno Mountain Roadless Area
Rifle Ranger District
Location: South of Rifle in Mesa County
CRA Name: Reno Mountain
CRA Acres: 12,400
2001 Name: Reno Mountain
2001 Acres: 12,400
SRCA Name: Reno Mountain
SRCA Acres: 12,800

The Reno Mountain Roadless Area adjoins the SRCA Hightower Roadless Area on the Grand Mesa National Forest. The WRNF and CRA inventories excluded several hundred acres along the West Divide Creek Road (FSR 800.1) and in Cayton Gulch on the northern side of the roadless area for no apparent reason. The SRCA inventory program supports and employs this practical, iterative approach to mapping roadless area boundaries. The CRA inventory should also connect these Roadless Areas.

Ripple Creek Pass Roadless Area

Blanco Ranger District
Location: Between the northern edge of the Flat Tops Wilderness Area and Rio Blanco County Road 8 at the Ripple Creek Pass between the White River and Routt National Forests
CRA Name: Ripple Creek Pass
CRA Acres: 600
2001 Name: Ripple Creek Pass
2001 Acres: 600
SRCA Name: Ripple Creek Pass
SRCA Acres: 1500

The Ripple Creek Pass Roadless Area is adjacent to the northern boundary of the Flat Tops Wilderness at the boundary between the White River and Routt National Forests. Across the Routt National Forest boundary, it is adjacent to the much larger Bunker Basin Roadless Area (SRCA 16,100 acres, CRA 12,800 acres.

The WRNF excluded the greater part of the area between the Flat Tops Wilderness and the Ripple Creek Pass (CR 8) and Trappers Lake (FSR 2-205) Roads from its roadless inventory because of its proximity to these County and Forest Service roads. This is not a valid criterion for establishing a roadless area boundary and needs to be amended. The SRCA boundary that uses these two main roads and the Picket Pin –Lily Pond Trail 1812 at its very southeastern end is the model that the CRA should be following in this case.

Ryan Gulch Roadless Area
Dillon Ranger District
Location: On the western edge of Silverthorne in Summit County
CRA Name: Ryan Gulch
CRA Acres: 600
2001 Name: Ryan Gulch
2001 Acres: 600
SRCA Name: Ryan Gulch
SRCA Acres: 1,700

The Ryan Gulch Roadless Area is bordered on its western side by the Eagles Nest Wilderness Area. The southern boundaries of the WRNF and CRA inventories are arbitrarily truncated at Salt Lick Gulch, when in fact the national forest roadless lands bordering the Eagles Nest Wilderness Area extend all the way to the Frisco exit off I-70. The full extent of this roadless area is documented in the SRCA inventory. The CRA inventory for this area needs to be corrected to reflect this actual extent.

Salt Creek Roadless Area
Eagle Ranger District
Location: Southwest of Edwards in Eagle County
CRA Name: Salt Creek

CRA Acres: 5,600
2001 Name: Salt Creek
2001 Acres: 5,600
SRCA Name: Salt Creek
SRCA Acres: 10,600

The Porphyry Road 4-435.1 is, in fact, closed some distance south of the national forest boundary and so overgrown as to be impassable. This adds some 4,000 acres of contiguous roadless land and critical wildlife habitat from Porphyry Mountain west to Brush Creek to the CRA-inventoried area, including most of the CNHP East Brush Creek PCA (High Biodiversity Significance). The CRA inventory for this area needs to be extended to include this entire contiguous area in order to fully and accurately reflect the extent of this roadless area.

Sloan Peak Roadless Area
Aspen and Sopris Ranger Districts
Location: Northwest of Aspen in Pitkin County
CRA Name: Sloan Peak
CRA Acres: 20,000
2001 Name: Sloan Peak
2001 Acres: 20,100
SRCA Name: Sloan Peak
SRCA Acres: 31,400

The SRCA-inventoried Sloan Peak Roadless Area is adjacent to the Hunter-Frying Pan Wilderness Area at its eastern end.

There are two major deficiencies in the WRNF and CRA inventories of the Sloan Peak Roadless Area. The first is that about 3,000 acres of wild land directly adjacent to the Hunter-Fryingpan Wilderness Area are neither incorporated into the Sloan Peak Roadless Area nor inventoried as a roadless area in their own right. The reason given for not including them in the Sloan Peak Roadless Area is that a string of three privately owned mining claims nearly severs the continuity of public land between the currently-inventoried Sloan Peak Roadless Area and the section adjacent to the Hunter-Fryingpan Wilderness Area. But the southern two of these claims have permanent conservation easements on them and will never be developed, thus the actual roadless character of the land will remain continuous.

The second major exclusion is equally unjustifiable. Some 4,000 acres in the Red Canyon area were excluded because of a network of (mostly non-system) motorcycle trails. While such motor recreation would not be permissible in a wilderness area, it is specifically allowed in a roadless area.

Both of these errors in the WRNF inventory need to be corrected in the CRA inventory in order to make a full and accurate accounting of the extent of roadless land in this area.

The Red Canyon section must be added to the Sloan Peak area, and the Porphyry Mountain area (the area east of the mining claims) must be added to either the Sloan Peak or Wildcat Mountain Roadless Areas, or added to the inventory as a separate area.

Sweetwater A & B Roadless Areas
Eagle Ranger District
Location: Flat Tops Mountains north of Glenwood Canyon
CRA Name: Sweetwater A and Sweetwater B
CRA Acres: Sweetwater A 11,900, Sweetwater B 4300, 16,200 total
2001 Name: Sweetwater A and Sweetwater B
2001 Acres: Sweetwater A 11,900, Sweetwater B 4300, 16,200 total
SRCA Name: Sweetwater
SRCA Acres: 21,800

The Sweetwater A Roadless Area is adjacent to the Flat Tops Wilderness Area along its northern border.

Sweetwater A and B are typical of the White River National Forest's Flat Tops "Roadless" Areas – their boundaries were determined as much by topography as by constructed roads and delineated land ownership. The clear intent of the WRNF roadless inventory here was to select areas considered capable and available for management as wilderness under the Forest Service's own guidelines. Roadlessness is only the first of the factors that guided the WRNF in its selection of areas and boundaries.

The next was what it calls "defensible" boundaries – boundaries that physically discourage travel by snowmobiles and other off-road vehicles. On the Flat Tops, the "defensible" boundaries are the canyon rims – the broad grasslands and open forest that cover the greater part of the Flat Tops were abandoned to the off-road vehicle users. Since off-road travel by snowmobiles is not prohibited in roadless areas, the WRNF's criteria for boundary determination are totally unsuitable for the CRA inventory of the Flat Tops in particular. Sweetwater A alone leaves out 4300 acres of Flat Tops tableland between its official boundary and the nearest roads.

It is incumbent upon the CRA to look past the narrow limits of the WRNF inventory to include all of the identifiable roadless areas on the White River National Forest – and, most of all, on the Flat Tops – in its State of Colorado Roadless Inventory. There is little disagreement between the SRCA and CRA inventories over the northern, eastern and western boundaries of Sweetwater A – basically, two irrigation ditches near the Wilderness boundary that were cherry-stemmed out as if they were roads. The southern boundary is where the CRA inventory leaves the road – specifically the Coffee Pot Road (FSR 4-600.1) as the southwestern boundary and the Jack Spring Road (FSR 4-618.1) along the southern boundary. The SRCA inventory does leave a major cherry-stem in the area for the Picket Pin Road (FSR 4-641.1). The SRCA inventory uses 618 as the principal southern boundary for Sweetwater B as well.

Tenderfoot Mountain Roadless Area
Dillon Ranger District
Location: Directly east of Dillon in Summit County
CRA Name: Tenderfoot Mountain
CRA Acres: 8,400
2001 Name: Tenderfoot Mountain
2001 Acres: 8,400
SRCA Name: Tenderfoot Mountain
SRCA Acres: 14,400

The WRNF and CRA inventories for this area cover only the most pristine portion of the Tenderfoot Roadless Area, which leaves out 6,000 roadless acres, most of which is more than ¼ mile from the nearest road or other development. This under-inventory by the WRNF needs to be corrected in the CRA in order to reflect fully and accurately the actual extent of roadless land in this area. The SRCA inventory includes most of the Dillon Bay Fen (High Biodiversity Significance) and the Straight Creek (Moderate Biodiversity Significance) CNHP PCAs.

Tenmile Roadless Area
Dillon Ranger District
Location: Southwest of Frisco, west of Breckenridge in Summit County
CRA Name: Tenmile
CRA Acres: 6,200
2001 Name: Tenmile
2001 Acres: 6,400
SRCA Name: Tenmile Range
SRCA Acres: 27,800

The WRNF and CRA inventories of the Tenmile Roadless Area cover less than ¼ of the actual contiguous roadless land in the Tenmile Range. The Wilderness-oriented "defensible boundary" rationale appears to be fully deployed in this case: the entire inventoried area is on the steeper, wind and avalanche-scoured west side of the range where there is no possibility of ski area development or timber harvesting, and no private mining claims to create management headaches. These considerations have no application in a true roadless area inventory, such as the one conducted by SRCA. The CRA needs to abandon the restrictive approach to the Tenmile Roadless Area taken by the Forest Service and extend the inventory boundary to the actual roads and private land and permitted ski area boundaries used in the SRCA inventory.

Thompson Creek Roadless Area
Sopris and Rifle Ranger Districts
Location: West of Carbondale in Garfield and Pitkin Counties
CRA Name: Thompson Creek

CRA Acres: 18,500
2001 Name: Thompson Creek
2001 Acres: 18,500
SRCA Name: Thompson Creek
SRCA Acres: 31,200

The Thompson Creek Roadless Area is adjacent to the Clear Fork Roadless Area on the Gunnison National Forest. In the SRCA inventory, it is also contiguous with the Assignation Ridge and East Willow Roadless Areas, as well as the SRCA-identified Hayes Creek Roadless Area, forming a network of roadless land covering over 100,000 acres in an area of regional wildlife value.

The WRNF and CRA inventories for the Thompson Creek Area fail to account for changes in land ownership and route designations that have occurred since the WRNF inventory was initiated over ten years ago. In that time, the government has acquired large tracts of land from the defunct coal mine in Coal Basin west of Redstone, effectively connecting areas of national forest land previously separated by private holdings. Additionally, as the mine was decommissioned, many miles of mine roads were closed and reclaimed, which also served to consolidate and connect the roadless areas. The more recently conducted SRCA inventory takes these changes into account and should guide the necessary corrections and additions to the CRA inventory.

Tigiwon Roadless Area
Holy Cross Ranger District
Location: South of Minturn along US 24 in Eagle County
CRA Name: Tigiwon
CRA Acres: 2,000
2001 Name: Tigiwon
2001 Acres: 2,000
SRCA Name: Tigiwon
SRCA Acres: 3,800

The Tigiwon Roadless Area is adjacent to the Holy Cross Wilderness Area. The northern boundary of the WRNF and CRA inventories bears no relationship to roads or the Forest boundary, but consists of a series of cartographic lines between obscure landmarks. Peterson Creek Road (FSR 7-706), is virtually abandoned and closed to all but foot traffic, so it should be incorporated into the roadless area as well. This brings the Tigiwon Roadless Area boundary down to the Eagle River, excepting privately held mining claims near the river. The CRA inventory boundary needs to be extended to show the actual extent of roadless land in this area, as illustrated by the SRCA Tigiwon inventory.

Treasure Mountain Roadless Area
Sopris Ranger District

Location: Southeast of Marble in Gunnison County
CRA Name: Treasure Mountain
CRA Acres: 1,500
2001 Name: Treasure Mountain
2001 Acres: 1,500
SRCA Name: Treasure Mountain
SRCA Acres: 3,800

The Treasure Mountain Roadless Area is adjacent to the Raggeds Wilderness Area. The WRNF and CRA inventory boundaries bear no relation to roads, private parcels, or even the topography in the Treasure Mountain area, but consist of straight lines between highpoints in the upper part of the basin. As a result, the point on the northern boundary closest to the Crystal River Road (FSR 3-314.1) is still ½ mile away and 2,000 feet above the road. From the easternmost point on the boundary it is ¾ mile due east to the end of the North Pole Basin Road (FSR 3-314.3P).

The rationale for this severely truncated boundary was the potential for snowmobile and ORV trespass into the area – a questionable argument since most of the excluded area consists of 30-45 degree slopes scoured by avalanche paths. In spite of this harsh terrain, some of the lower slopes of Treasure Mountain are covered with inactive mining claims that the SRCA inventory used as its boundary wherever the national forest land doesn't reach all the way to the Crystal River Road. The CRA inventory needs to adopt this approach to fully and accurately account for the actual extent of roadless land on Treasure Mountain.

Wildcat Mountain Roadless Area
Sopris Ranger District
Location: East of Basalt near the headwaters of the Fryingpan River in Pitkin County
CRA Name: Wildcat Mountain
CRA Acres: 3,500
2001 Name: Wildcat Mountain A
2001 Acres: 3,500
SRCA Name: Wildcat Mountain
SRCA Acres: 3,300

The Wildcat Mountain Roadless Area is adjacent to the Hunter-Fryingpan Roadless Area. The SRCA inventory includes fewer acres than the WRNF and CRA inventories because it included the land on Cyclone Mountain at the west end of the Wildcat Mountain Roadless Area in its inventory of the Sloan Peak Roadless Area.

Wildcat Mountain B Roadless Area
Sopris Ranger District
Location: East of Basalt near the headwaters of the Fryingpan River in Pitkin County
CRA Name: Wildcat Mountain B

CRA Acres: 2,300
2001 Name: Wildcat Mountain B
2001 Acres: 2,300
SRCA Name: Wildcat Mountain
SRCA Acres: 2,400

The Wildcat Mountain B Roadless Area is adjacent to the Hunter-Fryingpan Wilderness Area. The SRCA inventory includes a small area northwest of Nast on the Fryingpan River that was once subjected to timber thinning. Because this area excluded in the WRNF and CRA inventories straddles the river and includes wetland areas, it is appropriate to manage it as a roadless area in the future, and it should be added to the CRA inventory.

Wildcat Mountain C Roadless Area
Sopris Ranger District
Location: East of Basalt near the headwaters of the Fryingpan River in Pitkin County
CRA Name: Wildcat Mountain C
CRA Acres: 4,700
2001 Name: Wildcat Mountain C
2001 Acres: 4,700
SRCA Name: Wildcat Mountain
SRCA Acres: 6,100

The Wildcat Mountain C Roadless Area is adjacent to the Hunter-Fryingpan Wilderness Area and to the Mount Massive Roadless Area on the Pike-San Isabel National Forest.

The WRNF and CRA inventories of this area excluded two large parcels of roadless land that should properly be included in Wildcat Mountain C. The WRNF inventory used two underground tunnels – the Charles H Boustead water diversion tunnel and the historic Hagerman railroad tunnel – to artificially truncate the roadless area at its south end. On the west side, a long strip between the Hunter-Fryingpan Wilderness boundary and FSR 3-505.1 needs to be added to the CRA inventory. The Colorado Natural Heritage Program includes almost all of this extension in its High Biodiversity Significance Fryingpan River PCA. On the eastern side, the Wildcat Mountain C Roadless Area is adjacent to the Mount Massive Roadless Area on the Pike-San Isabel National Forest, and both are adjacent to an area of land between the Ivanhoe Lake Road (Pitkin County 4I) and a powerline corridor. This piece should also be added to the CRA inventory.

Williams Fork Roadless Area
Dillon Ranger District
Location: North of Silverthorne and east of Route 9 between Ute Pass and the north end of the Green Mountain Reservoir.
CRA Name: Williams Fork
CRA Acres: 6600

2001 Name: Williams Fork
2001 Acres: 6600
SRCA Name: Williams Fork
SRCA Acres: 8800

The Williams Fork Roadless Area on the White River National Forest mirrors but never actually joins with the Copper Mountain Roadless Area on the Arapaho-Roosevelt National Forest side of the Williams Fork Mountains.

The WRNF and CRA inventories match ¾ of the SRCA inventory almost exactly. The big difference is 2000+ unroaded acres between FSR 5-2850W.1 in Cox Gulch and the White River/Arapahoe-Roosevelt forest boundary 2½ mile to the north. There are no apparent roads or other reasons to terminate the boundary at Cox Gulch. The CRA inventory needs to be amended to include all the roadless land on the west side of Williams Peak.

The WRNF inventory totally failed to account for a smaller roadless area (approximately 3500 acres) that does adjoin the Copper Mountain Roadless Area on the Arapahoe-Roosevelt National Forest. The eastern boundary of the Williams Fork Roadless Area is formed largely by a powerline and service road cutting across the range and down into the Blue River Valley. Between the powerline and the forest boundary lie Eagle Roost Mountain and most of the Pass Creek Watershed. This area was identified too late to field-check and include in the SRCA inventory. The CRA can amend this oversight by verifying the apparent roadless character of this area and adding it to the Copper Mountain Roadless Area.

Woods Lake Roadless Area
Sopris and Eagle Ranger Districts
Location: South of Eagle in Eagle and Pitkin Counties
CRA Name: Woods Lake
CRA Acres: 9,500
2001 Name: Woods Lake
2001 Acres: 9,500
SRCA Name: Woods Lake
SRCA Acres: 14,300

The Woods Lake Roadless Area is bordered by the Holy Cross Wilderness on its eastern side. The WRNF roadless inventory failed to include almost 5,000 acres of roadless land in the East Brush Creek watershed south and east of Fulford that is both adjacent to the Holy Cross Wilderness Area and contiguous with the land included in the inventory. The CRA inventory needs to be extended northward to include this section outlined in the SRCA inventory in order to fully and accurately represent all of the roadless land in this area.

C. **Roadless Areas That Were Excluded Altogether From the Roadless Inventory.** The WRNF roadless inventory failed to identify, among other areas, a number of smaller roadless areas on the White River that adjoin larger areas on other Forests, particularly along the Continental Divide between Hoosier Pass and Loveland Pass on the Dillon Ranger District. Recognizing and appropriately managing these areas is vital to protect wildlife corridors along and across the Divide, as several of these areas have considerable biological significance.

Bald Mountain Roadless Area
Dillon Ranger District
Location: Southeast of Breckenridge in Summit County
SRCA Name: Bald Mountain
SRCA Acres: 4,800

The Bald Mountain Roadless Area is adjacent to the Boreas Roadless Area on the Pike-San Isabel National Forest, which in turn is connected to the SRCA Mount Guyot Roadless Area on the White River National Forest.

The Bald Mountain Roadless Area contains portions of both the Colorado Natural Heritage Program's Boreas Pass Potential Conservation Area (Very high Biodiversity Significance) and the Mosquito Range PCA (Outstanding Biodiversity Significance). It is incumbent on the CRA inventory to correct this kind of oversight and add the area of the SRCA Bald Mountain Roadless Area to its current Boreas Roadless Area. There is substantial habitat for marten in the area.

Big Beaver Basin Roadless Area
Blanco Ranger District
Location: East of Meeker in Rio Blanco County
SRCA Name: Big Beaver Basin
SRCA Acres: 8,700
RARE II Name: Big Beaver Basin
RARE II Acres: 8,300

Big Beaver Basin is an area of high habitat value for a broad range of species of value and concern to the White River National Forest and the State of Colorado, including: boreal toad, boreal owl, flammulated owl, goshawk, northern leopard frog, and American three-toed woodpecker. Located in the far northwest portion of the Flat Tops Plateau region, it is an important transition area between the montane and grassland ecosystems. This area should be added to the CRA inventory.

Canyon Creek Roadless Area
Rifle Ranger District

Location: Northwest of Glenwood Springs in Garfield County
SRCA Name: Canyon Creek
SRCA Acres: 36,000
RARE II Name: Canyon Creek
RARE II Acres: 38,000

"Canyon Creek A (24a)" and "Canyon Creek B (24b)" were among the areas that the White River National Forest originally evaluated for wilderness availability and capability during the preparatory stage for the White River National Forest Land and Resource Management Plan revision. Because the areas deemed to have defensible boundaries for Wilderness management were so small (4200 and 2400 acres, respectively), they were dropped from the roadless area inventory entirely. This decision had nothing to do with the actual size of the roadless area involved, as the SRCA inventory found Canyon Creek to be one of the four largest roadless areas on the entire White River National Forest. Rather, the Forest Service's decision reflected only the agency's perceived inability to manage it as a wilderness area.

It is imperative that the CRA inventory look past this decision and toward the character of the landscape itself. Between the Clinetop Road (FSR 603) on the western side of the area to the Transfer Trail (FSR 602) on the eastern side lie ten miles of wildlands carved by five major creeks: East Elk, Boiler, Canyon, East Canyon and Keyser. From the Forest boundary on the south to the Blair Mountain Road (FSR 601) on the north is a full six miles. Only one road of any length (Boiler Creek, FSR 636) is cherry-stemmed into the area. After the Red Table/Gypsum Creek roadless area it is the least road-impacted area on the White River National Forest outside of a designated Wilderness Area.

Canyon Creek is an area of overall good habitat value for species of concern to the White River National Forest and the State of Colorado, including lynx, marten, northern goshawk, northern leopard frog, northern three-toed woodpecker, olive-sided flycatcher and tiger salamander. It is critically important year-round for bighorn sheep. The SRCA Canyon Creek Roadless Area also contains almost the entire CNHP East Elk Creek PCA (High Biodiversity Significance). Omission of this major area from the CRA inventory calls into question the validity of the whole inventory process.

East Miller Creek Roadless Area
Blanco Ranger District
Location: South of Meeker in Rio Blanco and Garfield Counties
SRCA Name: East Miller Creek
SRCA Acres: 6,200

East Miller Creek was not part of the original WRNF roadless area capability and availability evaluation, but is of comparable size and habitat value with the West Miller (10) and Middle Miller (11) areas that were evaluated. It has excellent overall habitat value, including an elk calving area, and is one of the least-disturbed areas for wildlife,

providing refuge and passage in the western portion of the Flat Tops. Its size, character and location warrant its inclusion in the CRA inventory.

Geneva Peak Roadless Area
Dillon Ranger District
Location: East of Breckenridge in Summit County
SRCA Name: Geneva Peak
SRCA Acres: 1,600

The Geneva Peak Roadless Area is adjacent to the Burning Bear Roadless Area on the Pike-San Isabel National Forest.

The CNHP Sullivan Mountain Potential Conservation Area (High Biodiversity Significance) straddles the Continental Divide between the Geneva Peak and the Burning Bear Roadless Areas. The Montezuma PCA (High Biodiversity Significance) touches it on the west site and it is adjacent to the Collier Mountain PCA (High Biodiversity Significance) to the north and the Handcart Gulch PCA (Very High Biodiversity Significance) to the south.

It is incumbent on the CRA inventory to add the SRCA Geneva Peak Roadless Area to its current Burning Bear Roadless Area.

Hayes Creek Roadless Area
Sopris Ranger District
Location: Southwest of Redstone in Pitkin County
SRCA Name: Hayes Creek
SRCA Acres: 7,800
RARE II Name: Drift Creek
RARE II Acres: 8,900

The Hayes Creek Roadless Area is adjacent to the SRCA-inventoried Clear Fork Roadless Area on the Gunnison National Forest and to the SRCA-inventoried Thompson Creek Roadless Area on the White River National Forest.

The Hayes Creek Roadless Area is an essential element in the 100,000+ acre Clear Fork Divide roadless area complex identified by state and national conservation groups for its exceptional habitat and landscape linkage value. Species found here include: boreal owl, boreal toad, marten, goshawk, American three-toed woodpecker, and tiger salamander.

The five adjacent national forest inventoried Roadless Areas that make up the larger Clear Fork Divide roadless complex are: Assignation Ridge, Hayes Creek, Thompson Creek and East Willow on the White River National Forest, plus the Clear Fork Roadless Area on the Gunnison National Forest. Additionally, the BLM Thompson Creek roadless area is adjacent to the Forest Service Assignation Ridge Roadless Area.

Hayes Creek alone has high habitat value for species of interest and concern to the White River National Forest and the State of Colorado, and together with the other five linked areas it is one of the biologically richest areas in and adjacent to the White River National Forest. The Hayes Creek Roadless Area is large enough to stand on its own without being linked to any other areas, and with the cessation of coal mining under its northern reaches, there is no reason to exclude it from the CRA inventory.

Hoosier East Roadless Area
Dillon Ranger District
Location: South of Breckenridge in Summit County
SRCA Name: Hoosier East
SRCA Acres: 900
RARE II Name: Red Peak
RARE II Acres: Part of 5500-acre Red Peak area

The Hoosier East Roadless Area is adjacent to the 5100-acre SRCA-inventoried Hoosier Pass Roadless Area on the Pike-San Isabel National Forest, which in turn is adjacent to the White River National Forest's Hoosier Ridge Roadless Area. About half of the Hoosier East Roadless Area is included in the CNHP Mosquito Range (Outstanding Biodiversity Significance) and the Boreas Pass (Very High Biodiversity Significance) Potential Conservation Areas.

The purpose for identifying this seemingly small area is to ensure a complete inventory of all the roadless areas that cross national forest boundaries, something the WRNF did not do, especially along this portion of the Continental Divide.

Horse Park Roadless Area
Rifle Ranger District
Location: South of Silt in Garfield County
SRCA Name: Horse Park
SRCA Acres: 7,100
RARE II Name: Horse Park
RARE II Acres: 9,700

The Horse Park Roadless area has high habitat value for a broad range of species of interest and concern to the White River National Forest and the State of Colorado, including: lynx, black swift, boreal owl, boreal toad, flammulated owl, golden crown kinglet, pygmy nuthatch, and Virginia warbler. It also contains a significant portion of the CNHP Willow Creek Potential Conservation Area (Moderate Biodiversity Significance). This RARE II area was dropped from the White River National Forest's inventory for unknown reasons. Nonetheless, the area is still of sufficient size and significance to warrant inclusion in the updated CRA inventory.

Independence Mountain Roadless Area
Dillon Ranger District
Location: East of Breckenridge in Summit County
SRCA Name: Independence Mountain
SRCA Acres: 5,600

The SRCA Independence Mountain Roadless Area is connected to the SRCA Swan Mountain Roadless Area. Independence Mountain is a vital wildlife link through the southeastern part of Summit County, and preserving its roadless status is vital to this function. It also contains parts of the CNHP Montezuma (High Biodiversity Significance) and the North Fork Swan River (Very High Biodiversity Significance) Potential Conservation Areas. Its significance and its size warrant its inclusion in the CRA roadless area inventory, especially in the context of the relatively well-developed landscape nearby.

McArthur Mountain Roadless Area
Aspen Ranger District
Location: South of Aspen in Pitkin County
SRCA Name: McArthur Mountain
SRCA Acres: 5,300
RARE II Name: Elk Mountain/Collegiate
RARE II Acres: 6,100

The McArthur Mountain Roadless Area is separated from the Collegiate Peaks Wilderness Area by a single jeep road (Pitkin County 15E), and carries the wild character and scenic value of that wilderness area right down into the Castle Creek valley. It stands well on its own as a roadless area and warrants inclusion in the CRA inventory.

Middle Miller Creek Roadless Area
Blanco Ranger District
Location: Southeast of Meeker in Rio Blanco and Garfield Counties
SRCA Name: Middle Miller Creek
SRCA Acres: 5,200

Middle Miller Creek was evaluated by the White River National Forest for wilderness capability and availability as area #11. Subsequently it was reduced in size for being too flat and open and it fell below the standard 5,000 acre threshold. The roadless character of the area under review was never in question, only its manageability as wilderness. Of course, this standard has no bearing on the CRA inventory. The Middle Miller Roadless Area, as outlined in the SRCA inventory, needs to be added to the CRA inventory.

Milk Creek Roadless Area

Blanco Ranger District
Location: Northeast of Meeker in Rio Blanco County
SRCA Name: Milk Creek
SRCA Acres: 5,000
RARE II Name: Pagoda Peak
RARE II Acres: 48,700

The current roadless inventories no longer include an unbroken expanse of roadless land solely on the White River National Forest that stretches from Milk Creek to Pagoda Peak, but there is no system road between the Milk Creek and Morapos A roadless areas. There are only the Three Points (FST 1807.2A) and the Konopic Cutoff (FST 1807.2B) trails. Given this situation, the SRCA inventoried Milk Creek Roadless Area needs to be merged into the Morapos A Roadless Area and included in the CRA inventory. The Milk Creek Area has good overall habitat values and includes Elk Winter Concentration and Severe Winter Range areas that are lacking in the currently inventoried Morapos A Roadless Area.

Mount Guyot Roadless Area
Dillon Ranger District
Location: East of Breckenridge in Summit County
SRCA Name: Mount Guyot
SRCA Acres: 1,400

The Mount Guyot Roadless Area is adjacent to the Boreas Roadless Area on the Pike-San Isabel National Forest, which also connects to the Bald Mountain Roadless Area just west of the Mount Guyot Roadless Area on the White River National Forest.

The purpose for identifying such a small area is to ensure a complete inventory of the all the roadless areas that cross national forest boundaries, something the WRNF did not do along this portion of the Continental Divide. The Forest Service must correct this oversight and add the area of the SRCA Mount Guyot Roadless Area to its current Boreas Roadless Area.

Patterson Creek Roadless Area
Eagle and Rifle Ranger Districts
Location: North of Glenwood Springs in Garfield County
SRCA Name: Patterson Creek
SRCA Acres: 700
RARE II Name: Hunns Peak
RARE II Acres: 13,200

The Patterson Creek Roadless Area is adjacent to the Flat Tops Wilderness. Due to later road construction, the Patterson Creek Area is no longer part of the Hunns Peak Roadless Area. However, it was included in the White River National Forest's forest planning

evaluation of areas capable and available for Wilderness designation as area 22b with 300 acres. The SRCA inventory GIS analysis found 400 more roadless acres contiguous with the area identified by the WRNF.

Since wilderness area boundaries are so often drawn with management considerations in mind, it is essential that a roadless area inventory look carefully at all possible qualifying lands to ensure that it includes all land with roadless qualities, regardless of whether there is any intent to add it to a wilderness area. Patterson Creek fits in this category and needs to be added to the CRA inventory.

Ruby Lakes Roadless Area
Aspen Ranger District
Location: Southeast of Aspen in Pitkin County
SRCA Name: Ruby Lakes
SRCA Acres: 2,400

The Ruby Lakes Roadless Area is adjacent to the Collegiate Peaks Wilderness Area. It is a pocket of scenic alpine roadless land bordered on three sides by the Collegiate Peaks Wilderness Area that deserves to be added to the CRA inventory.

Star Peak Roadless Area
Aspen Ranger District
Location: South of Aspen in Pitkin County
SRCA Name: Star Peak
SRCA Acres: 5,500
RARE II Name: Elk Mountain/Collegiate
RARE II Acres: 4,300

The Star Peak Roadless Area is adjacent to the CRA Double Top Roadless Area on the Gunnison National Forest (the Cement Mountain Roadless Area in the SRCA inventory).

Star Peak, with its long, jagged arêtes and deep cirques, is the iconic peak of the Castle Creek Valley. Were it not for the Pearl Pass and Taylor Pass on its western and eastern sides, the Star Peak Roadless Area would already be part of either the Maroon Bells-Snowmass or Collegiate Peaks Wilderness Areas.

The Star Peak Roadless Area is divided into two parts by the closed Cooper Basin Road (FSR 121.1) that leads to a closed iron mine on Taylor Peak and undeveloped mining claims on the north ridge of Taylor Peak. It is a functionally continuous alpine roadless area divided by ownership. The southern piece is adjacent to the Double Top Roadless area and certainly needs to be added to the CRA inventory, either on its own or as an addition to the Double Top Roadless Area. The northern section covers only about 3,000 acres but is classic alpine and sub-alpine terrain that includes the CNHP Taylor Pass Potential Conservation Area (Very High Biodiversity Significance). It should be

considered as a smaller, stand-alone roadless area or as a non-contiguous part of the larger Star Peak-Double Top Roadless Area.

Swan Mountain Roadless Area
Dillon Ranger District
Location: East of Breckenridge in Summit County
SRCA Name: Swan Mountain
SRCA Acres: 6,100

The Swan Mountain Roadless Area is adjacent to the Independence Mountain Roadless Area. The Swan Mountain Roadless Area contains half of the Elk Severe Winter Range in the upper Blue River Valley and the best overall habitat for species of interest and concern to the White River National Forest and the State of Colorado of the SRCA-inventoried roadless areas in the Upper Blue. These species include black swift, boreal toad, golden crown kinglet, marten, northern three-toed woodpecker, olive-sided flycatcher, pallid bat and tiger salamander. These characteristics, combined with its relatively small size and isolation from large areas of roadless land and designated Wilderness make it all the more important to add it to the CRA inventory and to keep it roadless.

Three Forks Roadless Area
Blanco and Rifle Ranger Districts
Location: North of Rifle in Garfield County
SRCA Name: Three Forks
SRCA Acres: 8,700
RARE II Name: Three Forks
RARE II Acres: 9,000

The Three Forks Roadless Area was analyzed in the White River National Forest's forest planning evaluation of areas capable and available for wilderness designation as area 18. As with so many roadless areas on the Flat Tops, the inventory boundary was restricted to the areas below canyon rims, so an 8700-acre area without roads became a 3000-acre area that was dropped from further consideration for recommendation as a wilderness area. The CRA inventory needs to look beyond this procedural process of elimination to the actual character of the land and add Three Forks to its roadless area inventory.

West Miller Creek Roadless Area
Blanco Ranger District
Location: South of Meeker in Rio Blanco and Garfield Counties
SRCA Name: West Miller Creek
SRCA Acres: 6,700

The West Miller Creek Roadless Area was analyzed in the White River National Forest's forest planning evaluation of areas capable and available for wilderness designation as area 10. As with so many roadless areas on the Flat Tops, the inventory boundary was reduced for its flatness, openness to snowmobiles, and even for grazing uses, so a 6700-acre area without roads became a 2600-acre area that was dropped from further consideration for recommendation as a wilderness area. The CRA inventory needs to look beyond this procedural process of elimination to the actual character of the land and add West Miller to its roadless area inventory.

Whale Peak Roadless Area
Dillon Ranger District
Location: South Eagle in Eagle County
SRCA Name: Whale Peak
SRCA Acres: 1,400

The Whale Peak Roadless Area is adjacent to the Jefferson Roadless Area on the Pike-San Isabel National Forest.

The purpose for identifying smaller areas is again to ensure a complete inventory of the all the roadless areas that cross national forest boundaries, something the WRNF did not do along this portion of the Continental Divide. Thus the SRCA Whale Peak Roadless Area should be added to the current Jefferson Roadless Area.

Please let us know how we can help you improve the Colorado roadless area inventory.

Sincerely,

Peter Hart
Conservation Analyst/Staff Attorney
Wilderness Workshop
PO Box 1442
Carbondale, CO 81623
O: (970)963-3977
F: (970)963-8447
peter@wildernessworkshop.org
www.wildernessworkshop.org

From: Rebecca Turner [rturner@americanforests.org]
Sent: Friday, July 15, 2011 12:38 PM
To: COcomments
Subject: CO Roadless Rule comments 2011 final letterhead
Attachments: CO Roadless Rule comments 2011 final letterhead.doc

Please find attached American Forests' comments on the CO Roadless Area Rule

Thank you

Rebecca R. Turner, Esq.
Director of Public Policy
American Forests
734 15th Street, N.W., Suite 800
Washington, DC 20005

tel. 202/737-1944 ext. 221
fax. 202/737-2547
rturner@americanforests.org

COR687

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July 14, 2011

Content Analysis Team
Attn: Roadless Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

Comments on proposed rulemaking for 36 CFR Part 294: Special Areas; Roadless Area Conservation; Applicability to the National Forests in Colorado

American Forests restores and protects urban and rural forests. Founded in 1875, the oldest national non-profit conservation organization in the country has served as a catalyst for many of the most important milestones in the conservation movement, including the founding of the U.S. Forest Service, the national forest and national park systems, and literally thousands of forest ecosystem restoration projects and public education efforts. Since 1990, American Forests has planted nearly 40 million trees in forests throughout the U.S. and beyond, resulting in cleaner air and drinking water, restored habitat for wildlife and fish, and the removal of millions of tons of carbon dioxide from the atmosphere. American Forests is working to support the protection of roadless areas in our national forests.

American Forests has been a strong supporter for increased protection of roadless areas since January 1998, when a national moratorium on roadbuilding in roadless areas was first announced, leading to the Roadless Area Conservation Rule of 2001. We believe roadless areas need greater protection because they provide vital ecosystem services to society such as clean air and water; critical fish, wildlife, and plant habitat; and climate regulation. These services also provide economic value that compares favorably with commodity production and other extraction-based activities which generally require road building.

Strong protection of Colorado roadless areas needs to continue in order to support small business owners and rural communities where hunting and fishing provide economic stability. However, roadless area protection and use by the energy and skiing industries remain in conflict with the interests of the hunting and fishing communities. To address the multiple interest groups involved, the proposed roadless rule aims to both protect the picturesque roadless areas of

Colorado and address the needs of the local energy and skiing industries. While the Administration's proposal offers some improvements from the 2001 Rule and offers state-customized forest management, we believe the rule still falls short on protecting several benefits that roadless areas provide, such as: undisturbed fish and wildlife habitat, local economic benefits, and outdoor recreational opportunities. To offer a higher level of protection, the rule designates 562,000 acres of Colorado's 4.2 million roadless acres as "upper tier", providing an increase in protection from the 2001 Rule levels. However, this percentage is much lower than the Idaho Rule, which also uses a tiered system and is already in effect. Colorado is proposing around 11 percent as "upper tier", while Idaho's level is around 30 percent. We recommend an expansion of land protected as "upper tier" acres that is comparable to the Idaho Rule levels in order to protect Colorado's valuable hunting and fishing grounds. Increasing the amount of acres designated as "upper tier" will be accomplished by limiting the exceptions for tree-cutting, sale, or removal and road construction/reconstructions (definition of *Colorado Roadless Area Upper Tier Acres*, sec. 294.41).

In order to accommodate the needs of the mining and ski industries, the proposed rule allows for multiple use and certain exemptions on roadless protection. In the proposed Colorado rule, road construction would be allowed on 8,000 acres of skiing areas and 20,000 roadless acres vulnerable to being cut down for existing oil, gas, and coal mining leases. Protection also does not apply to already existing leases. Designated "linear construction zones" (LCZs) allow the energy industry to construct temporary roads for development projects. The use of LCZs and tree-cutting may have significant impacts on fish, wildlife, and plant populations, including: an increase in invasive species, a loss of habitat viability, habitat fragmentation, and threats to endangered species. We recognize that while some tree removal is necessary to reduce the threat of wildfire and insect infestation, this process must be addressed separately from industrial development. We agree with considering alternatives (sec.294.46) that would relocate drilling on areas with pre-existing surface disturbance. Language recommending alternatives and limiting the amount of exemptions for LCZs will allow for more acres to be protected as roadless areas.

In the RDEIS, alternative four offers the most protection for Colorado roadless areas with public identified upper tier acres. This alternative designates a significantly larger number of acres as CRA upper tier than the proposed rule in alternative two (2,614,200 rather than 562,200). The upper tier protection in alternative four is at a comparable level to the Idaho Rule and is the most appropriate plan for protecting Colorado's roadless areas and wildlife habitat.

American Forests supports the protection of Colorado's roadless areas and the Administration's commitment to maintaining roadless area characteristics at least as protective as the 2001 rule. We are strongly supportive of a national roadless rule, eg. 2001, and therefore desire a state level rule. We want to continue to work towards creating a rule that can benefit us all. Thank you for

CCR 687

the opportunity to comment on the new proposals for protecting roadless areas on the national forests. Please feel free to contact American Forests should you have any questions regarding our comments.

Thank you,

Rebecca R Turner

Rebecca R. Turner, Esq.
Director of Public Policy
American Forests
734 15th St NW
Suite 800
Washington, DC 20005

COR688.

From: dennis atwater [datwaters@yahoo.com]
Sent: Monday, July 18, 2011 10:53 AM
To: COcomments
Cc: swplc@yahoo.com
Subject: Comments Attachment changed to another Word format
Attachments: swplc Roadless Comments.doc

Responding to your message, I have saved and sent in another word format, if you still have trouble, please let me know. Thanks, Dennis

COR 688

From; Southwest Public Lands Coalition
P.O. Box 172
Lewis, CO 81327
Swplc@yahoo.com

7-14-2011

To; Department of Agriculture
Forest Supervisor
Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812

COComments@fsroadless.org

Re; Proposed Colorado Roadless Rule

Our Organization is comprised of local citizens who represent all the primary multiple use categories of users to include, recreation, timbering, grazing, mineral, gas and oil exploration & extraction, local business, many other uses and user groups. We as concerned citizens have studied this proposed rule, the associated law and as a result, stand absolutely opposed to the proposed Colorado Roadless Rule. It is not in compliance with Federal, State and County laws and regulations. We comment at this time to establish "standing" for appeal should this proposed rule not be retracted in its entirety. It is not our intention to comment on all the inconsistencies at this time as the scoping, planning and implementation phases conducted to date by the Forest Service do not meet the first requirement of Federal Land Management Policy and Planning, the coordination requirement. There is sufficient precedent case findings to support legal recourse if necessary

The Forest Service is mandated by Congress to "Coordinate" with Local Government, (43 USC 1717). FLPMA, the Federal Lands Policy & Management Act of October 21, 1976 and FSMA, the Forest Service Management Act of 1976 also require "Coordination" with Local Government and Indian Tribes. Two of our Counties, Montezuma and Dolores have Land Management Plans that require Coordination as well. Coordination has a very specific meaning in the law and is not optional. The full requirement must be met by the agency or it is a flawed process. The Forest Service has not coordinated with Dolores or Montezuma County Local Governments as mandated by Federal law. For that matter, they have not coordinated as mandated and specified by law with other counties in Colorado that are directly impacted by the Roadless Rule, therefore, the entire process is flawed and must be retracted in its entirety.

The Forest Service, in scoping and planning is not in compliance with a number of Federal Acts. The Forest Service has not developed accurate, sufficient, compelling and area specific science as required by Federal acts to support implementing this proposed roadless rule. The language, purpose and driving force of this entire proposed rule is rooted in international interests representing Agenda 21 and not the short and long term best interests of the impacted public land, communities and United States Citizens. It must therefore be retracted in its entirety.

Southwest Public Lands Coalition
Chairman, D. Atwater

COR689.

From: Retzlaff, Elysia [emretzlaff@fs.fed.us]
Sent: Monday, July 18, 2011 11:10 AM
To: COcomments
Subject: CO Roadless Comment
Attachments: RoadlessComment_White_071411.PDF

Hello,

Attached is a comment we received at our office in Durango (San Juan NF). The comment was hand delivered so I have scanned it and attached it. I have also fowarded a hard copy to the regional office.

Thank you

Elysia Retzlaff
Planning and NEPA Coordinator
San Juan National Forest
970-385-1253
emretzlaff@fs.fed.us

COR 689

Colorado /Forest Service Conservation 36CFR Part 294 Proposed Rulemaking : Comment Special Areas: Roadless Area Conservation-Applicability to the National Forests in Colorado Action: Notce of Proposed Rulemaking Federal Register/ Vol. 76, No. 73 April 15 , 2011 to July 14, 2011 Colorado Roadless Areas Upper Tier Lands Conservation and Protection

National Forest Service: Focus is obviously to maintain a vigorous logging i.e. " tree cutting" program "subject to Regional Forestor approval" under the rubric "fuel treatment " "consistent with the forest plan" and "personal or administrative use" with the purpose of achieving some economic gain regardless of the adverse impacts on the watersheds and ecosystems.

An Environmental Impact Statement should be submitted with each proposed forest plan because it may be assumed that there will be changes to watershed maintenance of quality and quantity and alterations to the ecosystems with any and all surface and subsurface alterations that include erosion, pollution, and degradation that impact wildlife and population dependant on the relationships within the systems. The EIS should be prepared to include topographic maps and photographs that illustrate the conditions before and after the proposed actions by professional scientists within the agencies involved, and who can be held accountable for the results BY NAME.

Scope and Applicability Executive Order 12866 (and others ?)

"---authorizations for occupancy and use of NFS lands issued AFTER THE EFFECTIVE DATE of a final rule ." What is that date? Who decides that date? Some of these final dates have been prolonged and dragged out with the view to keeping in effect the old rules which more suit the political stance of the agency officials who do not change with the election of administration of a different persuasion. This is not an acceptable behavior. The public will hold NFS to account.

"---economically significant regulatory actions---" i.e. Small Business Regulatory Enforcement and Fairness Act (5 USC 800) *s this the primary driving force in your decision making?*

Timber companies are NOT small businesses. Oil companies are NOT small businesses. This fact has been clearly demonstrated by the development of the coal bed methane wells, and by the oil shale wells currently being drilled in the Rifle-Parachute, CO, area that are devastating the water and soils of those drill sites. Coal mines cause environmental devastation that cannot be environmentally restored, and health problems for the workers and their families that are permament.

When the rulemaking by BLM, and EPA are concurrent with Forest Service rulemaking and attuned to the preservation of elements of the environment, and not in conflict with other "multiple-use" principles that are purportedly promoted by the agencies, better outcomes can be promulgated. This current proposal contains conflicting objectives that cannot be resolved as it reads.

Lease modifications and lease exchanges can be made by the agencies with the cooperation of the minerals companies at any time prior to the development of the lands. The best interests of the public should be the motivating factor during the leasing and the permitting of operations on Federal (public) lands, and NOT the profit and pleasure of the minerals companies. We have had 8 years of genuflecting and simpering before the feet of the giants. You were notified by our votes that we were not taking their abuses , yet here we are with Clayton Williams calling the shots in Rifle. This is

7/14/11

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the man who lost the votes for Texas governor when he said in his campaign that "rape is not a crime". He has clearly demonstrated that position by his attitude toward the poor victims in Rifle.
Is it the position of the agencies affected by the contents and outcome of this current rulemaking that "business is predominant " in our beautiful west because they are rich "at our expense" and all-powerful? We the public who owns the Federal lands, demand that you who are the sworn protectors of our national heritage , and are by that oath " public servants" talk to us and listen to us , and carry out our wishes in your actions.

Sincerely

Maurine Mitchell White

University of Texas degree in Geology

USGS, MMS , BLM, BOR and Teacher certification Northern Arizona University

Maurine Mitchell White
7/14/11

RECEIVED
Signature: Art Sanchez
Date: 7/14/11 4:10 pm

COR 6889

MAURINE M. WHITE

[Social Security # removed]

PROFESSIONAL TRAINING COURSES

Carbonate Log Interpretation (Schlumberger)

Mineral Log Interpretation (Oil and Gas Consultants International)

Electric Log Interpretation and Techniques (Schlumberger)

Petroleum Geology and Subsurface Methods (Phillips Petroleum)

Oil and Gas Economic Evaluation (Monte Carlo Method)

Geographic Information Systems

Communitization, Unitization, Drainage, and Development of Oil and Gas Fields

Drainage Determinations

Geologic Hazards Assessments (University of Wyoming)

H_2S Gas Safety Practices in the Oil Field

Reservoir Engineering (Core Lab, Inc; Tooke Engineering)

Known Geologic Structures Determinations and Appeals

Groundwater, Advanced Hydrology and Contaminant Transport Evaluation Techniques

Management of Uncontrolled Hazardous Wastes Sites

NTL 2B and NTL 3A: Water Sample Analysis

Coal Management (Technical Support)

Legislation and Regulations, Congressional Subcommitte Hearings:
- On-Shore Oil and Gas Leasing
- Withdrawal of Public Lands from Minerals Operations
- National Strategic and Critical Minerals Advisory Committee
- Prepared Interagency Response to Environmental Protection Agency on Disposal of Hazardous and Toxic Mining Wastes

Professional Memberships/Conventions:
- American Society of Photogrammetry and Remote Sensing
- American Association of Petroleum Geologists
- West Texas Geological Society
- Wyoming Geological Association
- Wyoming Geological Survey

Publications:
- Guidelines for Conducting Groundwater Studies in Support of Resource Program Activities (co-author), 1985: Technical Reference 7230-1, Bureau of Land Management
- Coal Operations Manual, 1986: Bureau of Land Management

Maurine M. White
7/14/11

COR 689

Technical Reports in Geohydrology, Geology, Watershed, F estry, and N ral and Cultural Resources for illing and Production of Oil and Natural Gas and Solid Minerals, and for Land Withdrawals, for Stipulations, for Wilderness Study Areas, and Unique Ecologies, for the following Environmental Impact Statements Environmental Assessments, and Response to EPA Proposed Rulemaking:

1. Disposal of Hazardous and Toxic Wastes in Landfills, Caves, Mines, Salt Domes and Injection Wells
2. Searles Lake Brines Geohydrological Regime
3. Red Desert of Wyoming Unique Ecological Niches
4. Lahontan and Rye Patch Nevada Threatened and Endangered Species and Unique Ecology
5. Bridger-Teton National Forest (for the Cody, WY Forest Service Office) Geothermal Subsurface Structure in Connection with the Yellowstone National Park Geothermal Features
6. Fossil Fish National Monument Area Drilling by Mobil Oil and other resource development

Bear River Drainage Divide environmental cleanup and oil field development in connection with Riley Ridge Field, WY

7. Seedskadee Wildlife Refuge, WY in connection with collapse of dam and rebuilding by the Bureau of Reclamation
8. Pryor Wildhorse Range, Montana
9. Western Flyway corridor for bird migration
10. Land parcels for sale by the Bureau of Land Management in Star Valley, WY: thirty-three parcels bounded by private and State lands
11. Minnesota vegetation in traditional ceremonial use by Native American tribes endemic to the area
12. Bridger Coal Mine, WY, disposal of toxic effluents from stacks in playa lakes used as watering holes by wildlife, and adjacent to municipal water well for domestic use
13. Injection of Toxic Wastes and Produced Radioactive Waters into Deep Drilled Injection Wells in the Whitney Canyon Gas Plant, WY
14. Coal and Trona Mining, and Oil and Gas Drilling near the Flaming Gorge National Recreation Area
15. Reclamation of the Environment on the Wind River Indian Reservation from the early drilling and production of oil and gas and the mining of coal and radioactive minerals
16. Geothermal energy development outside the Yellowstone and Grand Teton National Parks for potential commercial uses as energy source and the possible detriment to subsurface conduits supplying waters to geothermal features in the parks

[Social Security # removed]

7/14/11

COR690.

From: Ted Zukoski [tzukoski@earthjustice.org]
Sent: Thursday, July 14, 2011 2:58 PM
To: COcomments
Subject: Comments on Colorado Roadless Rule RDEIS
Attachments: Power Consulting CRA-Coal GHG Final Report.pdf

To the Forest Service:

Please accept the attached critique prepared by Power Consulting of the Forest Service's analysis of climate change impacts of the varying alternatives as a comment on the RDEIS. I request that the Forest Service review and respond in detail to report.

Thank you.

Edward B. Zukoski

Attorney for Sierra Club and WildEarth Guardians
++++++++++++++++++++++++++
Edward B. Zukoski, Staff Attorney
Earthjustice
1400 Glenarm Place, #300
Denver, CO 80202
Ph: (303) 623-9466
DIRECT: (303) 996-9622
Fax: (303) 623-8083
tzukoski@earthjustice.org
www.earthjustice.org

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COR 690

Greenhouse Gas Implications of Changes in North Fork Valley, CO, Coal Mining: A Critical Review of the Colorado Roadless Areas Rulemaking RDEIS

Comments Prepared for
Sierra Club and Earthjustice
Boulder, Colorado, and Denver, Colorado

By

Thomas Michael Power
Donovan S. Power
Power Consulting, Inc.
Missoula, Montana
www.powereconconsulting.com

July 2011

COR690

Executive Summary

A. Management Policies for the Roadless Areas Will Significantly Affect Coal Mining

The U.S. Department of Agriculture Forest Service (Forest Service) has prepared a Revised Draft Environmental Impact Statement (RDEIS) in support of rulemaking for alternative management regimes for Colorado's roadless areas.[1] That RDEIS considers four alternatives that would provide greater or lesser protection to the roadless qualities of Colorado's remaining, unprotected roadless areas within National Forests. As a result of the restrictions on the building of roads under the various alternatives considered, the amount of coal that can be effectively mined in the North Fork Valley in western Colorado's Gunnison County varies from one management alternative to another.

This report focuses on how the Greenhouse Gas (GHG) emissions associated with the different levels of coal production would vary under those alternative roadless area management regimes. The purpose of this report is *not* to undertake a comprehensive analysis of GHG emissions associated with the different levels of coal mining analyzed by the RDEIS. That is an analysis the Forest Service is required to undertake. The purpose of this report is to make clear that the RDEIS did not provide an analysis of this significant environmental impact. The Forest Service must correct this serious omission before the environmental impact process is complete.

In the RDEIS, the Forest Service estimates that in the roadless areas of the Grand Mesa, Uncompahgre, and Gunnison National Forests (GMUG NF) there are about 1.2 billion tons of in-place coal reserves. For the mines on the GMUG NF affected by the roadless rule, if there are no roadless rule restrictions limiting access to this coal (Alternative 3), the RDEIS estimates that 675 million tons of coal would be potentially recoverable.[2] If the most protective roadless rule considered were to be adopted (Alternative 1), only 108 million tons of potentially recoverable reserves would be available. That is, a roadless area management decision that facilitated coal mining (Alternative 3) would make 568 million additional tons of recoverable coal reserves available for production, sale, and combustion.[3]

---

[1] Rulemaking for Colorado Roadless Areas Revised Draft Environmental Impact Statement, USDA Forest Service, April 15, 2011. www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5291426.pdf

[2] Specialist Report for Leasable Energy Minerals: Coal, prepared by Liane L. Mattson, GMUG NFs, Final Report, June 2010, p. 9, Alternative 3.

[3] Leasable Energy Minerals Report, Table 4, p. 9, and RDEIS Table 3-18, p. 35, comparison of Alternative 3 and Alternative 1. This includes more than just the Somerset coalfield roadless areas. It also includes the adjacent Grand Mesa coal field roadless areas. There currently are no coal leases there but

Compared to the annual production in the North Fork Valley in recent years of 16 million tons of coal, that 568 million additional tons of recoverable reserves represents a substantial quantity of additional coal that could be produced and burned if a management decision is made by the Forest Service to adopt a management alternative that facilitates access to that coal. Coal is the most carbon-intensive of the fossil fuels the burning of which releases substantial GHG. In addition, the three North Fork Valley mines that would produce this coal are among the most gassy coal mines in the United States. As a result, the mining of this particular coal would also release substantial quantities of methane gas which is at least 21 times more powerful than carbon dioxide as a heat-trapping greenhouse gas.

B. The RDEIS Incorrectly Concluded That Different Levels of Coal Mining Would Have No Impacts on Greenhouse Gas Emissions

The quantity of coal whose mining would be facilitated by, and quantity of the methane releases that would accompany, that mining under Alternatives 2 or 3 or 4 should have indicated the need for the RDEIS to provide a careful analysis of the impacts of the alternatives on greenhouse gas emissions and climate change. The RDEIS, however, does not analyze the impact of facilitating this additional coal mining on greenhouse gas emissions. Instead, the RDEIS asserts that facilitating this mining will have no significant impact on greenhouse gas emission. The RDEIS's discussion of the impact of different levels of coal mining on greenhouse gas emissions is contained in a single paragraph with only four sentences on greenhouse gas emissions. That brief statement simply asserts, without supporting analysis, that despite the large differences in the level of coal mining under the various alternatives there will be no significant differences in GHG emissions. The RDEIS asserts:[4]

1. The relevant GHGs to be considered when evaluating different levels of coal mining are those associated with the fossil fuel consumed during the development of the mine and the extraction, processing, and transportation of the coal.

2. Reductions in coal production within roadless areas would likely just shift that coal production to areas outside of the Colorado roadless areas. Current customers for that coal in the eastern United States would simply shift their demand to other western U.S. sources.

3. Because substitute coal sources would replace any reduction in coal production from Colorado roadless areas, it is unlikely that any of the alternatives would result in a significant change to total atmospheric greenhouse gas concentrations.

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the RDEIS believes that there is the potential for coal development there over the next 15 years if a roadless rule does not restrict such development.

[4] P.129.

C. Changes in the Colorado Coal Supply Will Significantly Impact GHG Emissions

This report critically analyzes the RDEIS's assertions concerning GHG emissions and concludes that these assertions lack support and are contradicted by the facts. Our analysis demonstrates that if coal mining is reduced in the North Fork Valley, three things are likely to happen:

i. Powder River Basin or some other low methane source of coal will be substituted for *some* of the coal not mined in the North Fork and the releases of the powerful GHG, methane, will be significantly reduced; and

ii. Because coal supply will have been reduced and there are no perfect substitutes for the North Fork Valley coal, the cost of coal-fired electric generation will rise and the attractiveness of coal as a source of energy will decline, also reducing the emissions of GHG because of reduced coal combustions; and

iii. Energy users will turn to less carbon-intensive substitutes for coal including investments in energy efficiency by electric generators, businesses, and households, more generation from renewable energy sources, and natural gas.

All three responses would result in erstwhile consumers of North Fork coal meeting their energy needs with reduced GHG emissions. The Forest Service did not undertake even the most rudimentary analysis of these likely adjustments and their impacts on GHG emissions. Any subsequent Forest Service analysis must address these adjustments to reduced coal supply from the North Fork Valley and their GHG implications.

There are significant differences among the RDEIS alternatives in their GHG emissions. Below we estimate that in comparison to Alternative 1 (which would be the most protective rule) Alternative 3, which involves the implementation of no roadless area rule, would result in the release of an additional 546 billion cubic feet of methane as the North Fork Valley accessible coal reserves are mined.

To better understand what more than 500 billion cubic feet (cf) of methane means, we provide a few comparative examples. 500 billion cf of methane is roughly 20% more than all of the natural gas the United States uses in an average month of the year for residential consumption. It is approximately the annual consumption of all natural gas in the state of Indiana. It is roughly enough energy to run all of the natural gas vehicles in the US, at current consumption, for 17 years.[5] The point of these comparisons is to indicate the significant size of the methane gas volumes that facilitating the continued mining of North Fork coal will release.

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[5] The derivation of these estimates is found in the full report. We recognize that we are sometimes comparing *annual* emissions to emissions associated with the use of the estimated recoverable coal resources potentially rendered inaccessible in roadless areas due to rulemaking. Those estimated coal resources would be developed *over many years*. We are simply attempting to put those potential cumulative emissions in a context that indicates their large size.

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Because North Fork Valley coal has a higher BTU content than most other low sulfur western coals, its removal from the coal market will likely lead to increased use of less gassy but lower BTU coal that is also low in sulfur such as that found in the Powder River Basin of Wyoming and Montana. Burning the equivalent BTUs of that substitute coal would result in higher carbon dioxide emissions than burning the same BTUs of North Fork Valley coal. Even adjusting for this difference, the reduction in the mining of North Fork Valley coal would lead to a reduction in CO2 equivalent GHG of 190 million tonnes.[6] This is the equivalent of about 9.5 percent of the total CO2 output by coal fired electrical generation in the United States in 2006.

We have not quantified the reduction in GHG emissions associated with an overall reduction in coal combustion in the United States as a result of the adjustments to reduced coal supply. These would add to the differential emission associated with the different levels of coal mining associated with the RDEIS alternatives.

The purpose of this report is not to undertake a comprehensive analysis of GHG emissions associated with the different levels of coal mining analyzed by the RDEIS. That is an analysis the Forest Service is required to undertake. The purpose of this report is to make clear that the RDEIS did not provide an analysis of this very important environmental impact. The Forest Service must correct this serious omission before the environmental impact process is complete.

[6] "Tonnes" refers to "metric tons," i.e. 1,000 kilograms or about 2,200 pounds. Thus a metric ton represents about 1.1 "short tons" or the "tons" regularly used in the United States.

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About the Authors:

Thomas Michael Power is the Principal in Power Consulting, Inc. and a Research Professor and Professor Emeritus in the Economics Department at The University of Montana where he has been a researcher, teacher, and administrator for over 40 years. He received his undergraduate degree in Physics from Lehigh University and his MA and PhD in Economics from Princeton University.

Donovan S. Power received his undergraduate degree in Geosciences at the University of Montana and his M.S. in Geology from the University of Washington. He has been the principal scientist at Power Consulting, Inc. for the last three years.

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Greenhouse Gas Implications of Changes in North Fork Coal Mining

1. Introduction

The U.S. Department of Agriculture Forest Service (Forest Service) has prepared a Revised Draft Environmental Impact Statement (RDEIS) in support of rulemaking for alternative management regimes for Colorado's roadless areas.[7] That RDEIS considers four alternatives that would provide greater or lesser protection to the roadless qualities of Colorado's remaining, unprotected roadless areas within National Forests. The alternative providing the greatest protection to roadless areas would enforce the 2001 roadless rule promulgated by the Clinton Administration (Alternative 1). The alternative that would provide the least protection would not adopt any specific roadless rule but, instead, would leave the management of current roadless areas to each National Forests' forest plan (Alternative 3). Two other alternatives would seek to "carve out" the coal-bearing North Fork Valley roadless areas and exempt them from restrictions on roads necessary for the continued development of the region's coal resources (Alternatives 2 and 4).

This report focuses on how those alternative management regimes would impact coal mining in the North Fork Valley of western Colorado and the release of greenhouse gases (GHGs). The purpose of this report is *not* to undertake a comprehensive analysis of GHG emissions associated with the different levels of coal mining analyzed by the RDEIS. That is an analysis the Forest Service is required to undertake. The purpose of this report is to make clear that the RDEIS did not provide an analysis of this significant environmental impact.

The RDEIS makes explicit that the level of coal mining and the potential volume of coal extracted will vary among the alternatives the RDEIS analyzes. As the RDEIS says: "The 2001[Clinton] Rule does not withdraw inventoried roadless areas from the development of mineral material sites. However, it does prohibit road construction or reconstruction associated with developing new mineral material sites within inventoried roadless areas. This effectively precludes the sale and disposal of mineral materials from sites well within inventoried roadless areas…" (p.127). Thus the various alternatives management regimes considered by the Forest Service have significant implications for the future level of coal production in the North Fork Valley.

In the RDEIS, the Forest Service estimates that in the roadless areas of the Grand Mesa, Uncompahgre, and Gunnison National Forests (GMUG NF) there are about 1.2 billion tons of in-place coal reserves. This represents 75 percent of all of the 1.6 billion tons of in-place coal reserves across the whole of the GMUG NF.[8] The Forest Service approximates the potentially recoverable reserves by taking 50 percent of the coal

[7] Rulemaking for Colorado Roadless Areas Revised Draft Environmental Impact Statement, USDA Forest Service, April 15, 2011. www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5291426.pdf
[8] RDEIS, p. 121. Both IRA and CRA included.

reserves in place. For the mines on the GMUG NF affected by the roadless rule, if there are no roadless rule restrictions limiting access to this coal (Alternative 3), 675 million tons of coal would be potentially recoverable.[9] If the most protective roadless rule considered were to be adopted (Alternative 1), only 108 million tons of potentially recoverable reserves would be available. That is, a roadless area management decision that facilitated coal mining (Alternative 3) would make 568 million additional tons of recoverable coal reserves available for production and use.[10]

Compared to the annual production in the North Fork Valley in recent years of 16 million tons of coal, that 568 million additional tons of recoverable reserves represents a substantial quantity of additional coal that could be produced and burned if a management decision is made by the Forest Service to adopt a management alternative that facilitates access to that coal.[11]

Coal is the most carbon-intensive of the fossil fuels whose burning releases substantial GHGs. In addition, the three North Fork Valley mines that would produce this coal are among the most gassy coal mines in the United States. As a result the mining of this particular coal would also release substantial quantities of methane gas which is at least 21 times more powerful than carbon dioxide as a heat-trapping greenhouse gas.

The quantity of coal whose mining would be facilitated by, and quantity of the methane releases that would accompany, that mining under Alternatives 2 or 3 should have indicated the need for the RDEIS to provide a careful analysis of the impacts on greenhouse gas emissions and climate change. The RDEIS, however, does not analyze the impact of facilitating this additional coal mining on greenhouse gas emissions. Instead, the RDEIS asserts that facilitating this mining will have no significant impact on greenhouse gas emission. The RDEIS's discussion of the impact of different levels of coal mining on greenhouse gas emissions is contained in a single paragraph with only four sentences on greenhouse gas emissions. Although that paragraph promises that: "These and other effects are further discussed in the following sections," they are not. As a result the total of the "analysis" of greenhouse gas emissions in the RDEIS consists of the following four assertions: [12]

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[9] Specialist Report for Leasable Energy Minerals: Coal, prepared by Liane L. Mattson, GMUG NFs, Final Report, June 2010, p. 9, Alternative 3.

[10] Leasable Energy Minerals Report, Table 4, p. 9, and RDEIS Table 3-18, p. 35, comparison of Alternative 3 and Alternative 1. This includes more than just the Somerset coalfield roadless areas. It also includes the adjacent Grand Mesa coal field roadless areas. There currently are no coal leases there but the RDEIS believes that there is the potential for coal development there over the next 15 years if a roadless rule does not restrict such development. See Figure 3, p. 7 for a map of these coalfields (Coal Resource and Development Potential (2006), GMUG National Forests)

[11] Yet another way to look at this is to look at what the mining level would be in the <u>average year</u> under Alternatives 1 and 3. Alternative 1 has all mining operations stopping by 2018. (Bowie is forecasted to close in 2013, Elk Creek in 2012, and West Elk in 2018). Given their current production this would mean an average mining rate of 4.9 million tons per year for the duration of the study period (through 2025). This can be compared to alternative 3 which has an average mining rate of 11.7 million tons per year for the duration of the study period. These average projected mining levels do <u>not</u> deplete the available coal resources the RDEIS estimated would be available under the two alternatives by 2025.

[12] P.129.

1. The relevant GHGs to be considered when evaluating different levels of coal mining are those associated with the fossil fuels consumed during the development of the mine and the extraction, processing, and transportation of the coal.

2. The methane released by the North Fork Valley coal mines is a potent greenhouse gas. For that reason capturing or flaring that methane from future coal production could make an important contribution to greenhouse gas reduction.

3. Reductions in coal production within roadless areas would likely just shift that coal production to areas outside of the Colorado roadless areas. Current customers for that coal in the eastern United States would likely shift their demand to other western U.S. sources.

4. Because substitute coal sources would replace any reduction in coal production from Colorado roadless areas, it is unlikely that any of the alternatives would result in a significant change to total atmospheric greenhouse gas concentrations.

Three quite separate issues are raised in these RDEIS assertions. We will take each up in turn.

The conclusions from our analysis will contradict the above RDEIS assertions that GHG emissions will be unaffected by the various management alternatives being considered. Coal mining in the North Fork Valley contributes to climate change in three ways. First, coal mine operations contribute to climate change through the use, directly and indirectly, of fossil fuel to energize the heavy equipment used in mining and processing the coal and transporting it to customers. Second, North Fork mines release methane gas, a very powerful greenhouse gas, in unusually large amounts. Third, coal is only mined so that it can be burned. Coal combustion emits the GHG carbon dioxide.

The Forest Service could and should have analyzed and disclosed the impacts of each of the alternatives on climate change by examining in detail how the alternatives would change the GHGs that might result from each of these three sources. Instead, the RDEIS contains only the most cursory discussion of the GHG impacts of coal mine operations, and largely ignores the likely impacts of methane and coal combustion.

This stands in stark contrast to the efforts the RDEIS devoted to the measurement of the economic impacts associated with the various alternatives. The RDEIS carefully studied how the different levels of coal mining would impact regional production, employment, and labor income, commissioning an Economics Specialist Report on that topic. That report found "sizable" or "substantial" difference among the alternatives in terms of economic impacts.[13] However, when it came to the impact of those different

[13] RDEIS, pp. 295 and 306. Economics Specialist Report, pp. 50-51. While the Economics Specialist Report characterizes the impacts of mineral development as "substantial" (p. 50) and "sizeable" (p. 15) it

levels of coal mining on GHG emissions and climate change, the RDEIS provides almost no analysis or information except the general assertion that: "It is unlikely that reduced mineral extraction in roadless areas related to any alternatives would result in a significant change to total atmospheric greenhouse gas concentrations..." (p. 129). This failure to provide any analysis of the impact of the alternatives on GHG emissions is a serious and unnecessary omission.

Below we discuss the significant difference in GHG emissions associated with the RDEIS's various alternatives. We conclude that if coal mining is reduced in the North Fork Valley, three things will happen:

A. Powder River Basin or some other low methane source of coal will be substituted for *some* of the coal not mined in the North Fork and substituting that low-methane coal for high-methane North Fork coal will result in significant reduction in emissions of methane, a powerful GHG, and

B. Because coal supply will have been reduced and there are no perfect substitutes for the North Fork Valley coal, the cost of coal-fired electric generation will rise and the attractiveness of coal as a source of energy will decline, also reducing the emissions of GHGs because of reduced coal combustions; and

C. Customers will turn to less carbon-intensive substitutes for coal including investments in energy efficiency by electric generators, businesses, and households, more generation from renewable energy sources, and natural gas.

A mix of all three of these adjustments is likely to be the response to reduced coal supply. All three responses would allow coal consumers to meet their energy needs with reduced GHG emissions. The Forest Service did not undertake even the most rudimentary economic analysis of these likely adjustments and their impacts. Any subsequent Forest Service analysis must address these adjustments and their GHG implications.

2. Coal Mine Methane Emissions at the North Fork Valley Mines

The RDEIS explicitly states that the coal mine methane being released by the North Fork Valley Mines as coal is produced represents an important contribution to greenhouse gas emissions.

> Methane, a gas produced in underground coal mines and removed for safety reasons, is a potent greenhouse gas and capturing or flaring gas produced from the existing, as well as future, coal leases could be an important contribution to greenhouse gas reduction. (p. 129)

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also pointed out that in the regional context of a growing economy these impacts were "relatively small" (p. 50). This relabeling is more rhetoric than it is economics.

The RDEIS also indicates that reducing the release of GHGs from the mines is "desirable":

> Methane capture is desirable compared to venting or flaring due to the fact that methane is a potent greenhouse gas. The use of captured methane would also substitute for other fossil fuels, and thereby eliminate the environmental impacts, including GHG, associated with the production and transportation of those fuels. (p. 132)

Clearly the Forest Service recognizes the significance and importance of the coal mine methane emissions associated with additional coal mining in the North Fork Valley. It directly follows that a Forest Service decision to facilitate the ongoing mining of this gassy coal when there are sources of coal that release far less methane causes an "important" increase in greenhouse gas emissions. The RDEIS failed to discuss this "important" difference in the greenhouse gas impacts of the various alternatives considered.

Instead of directly discussing this important greenhouse gas implication of the alternatives, the RDEIS contradicts itself and concludes that there is no difference among the alternatives in terms of greenhouse gas emissions:

> It is unlikely that reduced mineral extraction in roadless areas related to any alternatives would result in a significant change to total atmospheric greenhouse gas concentrations, due to the substitution of other fossil energy sources. (p. 129)

This simply is not true.[14] If coal mining shifts from mines with some of the highest concentrations of methane release to less gassy coal sources such as Powder River Basin coal, in the Forest Service's words, "this could be an important contribution to greenhouse gas reduction." We discuss this in detail below. The RDEIS can and should analyze these effects in detail in any subsequently prepared NEPA document.

In addition, all fossil fuels do not have the same carbon emissions per Btu of energy. To the extent that natural gas is substituted for coal in energizing electric generators, there are significant reductions in greenhouse gas emissions. This too is ignored in the RDEIS's brief discussion of the greenhouse gas implications of that alternative. A later section will discuss the implications of this for the alternatives the RDEIS considers.

Under Alternative 1 of the RDEIS, coal mining in the North Fork is projected to cease altogether by 2018.[15] This can be compared to Alternative 3 which would have coal mining in the North Fork Valley continue until 2079. These are the end points of the

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[14] We assume that the RDEIS has not purposely shifted the emphasis from greenhouse gas "emissions" to greenhouse gas "concentrations." The latter refers to the cumulative impact of emissions over time, e.g. since the start of the industrial revolution. In percentage terms the impact on "concentrations" would be smaller than the impact on annual "emissions." There is no difference, however, in the level of concern about one as opposed to the other. They are different ways of describing the same problem.

[15] Economic Specialist Report 2010 at page 27 table E11.

possibilities that were considered in the RDEIS. It is informative to take a closer look at the implications of each of these alternatives.

A. If Current Coal Buyers Seek Substitutes for North Fork Valley Coal That Is No Longer Available Due to Roadless Area Protection, They are Likely to Turn to Powder Rive Base Coal to Replace Some of It

To help frame this comparison of the different alternatives some understanding of where North Fork coal is shipped and its place in the national market is important. Colorado is currently the 11th largest coal producer in the country (2010).[16] In 2010 Colorado produced 25.2 million tons of coal.[17] The North Fork mines in general produce high quality bituminous coal with low sulfur content. It is a relatively high priced source of coal compared, for instance, to Wyoming's Powder River Basin coal. It is also used in much smaller volumes by the non-Colorado electric generators who purchase it. This is due to its specialized use by those electric generators. Some of it is sold to electrical generators where it is blended with much higher sulfur coals from the eastern United States. This blending allows electric generators to meet emission standards that limit the pounds of sulfur emitted per million Btu of energy. With its high Btu and low sulfur content, North Fork coal is ideal for this use. North Fork coal is also stockpiled to be burned when ambient air quality events would otherwise require curtailment of generation to avoid potential violations of the Clean Air Act's local ambient air quality standards. In a conversation between the Forest Service, and the BLM, the Mining Engineer for the Uncompahgre Field Office stated that the North Fork coal was used as "a filler market [coal], rather than a major producer."[18]

Wyoming, by far the nation's leader in coal production, has a very similar kind of coal in terms of sulfur content and that coal is generally also burned to help reduce sulfur emissions as mandated by the Clean Air Act. It is so similar in fact that Wyoming coal mines sell to 17 of the same electric generators as Colorado coal does. The one striking difference is the volume of coal that Wyoming sells compared to Colorado coal in general but especially North Fork Valley coal. In 2009 the North Fork sold approximately11.6 million tons of coal.[19] During that same period Wyoming sold more than 431 million tons of coal. That is, Wyoming sold more than 60 times as much coal as the North Fork Valley did.

If Alternative 1 is selected and ultimately coal mining is phased out at the West Elk, Elk Creek, and the Bowie mines, the reduction in coal supply could be somewhat offset by expanded mining of Powder River Basin (PRB) coal. To completely offset the decline in

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[16] The EIA document "U.S. Coal Supply and Demand: 2010 Year in Review" clearly shows that in 2009 Colorado was the 10th leading coal producing state. This stands in contrast to the RDEIS which states that Colorado was the 6th leading coal producing state. In 2010Colorado was the 11th leading coal producing state. http://www.eia.gov/coal/review/pdf/feature10.pdf

[17] Ibid.

[18] Notes of Conversation between Liane Mattson, FS and Desty Dyer, Mining Engineer, BLM. 4-24-2008.

[19] http://www.eia.gov/coal/review/pdf/feature10.pdf

North Fork mining the increased PRB production would have to be increased approximately 2.5% over the PRB 2010 level of production. It is possible that PRB mines could increase production by this amount. Coal production in Wyoming increased from 2009 to 2010 by almost exactly 2.5%.

B. Substituting Powder River Basin Coal for North Fork Valley Coal Will Result in Far Less Methane Emissions Because Powder River Basin Coal Is Far Less Gassy Than North Fork Valley Coal Per Ton of Coal Mined

One of the principal differences between PRB coal and North Fork coal emerges during the mining process. PRB coal is mined in a fundamentally different manner than North Fork Valley coal. PRB coal is generally surface mined whereas North Fork Valley coal is mined underground. The North Fork underground mines are extremely gassy in terms of methane releases when compared to PRB surface mines. In fact the North Fork mines are some of the gassiest mines in the country.

Methane is produced when organic material is compressed and heated as it undergoes metamorphosis on its way to becoming coal. This process is called coalification. The Methane can be produced by anaerobic bacterial respiration or thermogenically as the organic material gets buried progressively deeper. The methane is stored in the matrix of the coal and can be released if pressure is taken off the coal. "Coal" is actually a spectrum mineral principally differentiated by its Btu content. At the low end of the spectrum of burnable coal for power generation is lignite and at the high end is anthracite. Anthracite is almost never burned to generate electricity because of its extremely high Btu content and value for other uses. Anthracite is relatively rare compared to the lower Btu families of coal.

PRB coal is a Sub-Bituminous coal and the North Fork coal is a slightly higher grade of coal, Bituminous. PRB coal has a 25-30 percent lower heat content when compared to the North Fork coal. PRB coal is generally about 8,800 Btu and North Fork coal is about 12,000 Btu. With the added Btu content of North Fork coal, comes a lot more methane gas. The PRB coal has been sitting so close to the surface, for so long, that the methane that was in the matrix of the coal has largely already been lost as it migrated out of the coal to a lower pressure (the atmosphere). This migration and loss of most of the methane from PRB coal likely happened so long ago that the methane did not contribute to the current anthropogenic rise in GHGs. This loss of the methane gas in the distant past stands in dramatic contrast to the North Fork coal where it was not possible for the methane contained within that coal, which has been deeply buried and under pressure for millions of years, to lose its methane. The important difference is that the PRB coal lost much of its methane well before the industrial revolution and North Fork coal is losing its methane now as it is mined.

The U.S. Environmental Protection Agency has tracked and expressed concern with the climate change implications of coal mine methane (CMM) for years. The EPA has identified mines all over the country that are extremely gassy in terms of methane

releases and has suggested ways that those mines might limit the CMM that they give off. Coal mines all over the country and around the world are actively capturing and using or flaring, or otherwise mitigating their CMM pollution. The North Fork mines were identified as having both high methane coal and a high potential to capture their CMM because to the high volume of it. In fact the West Elk mine in the North Fork Valley is currently capturing a small part of its methane to heat the mine.

CMM is a major contributor to climate change because methane is an extremely effective heat trapping GHG. Averaged over 100 years, it is at least 21 times more efficient than CO2 at trapping heat.[20] For a clearer understanding of just how much gassier the North Fork mines are when compared to PRB coal mines, we used the Black Thunder mine in the PRB and compare it to the Bowie No. 2 mine in the North Fork. Black Thunder produced 86 million tons of coal in 2007[21] while liberating about 9.4 million cubic feet per day (mmcf/d) of methane. Bowie No. 2 produced about 1.4 million tons of coal in 2009 while liberating 14 mmcf/d of methane[22]. Thus Bowie produces about 10 cf/ton and Black Thunder produces about 0.11 cf/ton of methane. That is, Black Thunder has about 1/90th the methane per ton that Bowie has.[23] Taking all of the North Fork mines together, they released about 32 mmcf/d of CMM while recovering about 11.6 million tons of coal in 2009.[24] Almost 300 million tons of PRB coal could be mined in Wyoming before a similar amount of methane would be released. This is equivalent to 27 times as much coal as the North Fork mines produce in a year. It is for this reason that facilitating the continued mining of the North Fork coal should be carefully analyzed in terms of the substantial greenhouse gas implications associated with the coal mine methane releases. The Forest Service should critically and carefully look at the impacts of facilitating the mining of some of the gassiest coal in the nation.

One can approximate the different GHG impacts of the alternatives the RDEIS analyzed by looking at the projected lifetimes of the North Fork mines as specified in the RDEIS, Table 3-18.[25] Part of this table has "estimated recoverable coal resources potentially rendered inaccessible in roadless areas due to rulemaking." Alternative 1 has 568 million tons rendered inaccessible and Alternative 3 (no action) has none. The average methane gas liberated per ton for North Fork coal mines, as estimated by the EPA in 2009, is about 1,006 cf [26]. Given this per ton volume of methane released, Alterative 1 would prevent the venting about 571 billion cf of CMM. Alterative 3 would save no CMM

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[20] IPCC. Changes in Atmospheric Constituents and in Radiative Forcing. 2005. Page 212 table 2.14 http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-chapter2.pdf and D. Shindell "Improved Attribution of Climate Forcing Emissions." *Science*. 2009.

[21] This value is from page 11 of a 2008 EPA document "U.S. Surface Coal Mine Methane Recovery Project Opportunities."

[22] These values are from page 2 of a 2010 EPA document "Coal Mine Methane Recovery at Active U.S. Coal Mines: Current Projects and Potential Opportunities." And http://www.deltacountyindependent.com/news/north-fork/17614-bowie-mine-is-temporarily-closed.html

[23] "Coal Mine Methane Recovery at Active U.S. Coal Mines; Current Projects and Potential Opportunities" 2010

[24] http://www.eia.gov/cneaf/coal/page/acr/table9.html and http://www.deltacountyindependent.com/news/north-fork/17614-bowie-mine-is-temporarily-closed.html

[25] Rulemaking for Colorado Roadless Areas Draft Environmental Impact Statement page 145 table 3-18.

[26] CMOP 2010 Coal Bed Methane Recovery at Active U.S. Coal Mines: Current Projects and Potential Opportunities

and vent all the methane gas into the atmosphere. If that coal is not mined in the North Fork and we assume an equal amount of coal in Btu terms comes from Wyoming, and, again, we take Black Thunder as a proxy for PRB coal, Alternative 1 would still save about 546 billion cf of CMM about 4 percent less than the 571 billion cf discussed above because of the need to mine more Wyoming coal to get the same Btus. Alternative 3 would save nothing.

To better understand what more than 500 billion cf of methane means, we provide a few comparative examples. 500 billion cf of methane is roughly 20% more than all of the natural gas the United States uses in an average month of the year for residential consumption.[27] It is approximately the annual consumption of all natural gas in the state of Indiana.[28] It is roughly enough energy to run all of the natural gas vehicles in the US, at current consumption, for 17 years. The point of these comparisons is to indicate the significant size of the methane gas volumes that facilitating the continued mining of North Fork coal will release.[29]

C. While Burning Powder River Basin Coal May Result in More GHG Emissions per Btu than North Fork Coal, Life-Cycle Emissions from Powder River Coal Are Still Substantially Lower than Life-Cycle Emissions from North Fork Coal

Another important way that we can look at the methane being released is to compare it to the CO2 that is released when the coal is burned. Not all coals release the same amount of CO2 when they are burned. There are modest differences among coals. The EPA pays close attention to the amount of CO2 released, and it provides the CO2 volumes for different coal types as well as different states.[30] Anthracite, the highest grade of coal, is also the dirtiest in terms of giving off the most CO2 per million Btu burned. The coal after Anthracite, in terms of pounds of CO2 per million Btu, is Lignite followed by Sub-Bituminous and finally Bituminous.

When comparing North Fork coal (Bituminous) with PRB coal (Sub-Bituminous), the lower CO2 emissions per million Btu needs of Colorado Bituminous coal compared to PRB Sub-Bituminous coal must be taken into account. The RDEIS estimates that Alternative 1 would prevent 568 million tons of coal from being mined in Colorado. This is the equivalent of 775 million tons of Wyoming PRB coal when the lower Btu content of PRB coal is accounted for. This would result in 1,450 million tonnes of CO2 being produced by Wyoming coal when it is burned. This can be compared to the CO2 that would be produced by the equivalent Colorado coal when it is burned: 1,405 million tonnes of CO2. Thus if the equivalent Wyoming coal were burned instead of North Fork

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[27] http://www.eia.gov/dnav/ng/hist/n3010us2M.htm
[28] Ibid.
[29] We recognize that we are sometimes comparing annual emissions to emissions associated with the mining of the estimated recoverable coal resources over many years, the coal reserves potentially rendered inaccessible in roadless areas due to rulemaking. We are simply attempting to put those potential emissions in a context that indicates their large size.
[30] http://www.eia.gov/cneaf/coal/quarterly/co2_article/co2.html

coal, an extra 44.9 million tonnes of CO2 would be produced. The lower BTU quality of PRB coal cancels out its slightly lower carbon intensity when burned.

This extra CO2 produced by burning Wyoming coal in the place of North Fork coal must then be balanced against the savings of CMM that results from the same switch. This balancing allows one to calculate the total net carbon balance for the CMM and the combustion of the coal. Under Alterative 1, as explained above, 546 billion cf of CMM are saved by mining Wyoming coal instead of North Fork coal. As noted earlier, methane is at least 21 times more effective at trapping heat than CO2. To compare the CO2 released from the combustion of the coal with the CMM saved by mining Wyoming coal instead of North Fork coal, we do a simple conversion. The 546 billion cf of CMM is equivalent to 233.5 million tonnes of CO2.[31] So the net CO2 savings under Alternative 1 by mining Wyoming coal in place of North Fork coal is about 189 million tonnes. This number takes into account the added CO2 from burning larger volumes of Sub-Bituminous Wyoming coal and the CO2 equivalent gained from not mining the far gassier North Fork coal.

To put this in perspective, the US emitted about 2,000 Tg of CO2 from all coal-fired electric generation in 2006.[32] A Tg is a million metric tons. If Wyoming coal were used instead of Colorado coal, the carbon equivalent savings would represent a savings of about 9.5% of 2006's total CO2 output by coal fired electrical generators in the United States.[33] This large potential CO2 equivalent savings contrasts with the RDEIS assertion that: "It is unlikely that reduced mineral extraction in roadless areas related to any alternatives would result in a significant change to total atmospheric greenhouse gas concentrations, due to the substitution of other fossil energy sources."[34] Elsewhere in the RDEIS (p. 129), the Forest Service explicitly recognizes that avoiding these potential CMM releases represents an "important" reduction in GHG emissions.

We can also look at this is in terms of what the North Fork Valley mining level would be in the average year under Alternatives 1 and 3. Alternative 1 has all mining operations stopping by 2018 (Bowie is forecasted to close in 2013, Elk Creek in 2012, and West Elk in 2018). Given their current production this would mean an average mining rate of 4.9 million tons per year for the duration of the study period (through 2025).[35] Taking into account the average CO2 equivalent released by the combustion of North Fork coal, this volume of coal would release 2 million tonnes of CO2 per year for the duration of the study period. This can be compared to Alternative 3 which has a mining rate of 11.7 million tons per year[36] for the duration of the study period and would release

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[31] http://www.epa.gov/cmop/resources/converter.html.

[32] http://www.epa.gov/climatechange/emissions/co2_human.html#industrial

[33] This comparison between *annual* US CO2 emissions from electric generation to the *cumulative* 15-year impact associated with the RDEIS's modeling of the different alternatives' impacts is intended to provide a relative measure of the size of the emissions. If we were seeking to measure the differences in annual impacts, we would have to adjust for the two different time frames.

[34] RDEIS chapter 3, page 129

[35] Economic Specialist Report, Table E7, pp. 15-16. Production rate weighted by the years of production and divided by the 15 years in the study period.

[36] Economic Specialist Report, p.49.

almost 5 million tonnes of CO2 per year, two and a half times as much per year[37]. But the actual total tonnes of C02 equivalent that would be released under Alternative 3 compared to Alternative 1 would be much larger than this suggests since the mines would be able to operate far beyond the 2011-2025 study period under Alternative 3, while all coal mining would cease under Alternative 1 in 2018. Under Alternative 3 there are 675 million tons of coal available to be mined.[38] At a mining rate of 11.7 million tpy this would allow about 58 years of mining, 43 more years than the study period.

3. The Greenhouse Gas Emission Implications of Substituting Other Energy Sources for North Fork Valley Coal

North Fork Valley coal is mined, processed, and transported to customers to be burned for the energy it contains.[39] The RDEIS emphasizes that different quantities of coal will be produced under the various alternatives. In fact, one of the points of Alternatives 2, 3, and 4 is to facilitate the continued mining of coal in the North Fork Valley. Despite recognizing that the level of coal mining would vary from one alternative to another, the Forest Service concludes that there will be no variation in carbon emissions associated with that coal. As shown below, that assumption is false.

A. The RDEIS Conclusion: Different Levels of Coal Production Have No Greenhouse Gas Impacts

The RDEIS asserts that because there are alternative sources of coal or other fossil fuels available to replace any coal that is not mined in the North Fork Valley, the impacts of the alternatives considered on greenhouse gas emissions will not differ significantly.

> Prohibitions on extraction of these resources within CRAs would likely shift production to areas outside of roadless areas, and for demand in the eastern U.S., to other western U.S. sources. It is unlikely that reduced mineral extraction in roadless areas related to any alternatives would result in a significant change to total atmospheric greenhouse gas concentrations, due to the substitution of other fossil energy sources. (p. 129)

This argument assumes that there are perfect substitutes for the coal coming from the roadless areas in the North Fork Valley that can be pursued at no additional cost by the

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[37] A mentioned previously, the *annual* production stretched over the RDEIS 15-year study period is not the same as the differences in the total recoverable coal associated with the alternatives. The total potential coal that *could* be mined is large.

[38] PDEIS Table 3.18, p. 135.

[39] A minority of coal is used in steel production rather than primarily for its energy content. Such metallurgical or coking coal is quite a bit more valuable than the thermal coal that is burned primarily for its energy content in electric generative facilities, concrete production facilities, and other industries needing process heat. North Fork Valley coal is sold as thermal coal to electric generators.

existing customers for this coal. But the RDEIS clearly understands that this is *not* the case. The RDEIS points out that:

> Road prohibitions under alternative 1 would restrict access to known reserves of compliant and super-compliant coal, contributing to less overall availability of "clean" coal to meet demand...Under alternatives 2 and 4, roads allowed for the developing known coal reserve in the North Fork coal mining areas...and contribute to supply needed to meet demand. However, road prohibitions in Colorado Roadless Areas...would contribute to an undetermined quantity of coal not being...developed, contributing to a known resource base being unavailable to meet demand. Under alternative 3, access to leased coal reserves and other coal resources in roadless areas throughout the State would contribute to supply needed to meet demand. (p. 147)

These RDEIS comments clearly recognize the interaction of supply and demand in determining the price of a commodity. In general, reductions in supply leave an existing level of demand unsatisfied and markets react to the reduced supply by bidding up the price paid for the remaining supply. As a result, higher prices both reduce demand and increase supply until supply and demand are back in balance. The net result is a somewhat higher cost of using coal and somewhat lower level of consumption relative to what otherwise would have been the case if supply had not declined.

The RDEIS quote above also recognizes that coal is not a homogeneous commodity with each ton of coal from any source interchangeable with any other ton of coal. This is another way of saying that a ton of coal from any source is not a perfect substitute for a ton of coal from some other source. Clearly some types of coal *can* be substituted for other types of coal although there may be both capital, operational, curtailment or other costs associated with that substitution. Electric generators have found the mix of coal sources that they believe minimize their costs of electric generation. If forced to change that mix, they are likely to face higher costs as they have to move away from their previous optimal mix. For instance, Powder River Basin coal could be used in place of North Fork Valley coal by generators in regions that have difficulty meeting ambient air quality standards. But because of the lower BTU content of that coal, curtailment of generation during pollution events would likely be more frequent and longer, a significant cost to the utility.

The RDEIS quotes above also recognizes one quality of coal that is important, sulfur content, that determines whether the coal qualifies as "compliant" or "super-compliant" in meeting air quality standards. North Fork coal is not only low in sulfur but also has relatively high Btu content. Because the emission standard is stated in terms of pounds of sulfur per million Btu, the higher the Btu content and the lower the sulfur content, the more likely it is the coal can be burned without violating that emission standard. This can allow electric generators to avoid building costly pollution control facilities that scrub the sulfur from the combustion gases coming from the burning coal.

This is one reason that North Fork coal is shipped east to many electric generators. It can be blended with other coals to reduce the sulfur per million Btus of fuel so that the

blended coal meets emission standards. In addition to the emission standards, ambient air quality standards require the air in a local area in a given time period have densities of various pollutants, including sulfur, that are below a certain threshold. If weather conditions and power plant operation result in emissions from a generator that surpass that threshold, emissions from such generators must be reduced until the ambient air quality standard is met. This can be done by reducing the burning of coal and the generation of electricity at a generating plant. But such curtailments of electric generating facilities can be costly as a utility turns to other sources such as natural gas-fired generators or market purchases from distant generators. Alternatively, electric generators can store high Btu/low sulfur coal such as North Fork Valley coal for burning during what otherwise would be pollution events requiring curtailment of generation. This avoids shutdowns or reductions in generation.

The ash and other chemical content of coal can also be important to particular electric generators, leading them to avoid some types of coal while preferring others. Some of the northern Powder River Basin coals, for instance, contain high levels of sodium that can cause slag buildup on the boiler and/or the fouling of pollution control devices. Unless the boiler or pollution control equipment is built to handle these problems, sodium content can be a costly contaminant. The optimal firing of boilers and control of operation and maintenance costs can lead electric generators to choose or blend different types of coal.

These examples illustrate that coal is not a uniform commodity where one ton of coal is always precisely interchangeable with another ton of coal.[40] Electric generators have to carefully choose the coal or mix of coals that will allow them to minimize the costs of operating their generators and meeting air quality standards. In addition, as investments are made in new electric generators and air pollution facilities, the economic tradeoffs between higher capital investments and less expensive coal and lower capital investments and the use of more expensive coal must be considered. Put slightly differently, one type of coal *can* substitute for another but not in a costless fashion. The same is true in the utility planning process: Natural gas, nuclear, wind, and solar are all potential substitute fuels for coal, but each has its own complex of capital, operating, and performance costs that must be carefully considered in making a choice.

In general, utilities are operating with what they believe to be the least cost mix of capital investments, operation and maintenance costs, and fuel costs. If their source of supply of a particular coal that in the past helped them minimize their costs ceases to be available, the cost of obtaining a similar coal is likely to rise or a different type of coal that raises their costs will have to be used. The costs of using coal to generate electricity will rise.

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[40] In our earlier discussion of the additional GHG emissions associated with facilitating the mining of North Fork Valley coal, we compared that coal with PRB coal. As our language in that discussion made clear, we were talking about a hypothetical alternative source of coal without discussing the impact of such a substitution on costs to any particular electric generator. Here we are focused on exactly those costs and the fact that, as the RDEIS recognizes, there are not "perfect," costless, substitutes available.

Such increases in the cost of using a primary input into a production process, such as coal for electric generation, will have a predictable impact: less of it will be used than if the costs had not gone up. This has implications for greenhouse gas emissions. Facilitating the production of coal *has* an impact on greenhouse gas emissions because it encourages the burning of more coal than otherwise would have been burned because it makes it less costly to bring supply into balance with demand, just as the RDEIS notes at page 147.

B. Reductions in Coal Supply Increase the Cost of Using Coal and Encourage Reductions in the Use of Coal and a Shift to Alternative Ways of Meeting Our Energy Needs

Lower prices and costs, in general, encourage higher levels of consumption while higher prices and costs discourage consumption. That is why demand curves depicting how price influences the quantity demanded are drawn sloping down to the right. In that context, the upward pressure that the reduction in mining of North Fork and other Colorado coal due to the adoption of a stricter roadless rule would put on coal costs faced by existing Colorado coal customers would lead to levels of coal consumption below those that otherwise would exist.

In the past some have suggested that when it comes to energy, there is an exception to this typical response of the quantity demanded to changes in price or costs. One asserted reason for energy use not being sensitive to changes in price is that energy is a necessity for economic activity and, even, human survival, with no alternatives or substitutes available. Such objections may have *some* validity in the very short run but are in error when a longer time frame is considered.

The sensitivity of the level of use of a primary input to an industrial process to changes in price or cost depends on the flexibility of that production process. Consider electric generation. For any given coal-fired electric generator, coal consumption is largely proportional to electric generation. A certain amount of coal is necessary for any given level of output. Changes in the cost of the coal cannot change that physical relationship. Higher or lower coal costs would raise or lower the cost of producing electricity and that could lead to higher or lower electric prices. Electric customers could change their electric usage in response, but electric customers might also be locked into using electricity in a particular pattern by the electric appliances they own and depend upon: cooking, water heat, clothes washing and drying, home heating, computers, entertainment, etc.

The way that energy-using technology in-place significantly dictates the level of energy consumption, making that energy use a "necessity" not easily adjusted *can* significantly reduce the sensitivity of energy usage to changes in price or cost. These potential short run constraints on coal or electric use in response to price changes can be contrasted with what was once a common situation where industrial plants dependent on process

heat had the capability of using any one of several fuels, e.g. natural gas, fuel oil, residual oil, or biomass. In that setting, a change in the relative price of one of the fuels could lead to a quick substitution of one fuel for another. [41]

The fact that technology in place can often dictate energy usage because there is little flexibility other than increasing or decreasing production, does not mean that energy use, in general, is insensitive to price changes. It simply means that the impact of price changes is likely to work through the adjustment in the technology deployed and that adjustment in technology cannot take place instantaneously. In the short run, meaning until adjustments can be made in the technology deployed, energy usage may be relatively insensitive to price changes, but in the longer run the technology deployed will adjust to those changes in relative prices, and with that technology adjustment, energy usage will adjust.

Some have also expressed doubts about the sensitivity of energy use to energy prices based on a casual overview of American energy consumption habits over the last forty years when, despite ongoing increases in energy prices, Americans adopted more energy intensive technologies such as larger motor vehicles and a larger number of energy-using electronic appliances. That sort of casual empiricism misunderstands what is meant by economic demand. Economic demand refers to the determinants of the level of consumption of any given product. Price is not the only determinant of our level of consumption. Price is an important determinant but just one of several. Other important determinants are the level of income, tastes and preferences, and technological developments. While higher prices depress demand, higher incomes increase demand. It is always possible that the impact of higher incomes will swamp the impact of higher prices and lead consumption to rise despite the higher prices. The important point, however, is that even when that happens, the higher price will have reduced consumption below what it would otherwise have been if price had been constant but the rise in income had been the same.

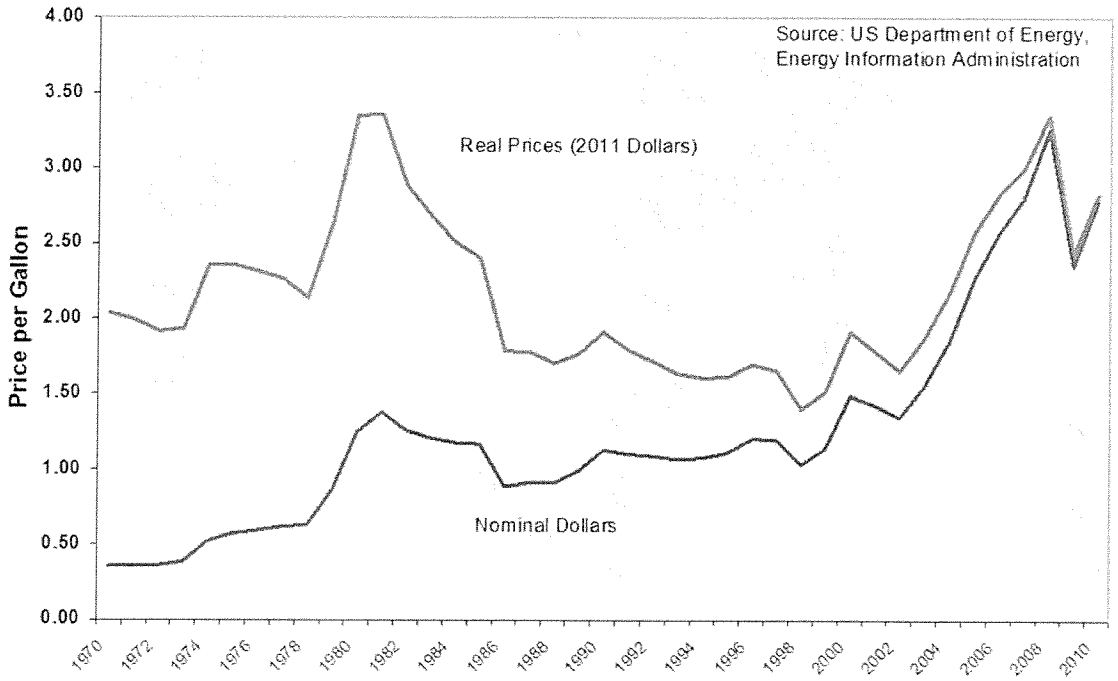
In addition, it is important to measure price changes in terms of monetary units of constant purchasing power. That is, the effect of general price inflation has to be removed. Because inflation makes the price of almost everything steadily rise as the purchasing power of the dollar shrinks, that purely inflationary trend has to be removed so that prices can be stated in terms of dollars of constant purchasing power. When that is done, the apparent trajectory of energy prices can change significantly. Rather than seeing energy prices constantly rising, we find that energy prices periodically rise

[41] For a utility with a set of electric generators, it may be possible to make rapid adjustments to relative fuel price changes. All electric generating plants are not operating at any given time except, possibly, at the times of peak demands during the year. At other times, some generators sit idle. The decision as to which generator to use at any given time is based on "economic dispatch." The generators with the lowest operating costs are used first. As load grows, the next more expensive facilities to operate are brought into production. Changes in the relative cost of fuels, e.g. coal versus natural gas can lead to changes in which facilities are operated at any given time. Electric production could shift from one type of generator to another with no change in technology required since many different technologies are in place at any given time. The possibility of making market purchases and sales of electricity can expand these substitution possibilities in response to changes in fuel costs.

steeply in real terms but then go through long periods during which they are actually declining in terms of the purchasing power we sacrifice to buy them.

If, for instance, we look at retail gasoline prices in nominal terms, with some fluctuations, gasoline prices rose significantly between 1970 and 2008. Immediately after the oil price shock of the late 1970s, Americans did turn to smaller cars to reduce fuel expenditures. Note the deployment of a different technology to allow that adjustment. But then Americans turned back to larger vehicles, beginning with the minivan and then SUVs and finally truck-like vehicles. It would be easy to argue that Americans were ignoring the price of gasoline. But between 1981 and 1998 gasoline prices in real terms fell dramatically. In 1998 real gasoline prices were lower than they had ever been in the twentieth century and 60 percent below the peak prices of 1981. Real gasoline prices remained below those peak levels until 2008. The steep rise in real gasoline prices in the 2000s renewed American's interests in more fuel efficient cars, including hybrids, diesels, and smaller conventional cars. Prices mattered, but those prices have to be expressed in terms of constant purchasing power to see that. See the figure below.

Real and Nominal Retail Gasoline Prices (Real Prices in 2011 Dollars)



In order to accurately observe adjustments in the use of energy to changes in energy prices, we must look beyond the very short run when technology locks in usage; we must statistically isolate the effect of prices changes from the effect of changes in income, technology, tastes, etc.; and we must measure energy prices after general inflation has been removed from them. When that is done, empirical analysis of energy

usage over the last four or more decades documents that energy consumption is in fact sensitive to price: higher prices or costs decrease consumption while lower prices or costs increase energy consumption.

This can be seen not only in the changes in the patterns of energy use over time as energy prices change but also in the difference in energy use patterns across countries that have long faced significantly different energy prices, e.g. the nations of Europe compared to the United States and Canada. In fact, it is the analysis of those differences across geography and time that provide the empirical tools that allow us to estimate the sensitivity of energy use to price.[42]

The rapid rise in energy prices in the mid- and late-1970s triggered several major studies of the sensitivity of different types of energy consumption to changes in the price of particular energy sources. Studies of residential energy use across nine European and North American nations for the 1960-1974 period found that the long run sensitivity of aggregate energy use to price was such that a 10 percent change in a cost index of all residential fuels cause aggregate residential energy consumption to move in the opposite direction by 11 percent.[43] For industrial energy consumption, that study found that a 10 percent change in aggregate industrial fuel prices led to an 8 percent change in energy consumption in the opposite direction. For coal itself, a 10 percent increase in coal cost led to an 18 to 22 percent decline in industrial coal consumption in the US and Canada and a 10 to 21 percent decline for Europe and Japan.[44] For gasoline used to fuel automobiles the analyses found that across 11 nations in North America and Europe a 10 percent increase in gasoline prices would result in only a 1 percent decrease in gasoline consumption the first year, but the impact rose to a 5 percent decrease by the fifth year, to 11 percent by the tenth year, and to a 13 percent decrease by the 25th year. That demonstrates the difference between the limited adjustments that can be made when the stock of energy-using equipment is fixed and the much broader adjustment that can be made as the stock of equipment is modified to reduce use of the now more costly fuel.[45]

A study focused specifically on the use of coal as an energy source in the United States was published in 1986.[46] The sensitivity of coal use by electric utilities in the U.S. to changes in price was estimated to be such that a 10 percent increase in coal costs would result in a 4 to 5 percent decline in coal use in the short run and a 6 to 9 percent decline in use in the long run.[47] These estimates were compared to earlier estimates for U.S. industrial use of coal that found the adjustment to a 10 percent increase in coal cost to range from a 6 to a 22 percent decline in coal consumption.[48]

The U.S. Department of Energy funded a review of all of the studies that had been done of the sensitivity of American energy usage to energy prices as of 1993. That analysis

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[42] *The Structure of World Energy Demand*, Robert S. Pindyck, The MIT Press Cambridge, MA, 1979.
[43] Ibid. p. 118.
[44] Ibid. p. 181 and Table 5.13, p 222.
[45] Ibid, page 232 and Table 6.3, p. 241.
[46] *Coal in Appalachia: An Economic analysis,* Curtis E. Harvey, Lexington, KY: University Press of Kentucky, 1986.
[47] Ibid. Table 15, p.156.
[48] Ibid. Table 14, p. 155.

was done to support the development of the National Energy Modeling System, the energy modeling system that the Energy Information Administration continues to use and develop today. For coal the conclusions of this 1993 review were similar to the 1978 and 1984 reviews: a change in the price of coal would have an impact on coal consumption in the opposite direction that would be about the same size in percentage terms, possibly a little smaller, possibly a little larger.[49]

In more recent years, energy research has focused on the use of petroleum products in the U.S. A study published in 2010 focused on the important role played by changes in oil prices relative to previous maximum prices as opposed to fluctuations up and down between relatively high prices. It found that a 10 percent increase in price over a previous maximum led to a 15 to 19 percent decline in petroleum consumption in the long run.[50]

Such sensitivity in the use of energy to energy prices is not just a characteristic of the richer nations. A recent study of the sensitivity of coal use to price changes in China estimated that a 10 percent change in coal cost resulted in a 12 percent change in coal consumption in the opposite direction.[51] An earlier study of the sensitivity of Chinese coal consumption to price estimated a smaller change in coal consumption attributable to a 10 percent change in coal cost: 6 percent.[52] A study of the decline in the energy intensity (or a rise in energy productivity) within the Chinese economy in the 1990s concluded that over half of the measured decline in energy intensity was a response to rising energy prices. Research and development activity, shifts in the structure of the Chinese economy towards less energy intensive sectors, and improvements in management incentives were each responsible for less than a sixth of the decline in energy intensity.[53] Energy prices have important economic consequences, even in a nation such as China where markets are more limited and where the government still exercises considerable control over those prices.

The important point here is that there is considerable flexibility in how utilities generate electricity in response to changes in fuel prices. Improvements in the efficiency of electric generation and electricity delivery can increase the delivered electricity without increasing fuel consumption and GHG emissions. The same is true of improvements in the efficiency with which consumers use electricity. Substantial strides have been made in reducing the electricity consumed in lighting, heating, and cooling our homes and businesses. The efficiency of refrigerators and hot water heaters has improved. The thermal integrity of our business and residential structures has improved. Those

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[49] "A Survey of Energy Demand Elasticities in Support of the Development of the NEMS, C. Dahl, Contract No. DE-Apo1-93EI23499 (Washington, DC, October 1993), pp. 60-63.http://mpra.ub.uni-muenchen.de/13962/.

[50] "Short- and long-run adjustments in U.S. petroleum consumption," Hillard G. Huntington, *Energy Economics* 32(2010):63-72.

[51] "The structural break and elasticity of coal demand in China: empirical findings from 1980-2006, Jiao, J-L, Fan, Y. and Wei, Y-M, *International Journal of Global Energy Issues* 31(3/4):331-344, 2009, p. 340..

[52] China's energy economy: Technical Change, factor demand and interfactor/interfuel substitution," Hengyun Ma, Les Oxley, John Gibson, Bonggeun Kim, *Energy* Economics 30 (2008): 2167-2183Table 5, p.2179.

[53] "Technology development and energy productivity in China," Karen Fisher-Vanden, Gary H. Jefferson, Ma Jingkui, and Xu Jianyi, *Energy Economics*, 28 (2006): 690-705, pp. 695-696 and Table 1. It should be pointed out that after 2002 the energy intensity of the Chinese economy began to increase as production in energy intensive industries such steel, aluminum, paper, chemicals, cement, etc. grew rapidly.

technological improvements have not reached their limits. In addition, consumers and regulators are just beginning to focus on the energy consumption of the electronic appliances that increasingly fill our homes and businesses. The cost of electricity and other energy sources relative to the costs associated with energy efficiency measures largely drives these improvements.

In addition, all methods of generating electricity are not equally carbon intensive. Over the last two decades there has been a significant increase in the use of natural gas to generate electricity partially because the GHG emissions are lower as are many other important air pollution emissions. That trend is found not only in the United States but also in the developed countries of Europe and Asia. The recent decline in natural gas prices relative to coal prices has helped facilitate that shift. [54]

The costs associated with wind electric generation have also fallen considerably and solar electric costs have also been declining. These downward prices trends, along with public policy mandates on utilities to include a certain percentage of renewable electric resources in their generating portfolio, have led to a substantial increase in wind electric generation and modest increases in solar electric generation, although both remain a relatively small part of total generation.

The fundamental fact is that existing technologies allow utilities and utility customers to respond to changes in relative generation costs. Higher generation costs stimulate more rapid and extensive efforts to improve efficiency or choose an alternative fuel. Lower generation costs discourage such efforts.

C. Conclusions: Facilitating the Expansion of Coal Mining into Roadless Areas Will Increase Coal Supply, Make Coal a More Attractive Fuel, and Increase the Release of Greenhouse Gases by Increasing the Combustion of Coal

There is nothing startling or controversial about these results. Energy price and cost matter. Lower prices and costs encourage consumption. Higher prices and costs discourage consumption. For these reasons, restrictions on supply discourage consumption due to higher prices and costs and facilitation of the expansion in supply encourage consumption due to lower prices and costs. The implications for greenhouse gas emission associated with the burning of coal are also straightforward: Facilitating

[54]This is not to say that "only price matters" when it comes to utilities choosing the fuel and technology for new or replacement electric generation. The relatively flat or declining market for coal in electric generation in the United States and other developed nations in Europe and Asia is tied at least in part to environmental concerns and uncertainty about future regulation of emissions from coal-fired plants. As the coal industry regularly asserted, if only the private costs are considered, coal remains the cheapest fuel to use to generate electricity. (Coal, however, has significant externalities and social costs in GHG and mercury pollution, the destruction of streams in Appalachia, etc.) Our primary point, however, remains: Restricting coal supply tends to reduce coal use and accompanying greenhouse gas emissions. Facilitating coal production has the opposite effect.

the expansion of coal production increases the emission of GHGs because, through lower costs, it encourages the use of coal.

The point of this discussion of the role of higher cost in reducing consumption is not to suggest that public policy should seek to arbitrarily raise coal or other energy prices. Economists strongly believe that prices should reflect costs. The costs that need to be reflected in prices, however, include both private costs and social costs as well as both market costs and non-market costs. Public policy that facilitates or discourages coal mining, for whatever reason, will impact the level of coal consumption and the volume of greenhouse gas emissions. The RDEIS could have, and by law should have, acknowledged and analyzed these significant environmental impacts associated with the alternatives considered. The RDEIS failed to do so.

Through a series of unsupported, and unsupportable, general assertions about substitute sources of coal being available, the RDEIS inappropriately abandoned the supply and demand context that the Forest Service clearly recognized elsewhere. That is a serious conceptual and empirical error that led the RDEIS to ignore important differences among the alternatives considered in how they would affect the volume of coal produced and burned and, therefore, affect greenhouse gas emissions and climate change.

D. Greenhouse Gas Emission Differences As a Result of Changes in Colorado Coal Supply Associated with the RDEIS Alternatives Are Not So Small That the RDEIS Could Ignore Them

The RDEIS correctly points out that it is likely that in response to any reductions in coal production from Colorado's roadless areas, coal production outside of roadless areas in Colorado, the Western United States, or elsewhere will increase in a partially offsetting way. As a result, under the alternative most protective of roadless area values (Alternative 1, the 2001 Roadless Rule) the greenhouse gas implications of the change in coal mining in Colorado roadless areas will likely be less than the full carbon content of the Colorado coal not mined since some amount of substitute coal will be burned instead. The environmental benefits from not releasing huge volumes of methane under Alternative 1, however, are likely to be remain quite high.

Some might argue that this makes the greenhouse gas implication of the change in roadless area coal mining in Colorado small enough to be ignored in the RDEIS. Such an assertion, however, misunderstands the purpose of the environmental impact process which is intended to provide environmental full disclosure that accurately analyzes all of the impacts of a proposed action. Many of the negative environmental impacts, possibly all, may, after analysis, be judged to be small enough to be acceptable given the positive impacts expected.

For example, the RDEIS analysis of the regional economic impacts reveals that the impacts of the various alternatives on regional employment and labor income would be

relatively small, less than one percent.[55] That does not mean that the economic analysis was a waste of time and should not have been included in the RDEIS process. The analysis of all potentially significant impacts is important in fully informing the ultimate decision maker as well as the public. Such full information is expected to lead to better decision making because the full array of public and private, market and non-market costs and benefits will have been taken into account.

The same is true of a full exploration of the greenhouse gas implications of changes in the quantity of coal mined in the North Fork Valley, including impacts on the volume of coal that ultimately is burned.

Some federal agencies in the past when dealing with fossil fuel development have not considered the GHGs released as a result of the combustion of the fossil fuels whose development their policies and decisions facilitated. The BLM, however, in its 2010 analysis of the West Antelope II coal leases in Wyoming, *did* estimate the likely emission of CO2 and other GHGs from plants burning the coal from the mine.[56] For those federal agencies that have ignored the combustion impacts of the fossil fuel production they are enabling, various explanations have been offered for the decision not to deal with the combustion that always follows the development and production of fossil fuels. One, of course, is the one we have discussed above: The claim that there are perfect substitutes available for the fossil fuels and therefore supply and demand are irrelevant. As a result, they simply assert that the level of greenhouse gas emissions will be unaffected by production of more or less fossil fuels. We have explained above the serious economic flaw in that argument.

Another argument that is regularly used is that it is not economically rational for a decision maker to take greenhouse gas impacts into account when making any particular development decision. Instead it is pointed out that if a particular local, state, or national government acts on its own to reduce its greenhouse gas emissions, the impact on global climate will be insignificantly small since it is total emission around the world that matter. The *costs* associated with a government unilaterally acting to reduce its emissions, however, may well not be small, especially when projected foregone economic activity is taken into consideration. In that setting, it can be asserted that the costs vastly exceed the benefits and the government agency should not act alone. Instead, it should recognize that the climate change effects of its relatively small reductions in greenhouse gas emissions will be trivially small given the total buildup of GHGs, and it should, therefore, wait for others to solve the problem. But even then, if others have effectively reduced greenhouse gas emissions, there would be little harm associated with any individual government deciding to enjoy the common benefits of stabilized climate while not contributing to the reduction in emissions. From a narrow economic rationality perspective, it is in any individual government agency's interest to

[55] The Economics Specialist Report while pointing out that in a regional context of a growing economy these impacts are "relatively small" (p. 50) also at times labels these impacts "substantial" (p. 50) and "sizeable" (p. 15).

[56] Powder River Basin Resource Council, 180 IBLA 119, 132 (2010). Also see Final EIS for South Gillette Area Coal Lease Applications (August 2009), BLM, p. 4-117.

"free ride" on the efforts of others and continue to take maximum advantage of the common property resource, the earth's atmosphere, for waste disposal purposes.

The economic incentives for individuals to maximally exploit open access common property resources is the source of the concern over the "tragedy of the commons," the over-use and damage to common property resources. The consequences of the absence of individual property rights and a way of enforcing those property rights is regularly used in economics texts and popular discussions of natural resource and environmental problems to dramatize the role of property rights and the rule of law in encouraging the efficient use of resources. However, the privatization of and creation of markets for scarce and valuable resources is not always possible and even where it is, that is not the only solution to the "free rider" and "tragedy of the commons" problems. For much of human history, other social arrangements have often been relied on to solve this social problem.

The likely "tragedy" associated with these open access situations is often dramatized by some version of the "prisoner's dilemma" where implicit cooperation between the prisoners would lead to the best outcome for both of them, but, because communication between them is not allowed, each prisoner has to contemplate the outcome if the other acts in her own individual interest rather than in their joint interest. The result is that both act in their individual interests and both are much worse off than they would have been if they had implicitly cooperated. The pursuit of "rational" self-interest by each leads to a much worse outcome for both.

Although this provides a dramatic example of the failure of self-interested rationality to lead to optimal results, this is a very contrived situation that is unlike most decision making in a social setting. First, the prisoners face this decision and realize the consequences only once. There is no learning possible or communication via the choices the individuals make over time. In addition, of course, there is no direct communication allowed.

If the assumptions are changed so that there are multiple, ongoing decisions that the two parties have to make, the optimal solution for each and the likely outcomes change considerably. Each individual can signal to the other her willingness to cooperate and can use future decisions to punish the other if she defects and tries to take advantage of the situation by refusing to cooperate. In that setting, cooperation is likely to emerge and something close to a jointly optimal outcome can be achieved.

Of course, if communication is allowed, negotiations can take place, interests can be expressed, compromises reached, threats of retaliation made for defecting from agreements, etc. In such real world settings cooperation often emerges over time through a broad range of mechanisms: the development of common ethical and cultural values, standards of social behavior, simple manners, best standards for resource use, negotiated agreements, the establishment of legal and enforceable rights, and the passage of laws prohibiting certain types of behavior.

"Rationality" does not consist of incessant selfish and exploitative behavior towards those with whom one interacts. A broader version of rationality takes into account the fact that we can learn and we can communicate and seek mutually beneficial cooperative solutions to problems. This is not simple-minded wishful thinking. It is hardnosed economic rationality in a broader business context. This broader, cooperative version of the "prisoner's dilemma" was summarized in a recent article by a financial analyst who applied it to global warming negotiations as a strategy that involves being "nice, retaliatory, forgiving, and clear."[57]

The fundamental economic fact is that the efficient markets we trust to allocate privately owned goods and services to their highest valued uses could not operate without shared values, socially determined standards of behavior, and trust. Things as common as commerce between strangers, open markets where customers handle and choose what they want to purchase, and our paper and electronic currency heavily rely on shared standards of behavior and trust as much as they rely on law and the threat of punishment.

Development of those shared values, reaching agreements based on them, and then using both cooperation and sanctions to enforce those agreements are crucial to our avoiding the "tragedy of the commons."

The Forest Service as an agency and institution recognizes that just because the impacts of its actions, especially at the district or forest level, may, by themselves, have a trivially small impact on global warming, the Forest Service still has an obligation to proceed to make what contribution it can to the reduction of greenhouse gas emissions even in the absence of a global agreement among all or most governments to reduce greenhouse gas emissions. President Obama issued an Executive Order in 2009 requiring all federal agencies, including the Forest Service to "measure, report, and reduce their greenhouse gas emission from direct and indirect activities."[58] Forest Service Chief Tidwell reminded all branches of the Forest Service of that order and that charge with respect to greenhouse gas emissions in March 2011 in a memo encouraging sustainable building construction and performance throughout the nation.[59] In the RDEIS, the Forest Service recognizes that the management alternatives considered for the roadless areas in Colorado could have an impact on carbon emissions by increasing or decreasing the frequency, extent, and ability to control wildfires.[60] The RDEIS also points out that control of coal mine methane emissions from the North Fork Valley mines could make an important contribution to reducing

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[57] Michael Liebreich, Chairman and CEO of New Energy Finance, "How to Save the Planet: Be Nice, Retaliatory, Forgiving & Clear," September 11, 2007. http://bnef.com/Download/docs_Press/NEF_WP_Carbon-Game-Theory_05.pdf . This article was based on Robert Axelrod's 1985 classic *The Evolution of Cooperation* (Basic Books, New York) the latest revised edition of which was published in 2006 (Perseus Book Group, New York)

[58] Executive Order 13514, October 5, 2009.

[59] Memo dated March 31, 2011, file code 7110, Subject: Forest Service Use of Sustainable Standards in Building Design and Construction.

[60] Pp. 114-115.

greenhouse gas emissions. Finally, the RDEIS repeatedly points out the threat that climate change poses to various forest values.[61]

Clearly the Forest Service recognizes that as a matter of public policy, the agency has an obligation to recognize that greenhouse gas emissions contribute to climate change and that climate change is expected to have negative impacts on forest values the agency is required by law to protect. Even though the individual steps, by themselves, that a district ranger or forest supervisor can take to reduce emissions or remove GHGs from the atmosphere will likely have small impacts, the Forest Service is committed to doing its part.

These actions by the Forest Service and other federal, state, and local government agencies along with similar actions by businesses, households, and non-profit organizations are both economically rational and significant. In the context of developing a national and international consensus, it is important for governments and other institutions to act now to collectively limit their emissions so that the worst consequences of global climate change can be avoided; such individual and local policies are eminently economic. This type of unilateral action is one of the first necessary steps in developing a global agreement and the mechanisms to reward those who adequately participate and apply sanctions to those who do not. If every party waits until enough others have acted to make a significant dent in the problem, that collective action will never take place. If citizens, organizations, and governments do not act until they believe other major players have volunteered sufficient reductions to not put them at a competitive disadvantage, it may be difficult or impossible to get a serious global effort underway.[62] Doing nothing will also undermine efforts undertaken by local, state, and regional governments to reduce contributions to climate change.

The actions of government agencies, business organization, NGOs, and individual citizens can be interpreted a "signals" that they are not going to be free-riders but, to the contrary, are willing to make significant reductions in their greenhouse gas emissions. That lays the basis for the building of the institutions to reduce emissions and the development of mechanisms to support other governments to do the same thing. Ultimately it lays the basis for mutual enforcement of appropriate reductions by all nations. In that sense, such actions by government agencies and others are not naïve or of trivial value in the efforts to stabilize climate but necessary and crucial. Rather than being economically irrational, they reflect a broader understanding as to how human beings have always sought to solve problems that required cooperative action.

The relatively small size of any particular local policy or action on a larger environmental problem cannot be an excuse not to analyze and discuss it in an environmental impact analysis. Similarly, a narrow, free-riding, self-interested mentality does not represent hardnosed economic rationality but rather a seriously sub-optimal strategy from the point of view of protecting our mutual well-being. Neither of these "arguments" justify the Forest Service's approach here of ignoring the impact of the roadless area management

[61] See pages 91, 94, 97, 155, 164,173,174, 176, and 190.
[62] Daniel H. Rosen and Trevor Houser, "China Energy: A Guide for the Perplexed," China Strategic Advisory, May 2007, pp. 37-46.

alternatives on greenhouse gas emission associated with facilitating the combustion of Colorado coal.

4. The Greenhouse Gas Emissions Differences among the Alternatives That Are Associated with Mining, Processing, and Transportation of North Fork Valley Coal Are Likely to be Quite Small

The greenhouse gas emissions associated with the electricity and fossil fuels used in producing, processing, and transporting that coal *are* important contributors to climate change, and the Forest should analyze and disclose them in any subsequently prepared NEPA document on the Colorado roadless rule. But compared to the methane emissions and the burning of the coal itself, these production and transportation costs are secondary or tertiary concerns. Further, GHG emissions from production, processing, and transport are likely to be similar for coal production in the North Fork when compared to likely coal substitutes from the Powder River Basin.

The RDEIS, while mentioning the GHG emissions associated with the operation of the coal mines, provided no quantification of those GHGs. The RDEIS could have analyzed and disclosed such emissions just as the BLM did in that agency's Final EIS for the Wright Area Coal Lease Applications in Wyoming.[63]

Since the RDEIS did not provide any of this information, we draw on an example from Wyoming. The example is a surface mine that uses explosives to help break up the coal, an electric dragline to pick up the coal, and trucks hauling the coal to a loading station. We use this as a proxy to provide an approximation of the GHG emissions associated with operating a western coal mine.[64] This allows a look at the greenhouse gas footprint of a coal mine that we can then compare with other emissions associated with the production and use of the coal. This will allow us to determine whether or not these emissions associated with coal mine operations and transportation are the emissions we should be paying primary attention to or whether they are secondary sources of emissions that are dwarfed by other first-order sources of GHG emissions.

The estimated tonnes of CO2 equivalent per million tons of coal mined due to the operation of the mine totaled 29,400.[65] We can extrapolate the amount of equivalent CO2 that would be produced by mining 568 million tons of North Fork coal (Alternative 3 compared to Alternative 1). The resulting CO2 equivalent produced by operating a

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[63] Wright Area Coal Lease Applications Final Environmental Impact Statement, BLM High Plains District Office, Casper, Wyoming, July 2010, pp. 3-324-325. http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/hpdo/Wright-Coal/feis.Par.33083.File.dat/01WrightCoalVol1.pdf

[64] http://www.oricaminingservices.com/Section.aspx?SectionID=290&CultureID=3 We are aware that using the energy consumed by surface mining provides only a crude indication of the emissions from operating a Colorado underground mine and an even cruder measure of the *difference* in greenhouse gas emission between North Fork mines and the alternative mines that might be used instead which is what we would like to measure.

[65] http://www.oricaminingservices.com/Section.aspx?SectionID=290&CultureID=3

mining operation that produces 568 million tons is approximately 17 million tonnes. To complete this examination we then need to add the CO2 emissions associated with the shipping of the coal.

Researchers at Carnegie Mellon University looked at various different methods of transporting energy and the CO2 footprint associated with the transportation[66]. One of the methods that they considered was shipment of coal by rail. This method had the most expensive fuel (diesel) but a relatively small CO2 footprint compared to the other alternatives. Using their CO2 emissions per ton-mile estimate, we can generate an estimate of the CO2 equivalent that it takes to ship 568 million tons of coal 1000 miles. 1000 miles was chosen as an approximation of the average distance that the coal could travel to assess the importance of the CO2 associated with transportation by rail. Using that ton-mile estimate, it would create approximately 33 million tonnes of CO2 to ship 568 million tons of coal 1000 miles.

These are not insignificant numbers, but those numbers need to be put in the context of the North Fork mines. The total CO2 equivalent to mine and ship the difference in coal between Alternatives 1 and 3 (568 million tons) is approximately 50 million tonnes of CO2 equivalent. Of course, if some of the coal currently produced in the North Fork Valley simply shifts to other Colorado or Wyoming sources with similar production and transportation costs, there are likely to be little or no GHG emission savings in the production and transportation process associated with those volumes.

Assuming that there is no substitution of other coal sources, the coal mine operation and transportation GHG emissions can be compared with the approximate CO2 equivalent of CMM that would be released from mining the North Fork coal which total about 233 million tonnes of CO2. This was discussed above in more detail.[67] This comparison shows us that the emissions associated with coal mine operations and transportation are approximately 21% or one fifth of the CO2 equivalent caused by CMM released by mining North Fork coal. In this light the methane released from the mining of the coal dwarfs any differences that there might be in transportation or mining operations. CMM in this light is a first order concern and CO2 equivalent emissions associated with mining and transportation of the coal to market are secondary concerns.

While the RDEIS mentions that there were GHG emissions associated the heavy equipment used to build and operated the mines and transport the coal, the RDEIS fails to analyze or estimate the quantity of these emissions. These emissions can be quantified and the Forest Service should analyze them in any subsequently prepared NEPA document on the Colorado roadless rule. Similarly, if there are expected differences in these emissions associated with the adaptions to the reduced North Fork Valley supply, these too could have been calculated so that the net impact on GHG

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[66] http://wpweb2.tepper.cmu.edu/ceic/pdfs/CEIC_03_04.pdf

[67] CMM is taken to mean all methane that is released during the mining process. The EPA gives estimates of total methane released by the gassiest mines in the country in their Coalbed Methane Outreach Program (CMOP). We do not differentiate between ventilated air methane (VAM) and the methane released by methane drainage wells (drained gas).

emissions associated with production and transportation could have been included in the overall impacts.

5. Roadless Rule Implications for Coal Mine Methane Capture and Use

The RDEIS carefully states that "Methane, a gas produced in underground coal mines and removed for safety reasons, is a potent greenhouse gas and capturing or flaring gas produced from the existing, as well as future, coal leases could be an important contribution to greenhouse gas reduction."[68] The RDEIS is acknowledging that the CMM could be captured and used in some fashion to help reduce greenhouse gases. The RDEIS then argues that Alternative 1 would put "Limits on placing facilities to manage coal mine methane."[69] There appears to be some confusion in the RDEIS on what the differential impact of the alternatives is on the ability to capture and use/destroy CMM. At one point the RDEIS suggest that Alternative 1 would somehow prevent the capture of methane while, in fact, Alternative 1 in would do exactly the opposite: It would prevent the methane from ever leaving the coal.

Currently the West Elk mine is the only mine in the North Fork that is capturing any of their methane. As of 2009 West Elk captured about 7% of the methane that comes from their mine.[70] That is about 1.5% of the total methane that is currently coming from mining in the North Fork. There are no road restrictions on the current leases and yet only 1.5% of the CMM is being captured. If Alternative 1 is adopted, the stated goal of "important contributions to greenhouse gas reduction" in reference to CMM, would be most easily reached since the mining that releases the methane would cease as the current leases are mined out. At present the current coal companies in the area have not collected or mitigated, and have no current plans to collect or mitigate, more than a tiny fraction of the CMM coming out of their mines' ventilation air and drainage wells. Bringing up, as a bulleted point in the RDEIS,[71] the potential loss of the ability to collect CMM because of a prohibition on new road building when the coal companies are not at present considering collecting the methane, and when the Forest Service in this RDEIS does not consider requiring the coal companies to do so, seems confused at best. When the lack of new road building under Alternative 1 is directly associated with restrictions on new coal mining that would reduce the release of the methane, the assertion is simply wrong.

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[68] RDEIS page 129.

[69] RDEIS page 131. The RDEIS appears to make contradictory statements about how the alternatives would affect CMM capture and use. Table 2-13, p. 69, says that under Alternative 1 there is "No regulatory prohibition on the use of roads constructed or reconstructed for purpose of collecting and transporting coal mine methane." More cryptically it also says that there is "No rule language on location of buried infrastructure needed to capture, collection, and use of coal mine methane." It is therefore unclear how any of the alternatives would limit CMM capture and use as the RDEIS states on page 131.

[70] U.S EPA, "Coal Mine Methane Recovery at Active U.S. Coal Mines: Current Projects and Potential Opportunities." West Elk is tapping methane from an *abandoned* part of the West Elk mining operation, a coal seam that is no long being mined rather than capturing CMM currently being released by the mining operations.

[71] RDEIS page 10.

The fact is that there is no reason that any of the alternatives should prevent the capture of CMM. If coal mining is allowed to occur, then the drainage wells have to be put in place to remove the CMM. If drainage wells are installed, a road system to facilitate this construction and maintenance of the drainage wells will be put in place. CMM collection pipes could be laid near or buried under those roads or temporary pipes could be laid between the drainage wells to collect the CMM. Those pipes can transport the CMM back to a central location where it could be (among other things) flared, cleaned then compressed and then used as liquid natural gas, burned in a combustion engine to create electricity, or combusted (as some of it is now at West Elk) to heat the mines.[72] There is no need for additional roads under which to bury the CMM collection pipes as those pipes would likely need to be regularly moved as the wall of the mine moves down the seam. None of the alternatives would place restrictions on a temporary CMM drainage collection system, nor would flaring require additional road construction.[73]

Alternative 1 could lead the different coal mines to balk in the face of the additional investment in, say, a methane powered electrical generator or other such investments required for the capture and use of CMM. If the mines are not going to be open through 2025 and beyond, the mines might conclude that investment in CMM capture and use equipment might not be economical at this point. But the reluctance to invest would be tied to the fact that the CMM under that alternative would not be produced or produced only at much lower levels, reducing the need for the capture and use-destruction efforts. This suggests that far more CMM is kept from being released into the atmosphere by choosing Alternative 1 rather than hoping the coal mines will agree to capture and use their methane under any of the alternatives.

Unless such capture and use is mandated by the federal agencies (something the Forest Service could consider as mitigation in the Colorado roadless rule EIS), the coal mines do not appear, at present, to be willing to capture, flare, or otherwise mitigate methane emission from their mines. The mine companies' reluctance to address methane emissions is exemplified by West Elk mine. There the Mountain Coal Company, which runs the mine, is directed by the BLM as part of the company's lease to collect all CMM that is economically feasible.[74] The West Elk mine, however, has repeatedly stated that it is not economical to collect that methane other than the small volumes mentioned above. The mine thus continues to vent millions of cubic feet a day of a powerful greenhouse gas into the atmosphere.

The alternative that saves the most CMM from being vented into the air is Alternative 1 because of the effective restriction on new coal leases. If Alternatives 2, 3, or 4 are

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[72] In 2010 Power consulting looked at the feasibility of putting in CMM collection systems on the West Elk mine and evaluated potential uses for the CMM. "An Economic Analysis of the Capture and Use of Coal Mine Methane at the West Elk Mine, Somerset, Colorado.

[73] The RDEIS appears to explicitly admit this. It points out that "coal mine methane capture operations would be restricted to using existing coal mine roads (pp. 131-132)" for Alternatives 1, 2 and 4. It also notes that under Alternative 1 there is "[n]o regulatory prohibition on the use for roads...for purposes of collecting and transporting coal mine methane (p. 69)." The RDEIS also says that Alternative 3 "does not limit location of buried infrastructure (p.69). Finally for Alternatives 2 and 4

[74] R2P2 report 2009.

chosen, then the volumes of methane previously discussed will likely be vented into the atmosphere directly, voiding the Forest Service's stated opportunity of making "an important contribution to greenhouse gas reduction."

6. Conclusions

A. Roadless Area Management Policies Will Significantly Affect Coal Mining

The RDEIS considers four alternatives that would provide greater or lesser protection to the roadless qualities of Colorado's remaining roadless areas not protected as wilderness within National Forests. As a result of the restrictions on the building of roads under the various alternatives considered, the amount of coal that can be effectively mined in the North Fork Valley in western Colorado's Gunnison County varies from one management alternative to another.

This report has focused on how the GHG emissions associated with the different levels of coal mining would vary under those alternative roadless area management regimes.

In the RDEIS the Forest Service estimates that about 1.2 billion tons of in-place coal reserves are in, or could be accessed through GMUG NF roadless areas. For the mines on the GMUG NF affected by the roadless rule, if there are no roadless rule restrictions limiting access to this coal (Alternative 3), the RDEIS estimates that 675 million tons of coal would be potentially recoverable. If the most protective roadless rule considered were to be adopted (Alternative 1), only 108 million tons of potentially recoverable reserves would be available. That is, a roadless area management decision that most facilitates coal mining (Alternative 3) would make 568 million additional tons of recoverable coal reserves available for production and use.[75]

Compared to the annual production in the North Fork Valley in recent years of 16 million tons of coal, that 568 million additional tons of recoverable reserves represents a substantial quantity of additional coal that could be produced and burned if a management decision is made by the Forest Service to adopt a management alternative that facilitates access to that coal. Coal is the most carbon-intensive of the fossil fuels whose burning releases substantial GHGs. In addition, the three North Fork Valley mines that would produce this coal are among the most gassy coal mines in the United States. As a result, the mining of this particular coal would also release substantial quantities of methane gas which is at least 21 times more powerful than carbon dioxide as a heat-trapping greenhouse gas.

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[75] Leasable Energy Minerals Report, Table 4, p. 9, and RDEIS Table 3-18, p. 35, comparison of Alternative 3 and Alternative 1. This includes more than just the Somerset coalfield roadless areas. It also includes the adjacent Grand Mesa coal field roadless areas. There currently are no coal leases there but the RDEIS believes that there is the potential for coal development there over the next 15 years if a roadless rule does not restrict such development.

B. The RDEIS Incorrectly Concluded That Different Levels of Coal Mining Would Have No Impacts on GHG Emissions

The quantity of coal whose mining would be facilitated by, and quantity of the methane releases that would accompany, that mining under Alternatives 2, 3 or 4 should have indicated the need for the RDEIS to provide a careful analysis of the impacts on greenhouse gas emissions and climate change. The RDEIS, however, does not analyze the impact of facilitating this additional coal mining on greenhouse gas emissions. Instead, the RDEIS asserts that facilitating this mining will have no significant impact on greenhouse gas emission. The RDEIS's discussion of the impact of different levels of coal mining on greenhouse gas emissions is contained in a single paragraph with only four sentences on greenhouse gas emissions. That brief statement simply asserts without analysis that despite the large differences in the level of coal mining under the various alternatives there will be no significant differences in GHG emissions.

C. Changes in the Colorado Coal Supply Will Significantly Impact GHG Emissions

This report critically analyzed those RDEIS assertions and came to conclusions that contradict the RDEIS's assertions that GHG emissions will be unaffected by the different levels of coal mining facilitated by the management alternatives considered.

Based on our analysis above, we conclude that if coal mining is reduced in the North Fork Valley, three things are likely to happen:

a. Powder River Basin or some other low methane source of coal will be substituted for *some* of the coal not mined in the North Fork and the releases of the powerful GHG, methane, will be significantly reduced; and

b. Because coal supply will have been reduced and there are no perfect substitutes for the North Fork Valley coal, the cost of coal-fired electric generation will rise and the attractiveness of coal as a source of energy will decline, also reducing the emissions of GHGs because of reduced coal combustion; and

c. Energy users will turn to less carbon-intensive substitutes for coal including investments in energy efficiency by electric generators, businesses, and households, more generation from renewable energy sources, and natural gas. These adjustments will reduce the GHG emissions associated with meeting our energy needs.

All three responses would allow utilities and their customers to meet their energy needs with reduced GHG emissions. The Forest Service did not undertake even the most rudimentary analysis of these likely adjustments and their impacts. Any subsequent Forest Service analysis must address these adjustments to reduced coal supply from the North Fork Valley and their GHG implications.

The purpose of this report is *not* to undertake a comprehensive analysis of GHG emissions associated with the different levels of coal mining analyzed by the RDEIS. That is an analysis the Forest Service is required to undertake. The purpose of this report is to make clear that the RDEIS did not provide an analysis of this significant environmental impact. The Forest Service must correct this serious omission before the environmental impact process is complete.

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From: Ted Zukoski [tzukoski@earthjustice.org]
Sent: Thursday, July 14, 2011 3:12 PM
To: COcomments
Subject: Comments of Sierra Club & WildEarth Guardians - on Coal Issues - Letter Attached
Attachments: Comments of Sierra Club on FS Roadless Rule RDEIS - FINAL - 2011-07-14.pdf

To the Forest Service:

Thank you for the opportunity to comment on the Revised Draft Environmental Impact Statement ("RDEIS") on the proposed rule for "Special Areas; Roadless Area Conservation; Applicability to the National Forests in Colorado" ("Colorado Roadless Rule"). See 76 Fed. Reg. 21272 (April 15, 2011). Earthjustice submits these comments on behalf of WildEarth Guardians and Sierra Club.

These comments focus largely on the RDEIS's analysis of various alternatives' impacts on (and to) coal mining. Specifically, the varying alternatives will permit (or limit) the amount of coal that can be mined safely in the North Fork Valley. The alternative least protective of roadless areas may allow up to half a billion tons more coal to be mined in the area than the most protective alternative. Such coal, when burned, will result in more than 1 billion tons of CO2 to be emitted into the atmosphere. In addition, prolonging the life of coal mines in Colorado's North Fork Valley will result in the emission of hundreds of billions of cubic feet of methane, a powerful greenhouse gas ("GHG").

This email attaches only the comment letter. The 80 exhibits to the attached comment letter will be sent in separate emails.

Thank you.

Edward B. Zukoski

Attorney for Sierra Club and WildEarth Guardians
++++++++++++++++++++++++++
Edward B. Zukoski, Staff Attorney
Earthjustice
1400 Glenarm Place, #300
Denver, CO 80202
Ph: (303) 623-9466
DIRECT: (303) 996-9622
Fax: (303) 623-8083
tzukoski@earthjustice.org
www.earthjustice.org

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July 14, 2011
File: 2200

Colorado Roadless Rule/EIS
P.O. Box 1919
Sacramento, CA 95812
Via e-mail: COComments@fsroadless.org

Re: Comments of WildEarth Guardians And The Sierra Club on Forest Service's Revised Draft EIS On The Rulemaking For Colorado Roadless Areas

To the Forest Service:

Thank you for the opportunity to comment on the Revised Draft Environmental Impact Statement ("RDEIS") on the proposed rule for "Special Areas; Roadless Area Conservation; Applicability to the National Forests in Colorado" ("Colorado Roadless Rule"). See 76 Fed. Reg. 21272 (April 15, 2011). Earthjustice submits these comments on behalf of WildEarth Guardians and Sierra Club.

These comments focus largely on the RDEIS's analysis of various alternatives' impacts on (and to) coal mining. Specifically, the varying alternatives will permit (or limit) the amount of coal that can be mined safely in the North Fork Valley. The alternative least protective of roadless areas may allow up to half a billion tons more coal to be mined in the area than the most protective alternative. Such coal, when burned, will result in more than 1 billion tons of CO_2 to be emitted into the atmosphere. In addition, prolonging the life of coal mines in Colorado's North Fork Valley will result in the emission of hundreds of billions of cubic feet of methane, a powerful greenhouse gas ("GHG").

Given the significant, and significantly differing, impacts of the alternatives on coal mining, the Forest Service must:

- disclose the climate change and other impacts from coal combustion;
- disclose the impacts of, and alternatives to mitigate, methane venting associated with, and required for, coal mining in roadless areas in the North Fork Valley;
- disclose the greenhouse gas and air quality impacts of continued operations of the North Fork coal mines, which several of the alternatives will make possible;
- disclose the non-methane pollution likely to result from methane venting;
- disclose the surface impacts associated with the construction of methane drainage well pads; and
- disclose the background of, and potential impacts of all alternatives on, climate change.

1400 GLENARM PLACE, SUITE 300 DENVER, CO 80202-5050
T: 303.623.9466 F: 303.623.8083 E: rmoffice@earthjustice.org W: www.earthjustice.org

The RDEIS, however, fails to disclose there impacts. The Forest Service must correct its omission of these potential impacts in any subsequently prepared NEPA document on the proposed Colorado Roadless Rule.

Further, the Forest Service must clarify that Alternative 1 – the 2001 national Roadless Area Conservation Rule – is the "no action" alternative, since a federal court order bars the agency from violating the Rule in Colorado.

I. THE RDEIS ANALYSIS OF IMPACTS OF VARYING LEVELS OF COAL MINING IS INADEQUATE.

A. Background

Three underground coal mines operate under or adjacent to Forest Service roadless areas in the North Fork Valley, near Paonia. See RDEIS at 122 ("Three underground mines (West Elk, Bowie #2, and Elk Creek) produce coal from private lands and leases on federal lands" in the GMUG National Forest). In order to safely mine coal, the mines are required by the Mine Safety and Health Administration ("MSHA") to remove methane, a combustible gas. To remove methane, the mines construct roads over the coal seams, construct well pads to drill down to the seam, and vent the methane untreated into the atmosphere as the coal is mined. The mines have argued – and the Forest Service assumes for purposes of the RDEIS – that unless the mines have the ability to build roads and construct methane drainage wells, they cannot mine the coal underneath.

B. The Alternatives Will Allow Or Restrict Coal Mining On Roadless Lands In The North Fork Valley To Varying Degrees.

The RDEIS evaluates four alternatives which allow or restrict road construction to varying degrees. Alternative 1, the 2001 Roadless Rule alternative, would bar road construction for coal mining purposes within roadless areas except for areas already under a coal lease. See RDEIS at 69. Alternatives 2 and 4 would permit the construction of roads associated with coal mines on roadless lands within the 20,000-acre "North Fork coal mining area" under certain conditions. Id. This 20,000-acre area includes Forest Service roadless lands that the three North Fork mines seek to mine in the future, both from existing and proposed mine facilities. Alternative 3, the "no action" alternative, would permit road construction on roadless lands pursuant to existing forest plans. Id. Under these differing management proposals, the RDEIS predicts significant differences in road construction by coal mines will occur on now-roadless lands by year 15 (7 miles of roads in new roadless lands under Alternative 1; 50 miles under Alternatives 2 & 4; and 64 miles under Alternative 3). RDEIS at 125.

The RDEIS estimates that these varying levels of road management will have dramatic impacts on the amount of coal mined from roadless lands. The RDEIS predicts the availability of coal under the alternatives as follows:

	Alternative 1 – 2001 Roadless Rule	Alts. 2 and 4 - Colo. Roadless Rule	Alt. 3 – Existing Forest Plans
Estimated accessible recoverable coal resources in roadless areas (tons)	**108 million**	**360 million**	**675 million**
Estimated total coal resources accessible by alternatives (tons)	**157 million**	**514 million**	**724 million**

RDEIS at 135. In short, an additional 250 million to 560 million tons of coal could be mined under Alternatives 2, 3, or 4 as compared to Alternative 1.

The RDEIS concludes that the regulation of coal mine roads will also have economic impacts related to coal available to the North Fork mines.

	Alternative 1 – 2001 Roadless Rule	Alts. 2 and 4 - Colo. Roadless Rule	Alt. 3 – Existing Forest Plans
Average annual jobs associated with coal production	**1,033**	**1,912**	**1,912**
Average annual value of coal production associated with coal production	**$305.9 million**	**$566.2 million**	**$566.2 million**

RDEIS at 74. The RDEIS thus predicts that coal-related employment will be nearly twice as high under Alternatives 2, 3 and 4 as under Alternative 1.

This is consistent with one the Forest Service-identified needs for the propose rule: "a need to accommodate state-specific situations and concerns in Colorado's roadless areas [including] … permitting exploration and development of coal resources in the North Fork Coal Mining Area." RDEIS at 34.

In short, Alternatives 2, 3, and 4 are designed to permit, and result in, increased coal mining in the North Fork Valley in comparison to Alternative 1, the 2001 Roadless Rule. But while the RDEIS predicts an increased level of coal mining under Alternatives 2 through 4, it fails to disclose the impacts of that increased mining in terms of climate change pollution or other air pollution.

C. The RDEIS Fails To Disclose The Impacts Of Climate Change Pollution That Will Occur From Alternatives That Will Permit More (Or Less) Coal Mining.

The RDEIS fails to analyze the potential greenhouse gas (GHG) pollution that will result from varying levels of coal mining permitted by the alternatives. The RDEIS states only:

> The development of coal for energy produces greenhouse gasses through the expenditure of fossil fuels during development and processing, and also through emissions from longer-term extraction, transportation, and processing facilities. Prohibitions on extraction of these resources within CRAs [Colorado roadless areas] would likely shift production to areas outside of roadless areas, and for demand in the eastern U.S., to other western U.S. sources. It is unlikely that reduced mineral extraction in roadless areas related to any alternatives would result in a significant change to total atmospheric greenhouse gas concentrations, due to the substitution of other fossil energy sources.

RDEIS at 129. The RDEIS provides no citation (or basis) for these conclusions, nor does it attempt to quantify or even estimate GHG impacts. The agency's conclusions are incorrect.

A report prepared by Powers Consulting, Inc. studies the RDEIS's four-sentence "analysis" of the impacts of the varying alternatives and concludes that the RDEIS's analysis is in error.[1] The Power Consulting report, quoted at length below, states in part:

> [T]he total of the "analysis" of greenhouse gas emissions in the RDEIS consists of the following four assertions:[2]
>
> 1. The relevant GHGs to be considered when evaluating different levels of coal mining are those associated with the fossil fuels consumed during the development of the mine and the extraction, processing, and transportation of the coal.
>
> 2. The methane released by the North Fork Valley coal mines is a potent greenhouse gas. For that reason capturing or flaring that methane from future coal production could make an important contribution to greenhouse gas reduction.
>
> 3. Reductions in coal production within roadless areas would likely just shift that coal production to areas outside of the Colorado roadless areas. Current customers for that coal in the eastern United States would likely shift their demand to other western U.S. sources.
>
> 4. Because substitute coal sources would replace any reduction in coal production from Colorado roadless areas, it is unlikely that any of the alternatives would result in a significant change to total atmospheric greenhouse gas concentrations.
>
> Three quite separate issues are raised in these RDEIS assertions. We will take each up in turn.

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[1] Power Consulting, Inc., "Greenhouse Gas Implications of Changes in North Fork Valley, CO, Coal Mining: A Critical Review of the Colorado Roadless Areas Rulemaking RDEIS" (July 2011), attached as Exh. 1.

[2] Citing RDEIS at 129.

The conclusions from our analysis … contradict the above RDEIS assertions that GHG emissions will be unaffected by the various management alternatives being considered. Coal mining in the North Fork Valley contributes to climate change in three ways. First, coal mine operations contribute to climate change through the use, directly and indirectly, of fossil fuel to energize the heavy equipment used in mining and processing the coal and transporting it to customers. Second, North Fork mines release methane gas, a very powerful greenhouse gas, in unusually large amounts. Third, coal is only mined so that it can be burned. Coal combustion emits the GHG carbon dioxide.

The Forest Service could and should have analyzed and disclosed the impacts of each of the alternatives on climate change by examining in detail how the alternatives would change the GHGs that might result from each of these three sources. Instead, the RDEIS contains only the most cursory discussion of the GHG impacts of coal mine operations, and largely ignores the likely impacts of methane and coal combustion.

This stands in stark contrast to the efforts the RDEIS devoted to the measurement of the economic impacts associated with the various alternatives. The RDEIS carefully studied how the different levels of coal mining would impact regional production, employment, and labor income, commissioning an Economics Specialist Report on that topic. That report found "sizable" or "substantial" difference among the alternatives in terms of economic impacts.[3] However, when it came to the impact of those different levels of coal mining on GHG emissions and climate change, the RDEIS provides almost no analysis or information except the general assertion that: "It is unlikely that reduced mineral extraction in roadless areas related to any alternatives would result in a significant change to total atmospheric greenhouse gas concentrations…" ([RDEIS at] 129). This failure to provide any analysis of the impact of the alternatives on GHG emissions is a serious and unnecessary omission.

Below we discuss the significant difference in GHG emissions associated with the RDEIS's various alternatives. We conclude that if coal mining is reduced in the North Fork Valley, three things will happen:

A. Powder River Basin or some other low methane source of coal will be substituted for *some* of the coal not mined in the North Fork and substituting that low-methane coal for high-methane North Fork coal will result in significant reduction in emissions of methane, a powerful GHG, and

B. Because coal supply will have been reduced and there are no perfect substitutes for the North Fork Valley coal, the cost of coal-fired electric generation will rise and the attractiveness of coal as a source of energy will decline, also reducing the emissions of GHGs because of reduced coal combustions; and

[3] Citing RDEIS at 295 and 306, and the Economics Specialist Report (in Forest Service files) at 50-51.

C. Customers will turn to less carbon-intensive substitutes for coal including investments in energy efficiency by electric generators, businesses, and households, more generation from renewable energy sources, and natural gas.

A mix of all three of these adjustments is likely to be the response to reduced coal supply. *All three responses would allow coal consumers to meet their energy needs with reduced GHG emissions*. The Forest Service did not undertake even the most rudimentary economic analysis of these likely adjustments and their impacts. Any subsequent Forest Service analysis must address these adjustments and their GHG implications.[4]

Among the specific conclusions of the Power Consulting report is that if Alternative 1 is adopted, consumers of North Fork coal may adapt to the reduction in North Fork coal available under that Alternative by substituting coal from Wyoming's Powder River Basin. Given that North Fork coal is particularly gassy – that is, that mining North Fork coal requires the release of nearly 100 times more methane per ton of coal mined than Powder River Basin coal – switching from North Fork coal to Powder River Basin coal would likely result in a huge reduction in methane-caused GHG pollution.[5] Specifically, Powers Consulting concludes that "the net CO_2 savings under Alternative 1 by mining Wyoming coal in place of North Fork coal is about 189 million tonnes."[6] In sum, "[t]he alternative that saves the most CMM [coal mine miethane] from being vented into the air is Alternative 1 because of the effective restriction on new coal leases. If Alternatives 2, 3, or 4 are chosen, then the volumes of methane previously discussed will likely be vented into the atmosphere directly...."[7]

Thus, contrary to the cursory "analysis" in the RDEIS, it is likely that choosing Alternative 3 over Alternative 1 could result in up to an additional 189 million tons of CO_2 equivalent GHG emissions in methane pollution – an amount greater than all of the GHG-related emission in Colorado over a year, or an amount equal to the GHG pollution of more than 40 very large coal-fired power plants over a year. While the CO_2 savings from reduced methane emissions caused by Alternative 1 are likely to be spread over several decades, this savings is still significant. The Forest Service must address the significant differences in likely GHG pollution among the alternatives in any subsequently-prepared NEPA document on the Colorado roadless rule.

We specifically request that the Forest Service review the entirety of the Power Consulting report – which we incorporate by reference into these comments – and that the Forest Service respond to that report in detail in any subsequently prepared NEPA document.

Bolstering the Forest Service's duty to prepare a more thorough analysis of GHG pollution likely to result from the alternatives' varying limitations on North Fork coal mining is the fact that courts, the EPA, and other federal land management agencies have all closely analyzed and

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[4] Power Consulting (Exh. 1) at 2-4 (emphasis added).

[5] Id. at 6-11.

[6] Id. at 10.

[7] Id. at 28.

disclosed the GHG pollution likely to result from coal combustion, a foreseeable impact of the proposed actions here.

For example, in Mid-States Coalition for Progress v. Surface Transp. Board, the Eighth Circuit held that the agency must analyze the impacts from increased use of coal caused by the agency action: construction of a railroad to deliver coal from Wyoming's Powder River Basin to Midwestern and Eastern utilities. 345 F.3d 520 (8th Cir. 2003). The court noted that the increased coal use was likely and foreseeable, and that the environmental effects of burning more coal must be included in the EIS. Id. at 549. The court held:

> The increased availability of inexpensive coal will at the very least make coal a more attractive option to future entrants into the utilities market when compared with other potential fuel sources, such as nuclear power, solar power, or natural gas. Even if this project will not affect the short-term demand for coal, which is possible since most existing utilities are single-source dependent, it will most assuredly affect the nation's long-term demand for coal.

Id.

EPA has pressed other land management agencies to disclose impacts that the Forest Service glosses over here, stating in comments on a recent coal lease that BLM "should ... include an estimate of the greenhouse gases emitted in the burning of the mined coal, as that is a logical consequence of mining the coal."[8] Similarly, here, coal combustion is a logical consequence of permitting road construction in known areas with coal resource, particularly when the very purpose of permitting road construction is to facilitate coal mining.

Further, action agencies have disclosed the GHG impacts of coal combustion when considering actions that may facilitate coal mining. For example, BLM estimated the volume of GHGs likely to result from coal combustion in analyzing a recent decision to lease coal at West Antelope leases in Wyoming. There, BLM "assumed that coal mined from the WAII [West Antelope II coal lease] tracts, like coal from other mines in the area, will be burned in coal-fired power plants to generate electricity. It then estimated the likely emissions of CO2 and other GHGs from plants burning coal from the Mine and other coal mines in the Basin." See Powder River Basin Resource Council, 180 IBLA 119, 132 (2010) (citations omitted).

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[8] L. Svoboda, EPA, Comments on South Gillette Area Coal Lease Applications Draft EIS (Dec. 19, 2008) at 5th page (emphasis added), attached as Exh. 2. BLM's Final EIS for the South Gillette leases ultimately included an estimate of the GHG pollution likely to result on an annual basis from all mines in the Powder River Basin. See BLM, Final EIS for the South Gillette Area Coal Lease Applications (Aug. 2009) at 4-117 ("In 2006, the Wyoming Powder River Basin coal mines produced approximately 432.0 million tons of coal. Using factors derived from laboratory analyses, it is estimated that approximately 716.9 million metric tons of CO2 would be generated from the combustion of all of this coal (before CO2 reduction technologies are applied."), excerpts attached as Exh. 3.

BLM also last month published an environmental assessment (EA) that included an estimate of the GHG pollutants likely to result from a coal lease in the North Fork Valley. See BLM, Environmental Assessment, Elk Creek East Tract Coal Lease (June 2011) at 19-20, excerpts attached as Exh. 4. The EA concluded that a decision to permit the mining of 3.96 million tons of coal would produce up to about "9.6 million metric tons of carbon dioxide equivalent" when the coal was combusted. While BLM characterized this figure as "a conservative overestimate," the EA demonstrates that such estimates are possible, and the estimate provides a sense of scale of GHG pollution resulting from the decision to allow coal leasing.

The Forest Service thus can and should disclose the GHG impacts from all of the impacts of prolonging the lives of North Fork coal mines – including methane pollution, emissions from operating the mines and transporting coal, from the end use of coal likely to be mined under the various alternatives, and the impacts of any substitution of other coal for North Fork coal – as is more fully detailed in the Power Consulting report.

D. The RDEIS Fails To Disclose Surface Impacts From The Construction Of Methane Drainage Well Pads.

Coal mine methane removal requires "methane drainage (vent) well drilling with associated access roads." RDEIS at 124. Drilling requires the clearing of a level pad to accommodate the large drill rig necessary to drill a well. Federal agencies have characterized these methane drainage well (MDW) pads as about a third of an acre in in size. This surface disturbance from well pad construction is in addition to any road construction disturbance.[9]

The RDEIS states that "between 10 and 20 methane drainage well locations per 640-acre section have been constructed at the existing mines. For the purpose of this analysis, it was assumed that about three miles of road per section would be needed for methane drainage purposes." RDEIS at 124.[10] The RDEIS then estimates the number of miles of road constructed in roadless areas to facilitate coal mining by year 15 under varying alternatives: 7 miles under Alternative 1; 50 miles under Alternatives 2 & 4; and 64 miles under Alternative 3. RDEIS at 125. However, the RDEIS fails to include any estimate of the surface disturbance from MDW pad construction. This contrasts with statements in the Forest Service 2008 Colorado Roadless Rule DEIS, which estimated that MDW pads are "about 0.33 acres in size." Forest Service, Colorado Roadless Rule Draft EIS at 108 (2008), excerpts attached as Exh. 6.

Assuming 3 to 7 MDW pads per square mile of road, at 0.33 acres per MDW pad, surface disturbance from MDWs alone could be 7-15 acres under Alternative 1; 50-100 acres under Alternatives 2 & 4; and 64-130 acres under Alternative 3.

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[9] See photos of methane drainage well pads constructed for the West Elk Mine in the North Fork Valley, attached as Exh. 5. These photos were taken by the author in 2009 directly adjacent to Forest Service roadless lands.

[10] Based on these numbers, one would expect between 3 and 7 well pads per mile of road. (10-20 MDW pads per square mile divided by three miles of road per square mile = 3-7 MDW pads per mile of road.)

The Forest Service clearly could have disclosed the impacts from MDW pad construction. Indeed, the RDEIS contains a table for oil and gas drilling that may occur under each alternative which compares, among other things, "estimated projections of oil and gas road miles, road acres, wells, pads, pad acres …." RDEIS at 126 (emphasis added). Given that the Forest Service disclosed the impacts of "wells, pads, [and] pad acres" for oil and gas drilling in roadless areas, it can and must do the same for coal mine MDWs.

II. THE FOREST SERVICE SHOULD ANALYZE ALTERNATIVES THAT REQUIRE THOSE MINING COAL IN ROADLESS AREAS TO REDUCE METHANE EMISSIONS.

The RDEIS states that the Forest Service initiated the proposed rulemaking in part "to accommodate State-specific situations and concerns in Colorado's roadless areas," including "permitting exploration and development of coal resources in the North Fork coal mining area."[11] Alternatives 2, 3, and 4 would allow the mining of hundreds of million of tons of coal beyond the amount permitted under Alternative 1 (the 2001 Roadless Rule alternative). As noted above, the mines have argued – and the Forest Service assumes for purposes of the RDEIS – that unless the mines have the ability to build roads and construct methane drainage wells, they cannot mine the coal underneath. Thus, the Forest Service predicts that Alternatives 2, 3, and 4 will result in the bulldozing of between 50 and 64 miles of new road in roadless areas over a 15-year period to facilitate methane removal from the North Fork coal mines.[12]

Given that the Forest Service proposes to pave the way for the destruction of roadless character on 20,000 acres of roadless lands to benefit private corporations, and given that this damage will directly cause massive amounts of methane pollution which will worsen climate change, the Forest Service should at least consider alternatives that require those constructing roads into roadless areas to mitigate the climate change impacts of methane venting.

A. The Forest Service Must Consider Reasonable Alternatives to Reduce Greenhouse Gas Emissions Caused By Exemptions To The Rule To Permit Mining Under Roadless Lands In The North Fork Coal Area.

1. NEPA Requires that the Forest Service Analyze All Reasonable Alternatives to the Proposed Action.

NEPA is the "basic national charter for protection of the environment[,]" and the "centerpiece of environmental regulation in the United States." New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 703 (10th Cir. 2009) ("centerpiece"); 40 C.F.R. § 1500.1(a) ("charter"). In taking a "hard look" at the potential impacts of a proposed federal action, an EIS must "study, develop, and describe" reasonable alternatives to the proposed federal action. 42 U.S.C. § 4332(2)(E). This alternatives analysis is "the heart of the [EIS]." 40 C.F.R. § 1502.14. NEPA's implementing regulations emphasize that an EIS must "[r]igorously explore and objectively evaluate all reasonable alternatives," giving "each alternative substantial treatment" in the EIS.

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[11] RDEIS at Summary-4.

[12] RDEIS at 86.

Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999) (emphasis added); 40 C.F.R. § 1502.14(a). See also Utahns for Better Transportation v. U.S. Dep't of Transportation, 305 F.3d 1152, 1166 (10th Cir. 2002). "By considering reasonable alternatives to the proposed action, the agency ensures that it has considered all possible approaches to, and potential environmental impacts of, a particular project; as a result, NEPA ensures that the 'most intelligent, optimally beneficial decision will ultimately be made.'" Wilderness Soc'y v. Wisely, 524 F. Supp. 2d 1285, 1309 (D. Colo. 2007) (emphasis added) (citation omitted). "[T]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate." Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992) (citation omitted). "While NEPA 'does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective,' it does require the development of 'information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned.'" Richardson, 565 F.3d at 708 (quoting Dombeck, 185 F.3d at 1174).

2. The RDEIS Will Result in Significant Greenhouse Gas Emissions Far Above the Significance Thresholds Set by CEQ and EPA.

The U.S. Supreme Court, federal agencies, and state and local governments have all recognized the threat of climate change and the necessity of reducing GHG emissions. The harms caused by climate change "are serious and well recognized." Massachusetts v. EPA, 549 U.S. 497, 521 (2007). These harms include, inter alia, unprecedented rates of sea level rise, a reduction in mountain glaciers and snowpack, and a change in the timing of the spring melting of ice on rivers and lakes. Id. The U.S. Environmental Protection Agency (EPA) has concluded that "[w]arming of the climate system is unequivocal," and the "root cause" of this warming is the elevated concentration of greenhouse gases resulting from anthropogenic activities, such as burning coal and other carbon-based fuels. See Endangerment and Cause or Contribute Findings for Greenhouse Gases, 74 Fed. Reg. 66496, 66517–18 (Dec. 15, 2009). Accordingly, President Obama, the U.S. Forest Service, and former Colorado Governor Ritter have issued orders calling for a reduction in the emissions of greenhouse gases by federal and state agencies.[13]

In addition, CEQ has issued draft guidance concerning climate change that bears on the consideration of alternatives. The guidance addresses "when and how Federal agencies must consider the impacts of proposed Federal actions on global climate change, as well as the expected environmental effects from climate change that may be relevant to the design of the proposed Federal action." The draft guidance states:

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[13] See Exec. Order No. 13514 (Oct. 5, 2009), reprinted in 74 Fed. Reg. 52117 (Oct. 8, 2009) (stating that "reduction of greenhouse gas emissions [shall be] a priority for Federal agencies" and establishes a national policy that Federal agencies "shall ... measure, report, and reduce their greenhouse emissions from direct and indirect activities" (emphasis added)); Interior Secretary Order No. 3289 (Sept. 14, 2009), attached as Exh. 7; Forest Service Roadmap for Responding to Climate Change (July 2010) at 8 (Forest Service strategy calls for the agency to "reduce emissions" that cause climate change); Colo. Exec. Order No. D 004 08 (Apr. 22, 2008), attached as Exh. 8.

> Examples of proposals for Federal agency action that may warrant a discussion of the GHG impacts of various **alternatives**, as well as possible measures to mitigate climate change impacts, include: approval of a large solid waste landfill; approval of energy facilities such as a coal-fired power plant; or authorization of a methane venting coal mine.[14]

The draft guidance also recommends that where a source emits 25,000 tons per year or greater of CO_2-equivalent (CO_2e), it "would be appropriate" for the agency to "discuss measures to reduce GHG emissions, including consideration of reasonable alternatives."[15]

The GHG pollution resulting from the North Fork coal mines as a result of adopting Alternatives 2, 3, or 4 will be substantial by any measure. According to a report on the RDEIS by Dr. Tom Power, methane pollution from these three alternatives will amount to 5 million metric tons per year of CO2 equivalent GHG emissions, 200 times greater than the presumptive threshold that the CEQ has proposed to identify projects with significant greenhouse gas emissions under NEPA.[16] Moreover, the direct methane emissions under the three alternatives will be 50 times greater than the most conservative major source thresholds for greenhouse gases under the Clean Air Act.[17]

When the GHG emissions from combustion of coal mined as a result of the proposed actions under Alternatives 2 through 4 are considered, the project's climate impacts may become even greater and more significant.

B. The RDEIS Should Analyze Reasonable Alternatives That Would Reduce or Mitigate the Greenhouse Gas Pollution Resulting From Road Construction And Mining In The North Fork Coal Mining Area.

The RDEIS acknowledges that methane has damaging environmental impacts, and that practical measures exist to reduce those impacts.

> Methane, a gas produced in underground coal mines and removed for safety reasons, is a potent greenhouse gas and capturing or flaring gas produced from the existing, as well as future, coal leases could be an important contribution to greenhouse gas reduction.

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[14] Memorandum from Nancy H. Sutley, Chair, Council On Envtl. Quality, to Heads of Federal Departments and Agencies, at 3 (Feb. 8, 2010) (emphasis added), available at http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf (last viewed July 14, 2011), attached as Exh. 9.

[15] Sutley, CEQ Draft Guidance (Exh. 9) at 3.

[16] Id. at 3 n.2 (stating that 25,000 tons of CO_2e is a "useful, presumptive, threshold" for discussing a project's greenhouse gas emissions under NEPA).

[17] See PSD and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31514, 31516 (June 3, 2010) (after July 2011, all stationary sources that emit 100,000 tons or more of CO_2e will be major sources requiring a PSD or Title V permit for its greenhouse gas emissions).

RDEIS at 129.

But despite the substantial greenhouse pollution resulting from adoption of Alternatives 2 through 4, and despite the Forest Service's admission that measures could result in "important contribution[s] to greenhouse gas reductions." the Forest Service failed to analyze in detail any alternative in the RDEIS that would reduce the project's greenhouse gas emissions.

The Forest Service's failure to analyze such alternatives is particularly troubling given the agency's admission and abundant evidence that practical and effective control technologies and mitigation measures exist to reduce coal mine methane emissions. These measures include: methane flaring; methane capture for use (energy generation) or sale; combustion of ventilation air methane (VAM); and carbon offsets. Adopting alternatives requiring coal mines to mitigate methane emissions through these measures as a condition of bulldozing roads in roadless areas would not hinder the project's purpose of permitting "development of coal resources in the North Fork coal mining area." RDEIS at Summary-4.

The Forest Service has authority to implement such alternatives. The RDEIS notes that concerning coal mining, the "Forest Service has the responsibility to 1) ensure that the permit action is consistent with the Forest Plan, 2) designate the post-mining land use, and 3) include adequate protection measures for surface resources on NFS lands." RDEIS at 121. Coal mining on Forest Service land may occur only with that agency's consent, and the Forest Service may impose conditions on such mining to protect forest resources. See 30 U.S.C. § 1272(e) (coal mining operations "shall be permitted ... if the Secretary finds that there are no significant recreational, timber, economic, or other values which may be incompatible"); 30 C.F.R. § 740.4(c)(2) (DOI's Office of Surface Mining must "consult[] with and obtain[] the consent ... of the Federal land management agency with respect to ... any special requirements necessary to protect non-coal resources."); 30 C.F.R. § 740.4(e)(2) (federal land management agency is responsible for protection of non-mineral resources). These authorities require the Forest Service to protect its lands from the climate change impacts caused by the billions of cubic feet of methane that will likely result from a decision to permit road construction within the roadless North Fork coal mining area.

The RDEIS's failure to consider alternatives that would reduce or offset methane emissions – alternatives which mines in other states and countries are adopting –violates not only NEPA but represents a huge missed opportunity. The Forest Service has the opportunity to spur innovation and take a leadership role in addressing climate change. The agency should not take a passive "wait and see" approach on climate change while other countries move forward. Instead, the Forest Service must consider the measures identified below as reasonable alternatives or reasonable mitigation measures.

A BLM Air Quality Specialist recognized that the agency has a duty to consider alternatives to reduce or mitigate the greenhouse gas emissions when evaluating an expansion plan at one of the North Fork Mines (Oxbow's Elk Creek mine). According to the specialist: "Clearly, there are very real limitations to the applicability of CMM [coal mine methane] projects. However, they

have been successfully demonstrated in many places and we need to fully and honestly explore the possibilities before we claim that we can not require or even allow them at Oxbow."[18]

Indeed, the EPA Coalbed Methane Outreach Program (CMOP) recently reported that within the United States in 2008, there were fourteen active underground mines with coal mine methane mitigation projects that recovered and used 37 billion cubic feet of methane.[19] At a CMOP-sponsored conference in Fall 2010, information was presented on active and planned coal mine methane mitigation projects around the world, including in China, Mongolia, and the United States.[20] There is a long and safe history of mitigation through flaring at working coal mines in the United Kingdom, Australia, and elsewhere.[21] Russia has recently launched its first coalbed methane to energy project.[22] Hundreds of coal mine methane reduction projects are planned throughout the world.[23] Mitigation of coal mine methane is clearly a rapidly maturing field.[24]

Given BLM's statement that coal mine methane pollution mitigation alternatives "have been successfully demonstrated in many places," and the proven history of viable mitigation projects

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[18] Email from Aaron Worstell, BLM, to Barbara Sharrow, BLM (May 7, 2009 2:11 PM) (emphasis added), attached as Exh. 10.

[19] Pamela Franklin et al., EPA Activities to Promote Coal Mine Methane Recovery, presented at the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference, October 2010, at 7, attached as Exh. 11.

[20] See, generally, presentations from the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference, October 2010: M. Cote, Tai Xi Coal Group Coal Mine Methane Feasibility Study, attached as Exh. 12; J. D'Amico, Coal Mine Methane "Recovery & Utilization" Strategies, attached as Exh. 13; N. Duplessis, Pioneering VAM Oxidation, attached as Exh. 14; and, C. Talkington, "Achieving Near-zero Methane Emissions Coal Mining," attached as Exh. 15. See also Yuecheng Coal Mine Methane Power Generation Project Clean Development Mechanism Project Design Document Form, March 25, 2011, attached as Exh. 16, for an example of the details of a mitigation project.

[21] See infra.

[22] GE, "Russia to begin producing Power from Coal Bed Methane," February 15, 2011, available at http://www.genewscenter.com/content/detail.aspx?ReleaseID=11912&NewsAreaID=2 (last viewed July 14, 2011), attached as Exh. 17.

[23] See D. Claughton, "Clean Coal Projects Funded," ABC Rural, June 8, 2010, http://www.abc.net.au/rural/content/2010/s2921412.htm?site=sydney (last viewed July 14, 2011), attached as Exh. 18; IEIA, "Test Plan, Methane capture from the Zory Mine borehole, Methane to LNG Zory Coal Mine Project, Assistance Agreement: XA-83396101-0," April 2009, attached as Exh. 19; Global Methane Initiative, Projects, available at http://www.globalmethane.org/projects/index.aspx?sector=coal (last viewed July 14, 2011) (listing scores of projects), attached as Exh. 20.

[24] United Nations ECE and Methane to Markets Partnership, Best Practice Guidance on Effective Methane Drainage and Use in Coal Mines, 2011, attached as Exh. 21; see Figure ES-1 (at xvi) for a breakdown of approximately 240 known utilization and abatement projects.

in the United States and elsewhere, the Forest Service must "fully and honestly explore" any such alternative possibilities in any subsequently prepared NEPA document.[25]

1. The Forest Service Must Analyze In Detail A Reasonable Alternative To Offset The Greenhouse Gas Emissions Of Coal Mining In Roadless Areas.

The Forest Service must consider in detail an alternative that would require any coal mine constructing roads in roadless areas to facilitate such mining to offset GHG emissions from the coal made available as a result of road construction in the roadless area. Such an alternative is reasonable.

There are numerous precedents and existing mechanisms through which project developers can offset their global warming impacts. California state agencies have, on several occasions, required such offsets as a condition of approving construction of projects that would release significant quantities of greenhouse gases. For example, the State of California and ConocoPhillips entered an agreement in 2007 that required the company to offset greenhouse gas emissions caused by the company's proposed refinery.[26]

The U.S. EPA has repeatedly urged land management agencies to consider offsets as a way to reduce the global warming impacts of agency actions, including, specifically, impacts of coal mine methane. In a 2007 letter to the Forest Service concerning a proposal to permit methane drainage wells at the West Elk Mine (which will benefit from a rule that permits road construction in the North Fork coal mining area, as proposed under Alternatives 2 through 4), EPA specifically rejected a Forest Service statement that the alternative of GHG offsets was not reasonable:

> EPA believes that it is reasonable to consider offset mitigation for the release of methane, as appropriate. Acquiring offsets to counter the greenhouse gas impacts of a particular project is something that thousands of organizations, including private corporation, are doing today. For example, the U.S. Forest Service and National Forest Foundation launched a plan on July 23, 2007 to sell credits to those seeking to offset their greenhouse gas footprint by measuring carbon stored in trees on areas reforested after wildfires, tornados, and other catastrophic events. The asking price for the two pilot projects is $6 per metric ton of carbon dioxide.[27]

As EPA suggested, numerous entities exist that permit developers to purchase carbon offsets that are third-party verified. The Carbon Fund and the Climate Action Reserve both permit entities to purchase carbon "credits."[28] In 2009, the total U.S. carbon offset market was worth $74 million,

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[25] See email from Aaron Worstell to Barbara Sharrow (Exh. 10).

[26] Settlement Agreement (Sept. 10, 2007), attached as Exh. 22.

[27] Letter of L. Svoboda, EPA to C. Richmond, GMUG National Forest (Aug. 6, 2007) at 7, attached as Exh. 23.

[28] See, e.g., www.carbonfund.org (Carbon Fund) (last visited May 6, 2011); www.climateregistry.org (Climate Registry) (last visited May 6, 2011).

with 19.4 million metric tons of CO_2e in traded volumes. The supply of credits in 2009 reached 29 million tons of CO_2e.[29]

EPA made a similar recent request that the Forest Service consider alternatives that would offset GHG emissions concerning a proposal to log and burn certain forest lands in Colorado. In its letter, EPA recommended that the Forest Service's final NEPA document should "discuss reasonable alternatives and/or potential means to mitigate or offset the GHG emissions from the action.[30]

Despite the fact that the GHG impacts from each of the alternatives can be estimated, the fact that offsets have been required by other agencies, the fact that EPA has repeatedly requested that the Forest Service consider offsetting the GHG impacts of proposed actions, and the fact that numerous mechanisms exist to offset GHG impacts in the U.S., the Forest Service failed to analyze a reasonable alternative that would require Oxbow to offset some or all of its GHG impacts.

The Forest Service cannot allege that an alternative that would allow coal mines to bulldoze roads through roadless areas while requiring that mining companies obtain offsets would not fulfill the proposed action's purpose and need. Such an alternative would allow mines in the North Fork coal mining area to expand underground operations and continue producing coal. It would simply increase the mines' cost of doing so while mitigating some of the mines' unnecessarily damaging impacts. Further, because the Forest Service has failed to evaluate this alternative, it cannot allege that the alternative is not economically feasible. The Forest Service certainly cannot argue that such an alternative is not technically feasible since purchasing carbon offsets is not technically demanding. It simply would require the mines to quantify the amount of CO_2e emissions (in tons) that it would offset, find a reputable vendor or exchange, and pay the appropriate price per ton for verifiable credits.[31]

For these reasons, the Forest Service must consider the reasonable alternative of requiring coal mines who bulldoze roads through roadless area to purchase carbon credits to offset the emissions from accompany permission to mine in roadless areas.

2. The Forest Service Must Analyze In Detail Reasonable Alternatives To Reduce Coal Mines' Greenhouse Gas Emissions By Combusting Ventilation Air Methane.

A significant portion of methane emissions from the North Fork mines whose lives will be lengthened by the ability to bulldoze roads through roadless areas will be released not through

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[29] See Point Carbon Research, "US Offset Markets in 2010: The Road Not Yet Taken" (Mar. 1, 2010) at 1, attached as Exh. 24.

[30] See letter of L. Svoboda, EPA Region 8 to T. Malecek, Rio Grande National Forest (Oct. 27, 2010) at 8 (emphasis added), attached as Exh. 25.

[31] One company, Terrapass, is selling carbon offsets on the web for $5.95 per 1,000 pounds of CO2 equivalent. See http://store.terrapass.com/store/c/18-Carbon-offsets.html (last viewed July 14, 2011), pages printed at Exh. 26.

drainage wells, but through the mine's ventilation system. Although more attention has been given to drainage and related methane capture techniques, ventilation air methane ("VAM") emissions are a critical component of an underground coal mine's environmental impact. According to EPA, VAM accounted for 56% of total U.S. coal mine methane emissions and 80% of emissions from underground mining alone in 2008—totaling 101 billion cubic feet of methane.[32] At Oxbow's Elk Creek Mine, which is in the North Fork coal mining area, the story is similar. VAM accounts for a steady 75% of all methane emissions at the Mine between 2004 and 2006.[33]

Because VAM represents a potentially large portion damaging methane pollution caused by a Forest Service decision to permit coal mines to bulldoze roads in roadless areas, the Forest Service must consider an alternative that would require North Fork coal mines to mitigate or eliminate VAM emissions as a condition of using those roadless lands.

A wealth of data demonstrates that VAM mitigation measures are technically and economically feasible, since such measures have been adopted at coal mines in the United States and around the world. In fact, there is a long history of capturing and/or combusting methane, including VAM.[34] Unlike methane emissions from drainage wells, VAM cannot be flared because the concentrations of methane in ventilation air are too dilute; so other technologies must be used to control VAM emissions. EPA reports that technology is available and in use to harness VAM.[35] These technologies permit coal mines to combust VAM even at very low concentrations.[36] This combustion has been shown to destroy 95% or greater of VAM, greatly reducing global warming pollution emitted by a mine.[37] MSHA has approved VAM mitigation projects and has

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[32] U.S. EPA, U.S. Underground Coal Mine Ventilation Air Methane Exhaust Characterization (July 2010) at 1, attached as Exh. 27.

[33] BLM, Elk Creek East Tract EA (April 2011) at 20, Table 5, excerpts attached as Exh. 28. For 2004, VAM = 75% of all methane emissions (3.8 / 5.1 = .745). For 2005, VAM = 75% of all methane emissions (4.1 / 5.5 = .745). For 2006, VAM = 76% of all methane emissions (5.6 / 7.4 = 0.756).

[34] J. Somers and H. Schultz, Coal mine ventilation air emissions: project development planning and mitigation technologies, 13th United States/North American Mine Ventilation Symposium, 2010, at 116, attached as Exh. 29.

[35] U.S. EPA, "Ventilation Air Methane (VAM) Utilization Technologies," September 2009, at 1 attached as Exh. 30.

[36] Id. at 1. See also United Nations Economic Commission for Europe & Methane to Markets Partnership, "Best Practices Guidance for Effective Methane Drainage and Use in Coal Mines," (Exh. 21) at 36 ("Current VAM technologies are generally not able to process methane concentrations below 0.2% without use of additional fuel, but research efforts are underway to lower the concentration threshold because VAM concentrations at many mines worldwide fall below 0.2%.").

[37] D. Kosmack, "Capture and Use of Coal Mine Ventilation Air Methane," (undated) at 79, excerpts attached as Exh. 31. See also Durr Environmental and Energy Systems, "Securing Your VAM Investment with Proper RTO Technology," presented at the 6th session of the Ad Hoc Group of Experts on Coal Mine Methane, United Nations Economic Commission for Europe,

established procedures for continuing to do so.[38] Further, a variety of mechanisms exist to fund and/or partially offset the cost of coal mine methane mitigation systems.[39]

EPA's Coalbed Methane Outreach Project has recently identified four U.S. VAM mitigation projects using oxidation that are completed, underway, or planned:[40]

- CONSOL Windsor Mine (closed) (MEGTEC vocsidizer)
- Jim Walter Resources Mine No. 4 (Biothermica VAMOX)
- CONSOL McElroy mine in West Virginia (Durr Ecopure technology) – to go online in the second quarter of 2011
- CONSOL Enlow Fork mine in Pennsylvania – scheduled to be operational in late 2010

The first VAM oxidation demonstration in the United States was carried out by CONSOL Energy at their abandoned Windsor coal mine. This project illustrated that the oxidizer could "reliably convert very low concentrations of methane present in mine ventilation exhaust air to carbon dioxide and water" and determined "the quantity of useful energy that can be produced by the oxidation reaction."[41] The project achieved an efficiency of at least 95%.[42]

Jim Walter Resources' No. 4 Mine in Alabama has operated VAM-reduction technologies since March 2009.[43] This project has been registered with the U.S. Climate Action Reserve (CAR), which helps fund the project.[44] The Mine Safety and Health Administration (MSHA) approved this project, which has destroyed up to 98% methane and avoided over 42,000 tons of CO_2e emissions.[45] Jim Walter Co. intends to implement similar projects at "all current and future

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(Oct. 2010) at 4, attached as Exh. 32 (claiming methane conversion rate of up to 99% with Regenerative Thermal Oxidation technology).

[38] E. Sherer, "MSHA and Coal Mine Methane," presented at the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference (October 2010), at 16-21, attached as Exh. 33.

[39] See, generally, U.S. EPA, Coal Mine Methane (CMM) Finance Guide, EPA-400-D-09-001(July 2009) attached as Exh. 34.

[40] P. Franklin et al., "EPA Activities to Promote Coal Mine Methane Recovery," (Exh. 11) at 13.

[41] U.S. EPA CMOP, "Case Study: U.S. Demonstration of Ventilation Air Methane Oxidation Technology," (July 2010) at 1, attached as Exh. 35.

[42] Id. See also J. Somers and H. Schultz, "Thermal Oxidation of Coal Mine Ventilation Air Methane (VAM)," presented at 12th U.S./North American Mine Ventilation Symposium (June 9-11, 2008), at 12-14, available at http://www.smenet.org/uvc/mineventpapers/ppt/045.ppt (last viewed July 14, 2011), attached as Exh. 36.

[43] N. Duplessis, "Pioneering VAM Oxidation" (Exh. 14) at 4.

[44] U.S. EPA, Coalbed Methane Extra, Summer 2010, at 4, attached as Exh. 37.

[45] N. Duplessis, "Pioneering VAM Oxidation" (Exh. 14) at 4, 5, and 11.

suitable ventilation shafts at Walter Energy's coal mines," with the first such project to be operational in 2011.[46]

Another CONSOL Energy project has been developed to mitigate VAM emissions at an active West Virginia coal mine (CONSOL's McElroy mine in Marshall County). This project is "intended to demonstrate significant reductions in methane emissions, in a safe and proven manner, and without any impact on mine operations or production."[47] A third CONSOL Energy project will reduce VAM emissions by 190,000 tons of CO_2e a year at the Enlow Fork Mine in Pennsylvania. This project was scheduled to be operational by late 2010 and will offer carbon offset credits through the CAR.[48]

EPA has compiled a number of other examples of the use or destruction of VAM in coal mines in the United States and around the world.[49] For example, in Australia, one coal mine is using ventilation air to generate power.[50] In 2009, the U.S. and Chinese governments announced that technology developed in the United States to oxidize VAM would be used at a coal mine in China. It is "expected to reduce greenhouse gas emissions by up to 200,000 tons of CO_2 equivalent per year. The VAM project is expected to . . . commence operations by the end of 2010 . . . . The VAM project will . . . capture[] and destroy[] about 95 percent of methane within the exhaust stream before it is released into the atmosphere."[51] The United States and China have also agreed to a joint project "to generate electricity from ventilation air methane (VAM) at a Chinese coal mine."[52] At least four more Chinese VAM projects are expected to be operational in the next two years.[53] VAM technologies are sufficiently advanced and in use that EPA has elsewhere urged BLM to consider in NEPA documents "alternatives and/or mitigation measures

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[46] PR Newswire, "Biothermica and Walter Energy Agree to develop Ventilation Air Methane Projects," October 5, 2010, available at http://www.prnewswire.com/news-releases/biothermica-and-walter-energy-agree-to-develop-ventilation-air-methane-projects-104336578.html (last viewed July 14, 2011), attached as Exh. 38 at 1.

[47] Coalbed Methane Extra, Summer 2010 (Exh. 37) at 3-4.

[48] Id. at 4; Business Wire, "CONSOL ENE : Green Holdings Lists Landmark Coal Mine Methane Abatement Project with the Climate Action Reserve," available at http://www.4-traders.com/CONSOL-ENE-12141/news/CONSOL-ENE-Green-Holdings-Lists-Landmark-Coal-Mine-Methane-Abatement-Project-with-the-Climate-Action-13580827/ (last viewed July 14, 2011), attached as Exh. 39.

[49] See EPA, "Ventilation Air Methane (VAM) Utilization Technologies" (Exh. 30).

[50] See BHP Billiton website, "World's First Power Plant To Use Coal Mine Ventilation Air As Fuel," available at http://www.bhpbilliton.com/bb/sustainableDevelopment/caseStudies/2008/worldsFirstPowerPlantToUseCoalMineVentilationAirAsFuel.jsp (last viewed May 6, 2011) attached as Exh. 40.

[51] Environmental Protection Agency, Coalbed Methane Extra (Dec. 2009) at 2, attached as Exh. 41.

[52] Id. at 1.

[53] EPA, Coalbed Methane Extra, Summer 2010 (Exh. 37) at 4.

to reduce the projected methane emissions, including . . . technologies such as oxidation of dilute methane emitted from ventilation shafts."[54]

Data from the Elk Creek Mine demonstrates that VAM reduction technologies in use in the U.S. and around the world are technically feasible at that North Fork mine. MSHA data from 2008-2009 demonstrates that the Elk Creek Mine is producing methane in sufficient concentrations to operate a VAM oxidizer. These data show methane concentrations of a minimum of 0.31%, a maximum of 0.56%, and an average of 0.46%.[55] VAM oxidizers are proven to operate reliably at concentrations as low as 0.2%.[56]

In sum, VAM is a reasonable, practical, and effective means to reduce the ecological costs of climate change emissions likely to result from a decision that will allow the North Fork coal mines to operate indefinitely in adjacent roadless areas. The Forest Service must examine measures requiring mines to mitigate VAM pollution in any subsequent NEPA document.

3. The Forest Service Must Analyze In Detail Reasonable Alternatives That Require North Fork Coal Mine To Capture And Use Methane.

While methane, or natural gas, is a potent greenhouse gas, it is also a valuable commodity – natural gas – that can be captured, processed, and sold; or captured for use as a fuel to generate electricity or lighting at the mines. The Forest Service has explicitly recognized the ecological benefits and desirability of methane capture and use:

> Methane capture is desirable compared to venting or flaring due to the fact that methane is a potent greenhouse gas. The use of captured methane would also substitute for other fossil fuels, and thereby eliminate the environmental impacts, including greenhouse gases, associated with the production and transport of those fuels.

RDEIS at 132. Despite recognizing the benefits of methane capture and use, the RDEIS does not actually consider requiring methane capture as a condition for despoiling roadless lands, and for worsening climate change that is also degrading Forest Service lands in Colorado and elsewhere.[57] Given that North Fork coal mines have demonstrated little interest in reducing or

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[54] Letter from Larry Svoboda, NEPA Program Director, EPA Region 8, to Melissa Smeins, BLM (Apr. 22, 2010) at 3 ("EPA New Elk Letter"), attached as Exh. 42.

[55] EPA Underground Coal Mine VAM 2010 (Exh. 27) at 11.

[56] Id. at 1.

[57] The Forest Service seems to imply that methane capture is made more likely under the provisions of Alternative 2 and 4 than the other alternatives. See RDEIS at 132. This implication is wrong, and contradicted by other statements in the RDEIS. Methane capture could occur under each of the alternatives, not just Alternatives 2 and 4. See RDEIS at 69 (noting that under Alternative 1 there is "[n]o regulatory prohibition on the use of roads … for purposes of collecting and transporting coal mine methane," and that Alternative 3 "does not limit location of buried infrastructure"). Thus, none of the alternatives prevent the removal via pipelines of captured methane. See also Power Consulting (Exh. 1) at 27 (discussing same issue).

mitigating the billions of cubic feet per year of methane that they pollute into the atmosphere to pad their profits, the mines are presently likely to reduce such emissions only if required to do so.[58]

The Forest Service therefore should consider, as a reasonable alternative, a proposal that would require those mines bulldozing roads through roadless areas to capture or use most or all of the methane pollution emitted due to the roadless protection exemptions.

The United Nations notes that methane capture at mines for on-site lighting dates back to the 1800s, and "[s]ince the 1960s, increasing use has been made of drained gas, initially for mine boilers and industrial processes and then later for power generation, pipeline gas, and town gas."[59] A recent United Nations report on methane capture and flaring provides case studies of methane capture from around the world, including methane capture systems at longwall operations, the mining technique used at the Elk Creek Mine and the West Elk Mine.[60]

EPA is actively engaged in efforts to reduce methane emissions from coal mines—including participation in the international Global Methane Initiative, which is designed, in part, to expand the use of methane capture projects at coal mines.[61] EPA's Coalbed Methane Outreach Program reports that as of 2008, fourteen active underground mines employed methane capture systems that captured a total of 37 billion cubic feet of methane.[62] When EPA commented on an EIS to expand the West Elk Mine (which will the greatest beneficiary of alternatives permitting road construction through roadless areas), EPA criticized the Forest Service's failure to include methane capture as an alternative in the EIS, explaining that "[m]ethane capture and reuse is a reasonable alternative to the proposal of venting the methane to the atmosphere, and thus, we

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[58] See Power Consulting (Exh. 1) at 29 ("Unless such capture and use is mandated by the federal agencies (something the Forest Service could consider as mitigation in the Colorado roadless rule EIS), the coal mines do not appear, at present, to be willing to capture, flare, or otherwise mitigate methane emission from their mines. The mine companies' reluctance to address methane emissions is exemplified by West Elk mine. There the Mountain Coal Company, which runs the mine, is directed by the BLM as part of the company's lease to collect all CMM that is economically feasible. The West Elk mine, however, has repeatedly stated that it is not economical to collect that methane other than the small volumes mentioned above. The mine thus continues to vent millions of cubic feet a day of a powerful greenhouse gas into the atmosphere.") (footnote omitted).

[59] U.N. Econ. Comm'n for Europe, Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines (Exh. 21) at 3.

[60] Id. at 48–55.

[61] See EPA, Global Methane Initiative, http://www.epa.gov/globalmethane/initiative.htm (last visited July 14, 2011).

[62] Pamela Franklin et al., EPA Activities to Promote Coal Mine Methane Recovery (Exh. 11) at 7.

recommend that it be analyzed."[63] In reviewing another proposal to expand a coal mine – the New Elk Mine in southern Colorado, EPA noted that "the potential for greenhouse gas emissions reductions from this project would be significant." EPA therefore recommended "that BLM disclose in the future NEPA documentation what administrative actions BLM intends to take to require the lessee to legally capture this methane."[64]

Because methane capture is feasible, effective, practical, and available, the Forest Service must consider alternatives that require those coal mines accessing coal by bulldozing roads through roadless areas to capture methane that will be vented as a result of that roadless area damage.

As noted above, BLM staff have concluded that methane capture must not be summarily dismissed as a reasonable alternatives. The Air Quality Specialist noted that methane capture systems "have been successfully demonstrated in many places and we need to fully and honestly explore the possibilities before we claim we can not require or even allow them."[65] In sum, methane capture is a reasonable, practical, effective, and feasible alternative that accomplishes the purpose of the project.

4. The Forest Service Must Analyze In Detail Reasonable Alternatives That Would Require Coal Mines Benefitting From Road Construction In Roadless Areas to Flare Methane.

In addition to methane capture, coal mine methane can be combusted, or flared, before it enters the atmosphere. Flaring results in between 85%-90% less GHG impacts than methane venting.[66] As with methane capture, methane flaring is a reasonable, practical, effective, and feasible alternative to reduce the greenhouse gas pollution North Fork coal mines whose lives will be extended if roadless areas are open to road construction.

There is a long and safe history of flaring at working coal mines.[67] Active mine flaring has been conducted in at least the following working coal mines: the United Colliery mine in Australia,[68]

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[63] Letter from Kerrigan G. Clough, Deputy Regional Administrator, EPA Region 8, to Charles Richmond, Forest Supervisor, U.S. Forest Serv., at 3 (June 1, 2007) (emphasis added), attached as Exh. 43. EPA has similarly noted that methane capture is a reasonable and available alternative that should be discussed in detail in its comments to BLM and the Forest Service on other coal mines in the region. See, e.g., EPA New Elk Letter (Exh. 42); Letter from Larry Svoboda, NEPA Program Director, EPA Region 8, to Glenn Wallace, BLM (Mar. 31, 2009) (Red Cliff Mine), attached as Exh. 44; letter from Larry Svoboda (Aug. 6, 2007) (Exh. 23).

[64] EPA New Elk Letter (Exh. 42) at 2 (emphasis added).

[65] Email from Aaron Worstell to Barbara Sharrow (Exh. 10).

[66] Daniel J. Brunner & Karl Schultz, Effective Gob Well Flaring 724 (1999), attached as Exh. 45.

[67] See EPA, International News Coalbed Methane Outreach Program, http://www.epa.gov/cmop/newsroom/international_2006.html (last visited July 14, 2011), attached as Exh. 46.

and in at least six UK Coal collieries.[69] In the United States, a coal mine in Wyoming has put in place a system that is functionally equivalent to flaring (on-site incineration). MSHA's approval was apparently not required for this mitigation measure.[70] It is unclear what obstacles to on-site incineration were overcome in Wyoming that cannot be overcome in Colorado.

At a conference sponsored by EPA in St. Louis in September 2007, evidence was presented that methane flaring at working coal mines was "state of the art," and that flaring to dispose of vented methane at coal mines was "[s]imple, low cost and reliable to operate" with "[l]ow maintenance requirements."[71] In April 2008, one industry expert noted that "[o]ff the shelf systems are available from companies that provide Flaring systems that are designed for and are in use around the world over coal mines."[72]

EPA has noted that flaring is standard safety practice in many industries, and that "outside of the United States, methane flaring at underground coal mines is widely accepted and approved as a safe practice."[73] EPA has repeatedly urged BLM to consider the alternative of flaring in NEPA documents evaluating coal mine expansions in Colorado.[74]

Mr. Erik Sherer, Mining Engineer at MSHA's Division of Safety, stated in 2007 that because flaring was safe, MSHA would approve it at a working coal mine under certain conditions.

> There is a long and safe history of flaring waste gases and volatile hydrocarbons in the petroleum and chemical industries. MSHA would approve flaring of

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[68] Id. (EPA report stating: "XSTRATA Coal's United Colliery has shown how to safely flair [sic] goaf (gob) gas at an active longwall mine and will capitalize on the resulting greenhouse gas (GHG) abatement credits" and describing how the mine was able to address safety issues.)

[69] See United Kingdom's Coal Authority, Coal Mine Methane Activity Within The UK, Coal Mine Methane Operators Activities, available at http://www.coal.gov.uk/publications/miningtechnology/coalminemethaneukactivity.cfm (last viewed July 14, 2011), attached as Exh. 47.

[70] See J. Liebert, Extracting Value from Coal Mine Methane, Coal Age (June 2009), attached as Exh. 48.

[71] See Harworth Power Ltd., CMM Flaring PowerPoint (Sep. 2007) at 6, 26 available at http://www.epa.gov/cmop/docs/cmm_conference_sep07/uk_coal_flaring.pdf (last viewed July 14, 2011), attached as Exh. 49.

[72] John C. Hempel, "Preliminary Assessment of the Feasibility of Capturing and Using Coalbed Methane Gas," (2008) at 4, attached as Exh. 50.

[73] See letter of L. Svoboda (Exh. 23) at 5-6 (Aug. 2007 EPA comment letter on West Elk Mine).

[74] See id.; EPA New Elk Letter (Exh. 42) at 3 (recommending that BLM "issue additional analysis for public review that assess[es] alternatives and/or mitigation measures to reduce the projected methane emissions, including ... flaring").

> methane drainage [at the North Fork's West Elk mine] if appropriate protections are incorporated into the flaring system.[75]

EPA has also concluded flaring methane at active mines is safe and practical. EPA based its conclusion in part on the agency's own 1999 conceptual design of a flare system whose specific purpose is to combust coal mine methane.[76] EPA's design "incorporates applicable petroleum industry codes and guidelines to achieve stringent industry safety requirements."[77] MSHA's Mr. Sherer told the Forest Service in 2007 that his agency had reviewed and endorsed EPA's flare design:

> MSHA has reviewed the EPA flare system and concurs that this is an acceptable method for flaring methane produced from coal mine degas holes. However, any proposed flare system would have to be designed for mine-specific conditions (flow rates, gas concentrations, etc.) and must be approved in the ventilation plan.[78]

Based on such evidence, EPA concluded that flaring methane was a "viable alternative" for addressing methane released from coal mines.[79]

MSHA has more recently reaffirmed its position on flaring, making clear that no regulatory hurdles exist to the agency approving the practice. MSHA explained:

Moreover, in a May 2010 letter to your BLM office, MSHA made clear that there were no regulatory obstacles to the agency approving methane flaring. MSHA explained:

> The [MSHA] has looked into the issue of flaring methane gas that is captured at underground coal mines. As you know mines throughout the country have been practicing methane drainage through strategically placed drainage wells, drilled from the surface, for many years. . . . A review of our regulations indicate that there is no specific prohibition [on] flaring gas, and as such, the Agency would consider any mine operators plan to flare gas at their location.
>
> . . . [T]here is considerable latitude given in the regulations which speak to mine ventilation and control of methane. . . . Flaring of methane that is removed from

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[75] Email of Hubert E. Sherer, MSHA to Liane Mattson, US Forest Service (Oct. 26, 2007), attached as Exh. 51.

[76] See letter of L. Svoboda (Exh. 10) at 6 (Aug. 2007 EPA comment letter on West Elk Mine); see also U.S. Environmental Protection Agency, Conceptual Design for Coal Mine Gob Well Flare (Aug. 1999), attached as Exh. 52.

[77] See letter of L. Svoboda (Exh. 23) at 6.

[78] Email of Hubert E. Sherer, MSHA to Liane Mattson, US Forest Service (Nov. 1, 2007), attached as Exh. 53.

[79] See web access page for EPA, Conceptual Design for Coal Mine Gob Well Flare (Exh. 52), and reprinted from http://www.epa.gov/cmop/docs/red009.pdf (last viewed July 14, 2011).

> the mine through wells could be included in the ventilation plan and the plan would be subject to review prior to approval.
>
> Since flaring has not been done on active mine gobs in the past in this MSHA district, a plan to flare would have to be reviewed by MSHA's Technical Support group to ensure it adequately addresses all the necessary precautions to ensure safety of all persons in the mine. There is no specific obstacle to accomplishing this, but a thorough review of the first flaring plan would be necessary to establish what the requirements for such a system would be.[80]

In sum, methane flaring is a reasonable, practical, effective, and feasible alternative that accomplishes the purpose of the project, while reducing greenhouse gas emissions. Consequently, the Forest Service must analyze methane flaring in detail as an alternative to the proposed action of placing no restrictions on methane venting while allowing the degradation of roadless areas to benefit a few coal mines.

III. THE ENVIRONMENTAL ASSESSMENT FAILS TO INCLUDE A REASONABLY COMPLETE DISCUSSION OF MITIGATION MEASURES.

NEPA requires agencies to provide a detailed statement of "any adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. § 4332(2)(C)(ii). For these unavoidable impacts, NEPA requires a discussion of appropriate mitigation measures. 40 C.F.R. §§ 1502.14(f), 1502.16(h), 1505.2(c), 1508.25(b)(3); see also Dine Citizens, 747 F. Supp. 2d at 1258 & n.39 (the EIS regulations on mitigation are "informative" regarding an agency's duty to analyze mitigation in an EA, and an EA "should include sufficient discussion and analysis to allow the public or a reviewing court to evaluate the adequacy of proposed mitigation measures"). The Ninth Circuit has explained that this mitigation discussion is required "precisely for the purpose of evaluating whether anticipated environmental impacts can be avoided." S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep't of Interior, 588 F.3d 718, 727 (9th Cir. 2009). If "all practicable means to avoid or minimize environmental harm from the alternative selected" have not been adopted, the agency's record of decision must explain "why they were not." 40 C.F.R. § 1505.2(c).

The CEQ has stated: "All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperation agencies . . . ." Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18026, 18031 (March 23, 1981). According to the CEQ, "[a]ny such measures that are adopted must be explained and committed in the ROD." Id. at 18036.

The Tenth Circuit has held that an agency's analysis of mitigation measures "must be 'reasonably complete' in order to 'properly evaluate the severity of the adverse effects' of a proposed project prior to making a final decision." Colo. Envt'l Coalition v. Dombeck, 185 F.3d 1162, 1173 (10th Cir. 1999) (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989)). Mitigation "must be discussed in sufficient detail to ensure that environmental

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[80] Letter from Allyn Davis, MSHA, to Desty Dyer, BLM (May 18, 2010) attached as Exh. 54.

consequences have been fairly evaluated." City of Carmel-by-the-Sea v. U.S. Dept. of Transp., 123 F.3d 1142, 1154 (9th Cir. 1997) (quoting Robertson, 490 U.S. at 353).

According to the U.S. Supreme Court, "[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action-forcing' function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989). A "perfunctory description," of mitigation, without "supporting analytical data" analyzing their efficacy, is inadequate to satisfy NEPA's requirements that an agency take a "hard look" at possible mitigating measures. Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1380 (9th Cir. 1998). An agency's "broad generalizations and vague references to mitigation measures . . . do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the Forest Service is required to provide." Id. at 1380-81.

In addition to constituting reasonable alternatives, carbon offsets, elimination of VAM, methane capture, and methane flaring are all practicable mitigation measures that the Forest Service must analyze in any subsequently prepared NEPA document.

IV. THE RDEIS'S ANALYSIS OF AIR QUALITY IMPACTS VIOLATES NEPA.

The RDEIS fails to analyze and assess impacts to any air quality standards. Instead, the RDEIS undertakes no analysis at all based on two assumptions. First, the RDEIS alleges that "[d]ifferences in effects on air quality do not substantially differ between the alternatives." RDEIS at 77. Second, the RDEIS alleges that "[a]tmospheric emissions within the analysis area are not expected to increase to a level that would be likely to exceed state or federal air quality standards." Id. Both assumptions appear incorrect. In addition, the assumption that emissions in the analysis area "are not expected to increase" ignores the Forest Service's duty to analyze potential impacts. The agency may not simply assume that no impacts will occur and so ignore them.

The RDEIS's assertion that "[d]ifferences in effects on air quality do not substantially differ between the alternatives"[81] ignores the fact that alternatives will permit more (or less) coal mining in the North Fork Valley, as discussed at length above. Each of the three North Fork Valley coal mines and their respective operations produce large amounts of several harmful air pollutants, including particulate matter, volatile organic compounds (VOCs), nitrogen dioxide, and pollutants that will worsen visibility. According to Colorado Department of Public Health and Environment emission inventory data, the stationary sources alone at the mines release nearly 350 tons/year of particulate matter.[82] Furthermore, recent environmental analyses indicate that a number of other sources at the mines, including locomotives, heavy equipment, and generators, also release pollutants such as nitrogen oxides and VOCs.

Alternatives 2, 3 and 4 will allow polluting coal mine operations to continue indefinitely;

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[81] RDEIS at 77.

[82] This data can be accessed at http://www.colorado.gov/airquality/inv_maps_2008.aspx.

Alternative 1 will not. Thus, under Alternative 1, significantly lower levels of pollutants will be produced by coal mine facilities in the North Fork Valley over time. Furthermore, the RDEIS discloses that under Alternatives 2, 3, and 4, 50-64 miles of new road construction would occur to facilitate expanded coal mining. See RDEIS at 86. It is difficult to believe that constructing 50-64 miles of new roads, let alone operating methane vents for years, would not pose potentially significant air quality impacts.

Although the RDEIS asserts that "Air analysis will occur when a development proposal is received by the Forest Service as part of the NEPA analysis" (RDEIS at 160), the Forest Service cannot punt on its obligations to analyze and assess impacts under NEPA until some speculative "development proposal" is received. The fact is the agency knows that under Alternatives 2, 3, and 4, coal-mining operations will continue for a longer period of time than under Alternative 1, that more roads will be constructed than under Alternative 1, and that other activities will occur that would not occur under Alternative 1, imposing an affirmative duty on the agency to analyze, assess, and disclose the associated air quality impacts. Further, it is inconsistent (and misleading) for the Forest Service to detail the economic benefits of extending the life of the North Fork coal mines to the local economy, but to claim that it cannot even generally describe the air pollution from those same mines. Deferring all analysis of impacts also violates NEPA since federal courts have long held that agencies must disclose "all 'reasonably foreseeable' impacts ... at the earliest practicable point."[83]

The Forest Service's duty to analyze and assess air quality impacts is especially critical in light of the Agency's substantive obligations to safeguard air quality. This affirmative duty is well-founded in the National Forest Management Act (NFMA), as well as a number of the Forest Service's other overarching environmental mandates. Notably, as part of its renewable resource program duties, NFMA requires the Forest Service to "recognize the fundamental need to ***protect and where appropriate, improve the quality of ... air resources***." 16 U.S.C. § 1602(5)(C) (emphasis added). The Agency is further obligated to ensure that this goal, among the other goals of the renewable resource program, is achieved through land management plans. *See* 16 U.S.C. § 1604(g)(3).

The Forest Service's duty to safeguard air quality is especially clear with regards to wilderness areas. The Wilderness Act of 1964 requires that Congressionally designated wilderness areas be managed "in such manner as will leave them unimpaired for future use as wilderness, and so as to provide for the protection of these areas [and] the preservation of their wilderness character[.]" 16 U.S.C. § 1131(a). This duty clearly extends to air pollution, which can oftentimes impair the wilderness character of wilderness areas through haze or by causing other forms of environmental degradation. Indeed, the Forest Service cites the Wilderness Act as providing authority to protect air quality in all wilderness areas managed by the Agency.[84]

For wilderness areas identified as Class I under the Clean Air Act, the duty to protect air quality is even more explicit. Class I areas include all wilderness areas designated prior to 1977. In

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[83] New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 718 (10th Cir. 2009).

[84] See Forest Service, *Forest Service Air Management Responsibilities*, http://www.fs.fed.us/air/respon.htm (last viewed July 13, 2011).

Colorado, Class I areas include the West Elk, Maroon Bells, Flat Tops, Weminuche, Rawah, Mt. Zirkel, and other Wilderness Areas managed by the Forest Service.[85] and within the National Forest System, encompass dozens of wilderness lands in 20 states. *See* 40 C.F.R. §§ 81.401, *et seq*. (list of mandatory Class I areas by state). With regards to protecting air quality in these areas, the Clean Air Act imposes upon the Forest Service an "affirmative responsibility" to protect all air quality values, including visibility, within these Class I areas. 42 U.S.C. § 7475(d)(2)(B). This "affirmative responsibility" includes, but is not limited to, ensuring that proposed major emitting facilities do not adversely impact air quality values in Class I areas. In other words, while the Forest Service must generally protect air quality, including in wilderness areas, it must make a proactive effort to do so in all Class I areas under its management authority.

The failure to adequately analyze impacts runs afoul of the Forest Service's responsibilities to safeguard air quality. To this end, we are specifically concerned over the air quality impacts of the Forest Service's proposed actions with regards to the following issues:

A. The RDEIS Fails to Analyze the Impact of Prolonging (or Shortening) the Life of North Fork Valley Coal Mines to Ambient Ozone Concentrations.

The RDEIS contains no analysis or the impacts of prolonging the life of the North Fork coal mine on ambient concentrations of ozone air pollution. Ozone is a pollutant of concern for which the Clean Air Act has established National Ambient Air Quality Standards (NAAQS). Ozone is formed when two key air pollutants—VOCs and nitrogen oxides (NOx)—react with sunlight. Nevertheless, the RDEIS entirely fails to analyze the impacts of prolonging the life of the three North Fork coal mines to ambient concentrations of ozone—including impacts from construction and production operations.

The RDEIS's failure to analyze and assess at all impacts to ambient ozone concentrations is troublesome in light of increasing ozone trends in the Rocky Mountain West, including western Colorado, and the link between rising ozone and industrial development and associated increases in VOC and NOx emissions. For example, a large region in western Wyoming has been declared a "nonattainment" area because the region violated the ozone NAAQS in 2008.[86] While the NAAQS limit ozone concentrations to no more than 0.075 parts per million (ppm) over an eight-hour period, ozone concentrations reached 0.122 ppm in parts of western Wyoming in 2008, higher than most urban areas. As Wyoming Governor Freudenthal noted in a letter to Acting EPA Region 8 Administrator Carol Rushin, these high ozone concentrations are linked to increasing natural gas drilling and production in the region.[87]

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[85] Class I areas in Colorado are identified at 40 C.F.R. § 81.406.

[86] See Wyoming Department of Environmental Quality news release, available at http://deq.state.wy.us/aqd/Ozone/Press%20Release_nonattainmentmarch12_3%2520CE.pdf (last viewed July 14, 2011), attached as Exh. 55.

[87] See letter from Wyoming Governor, Dave Freudenthal, to Acting EPA Region 8 Administrator, Carol Rushin (March 12, 2009), available at http://deq.state.wy.us/aqd/Ozone/Gov%20Ozone%20to%20EPA%20(Rushin)_Final_3-12-09.pdf (last viewed July 14, 2011), attached as Exh. 56.

While the current NAAQS limit ozone concentrations to no more than 0.075 ppm, EPA has proposed to establish an even lower NAAQS of between 0.06 and 0.07 ppm.[88] The EPA expects to finalize the new NAAQS this month.[89] Under the proposed standards, a number of regions in the Rocky Mountain West that have never exceeded or violated the ozone NAAQS are expected to do so. The map below shows the counties expected to violate the new ozone NAAQS, including counties that encompass lands within the San Juan, Arapaho-Roosevelt, and Routt national forests in Colorado.[90] Also, notably, based on recent monitoring, CDPHE has found that Mesa and Garfield Counties could violate the EPA's proposed ozone NAAQS. The current 3-year average of the fourth highest ozone values is 0.067 ppm in Mesa County and 0.064 ppm in Garfield County.[91] If EPA's final ozone NAAQS is set as low as 0.060 ppm, these counties would be considered in violation. The RDEIS cannot overlook such potentially significant violations, particularly given that Forest Service actions encouraging coal mining could worsen the violations.

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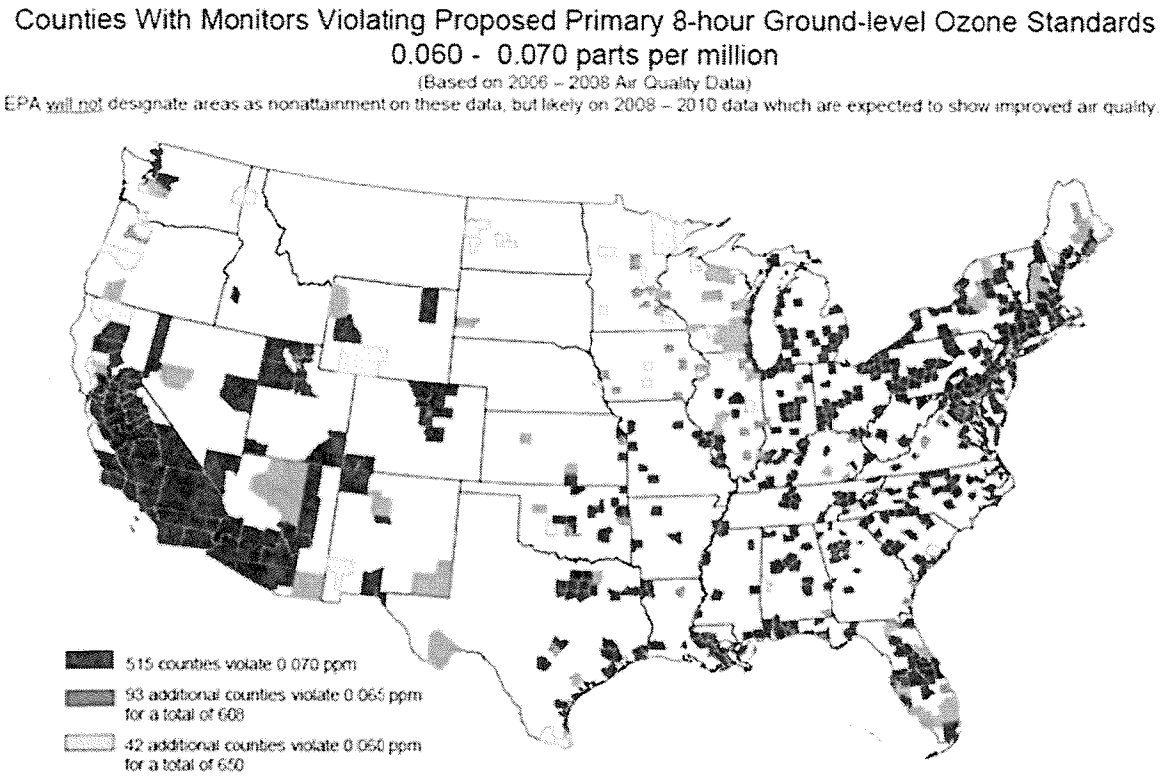
[88] See EPA, "National Ambient Air Quality Standards for Ozone, Proposed Rule," 75 Fed. Reg. 2930-3052.

[89] See U.S. EPA, Declaration of Regina McCarthy (Dec. 8, 2010), available at http://www.epa.gov/glo/pdfs/20101208declaration.pdf (last viewed July 14, 2011), attached as Exh. 57.

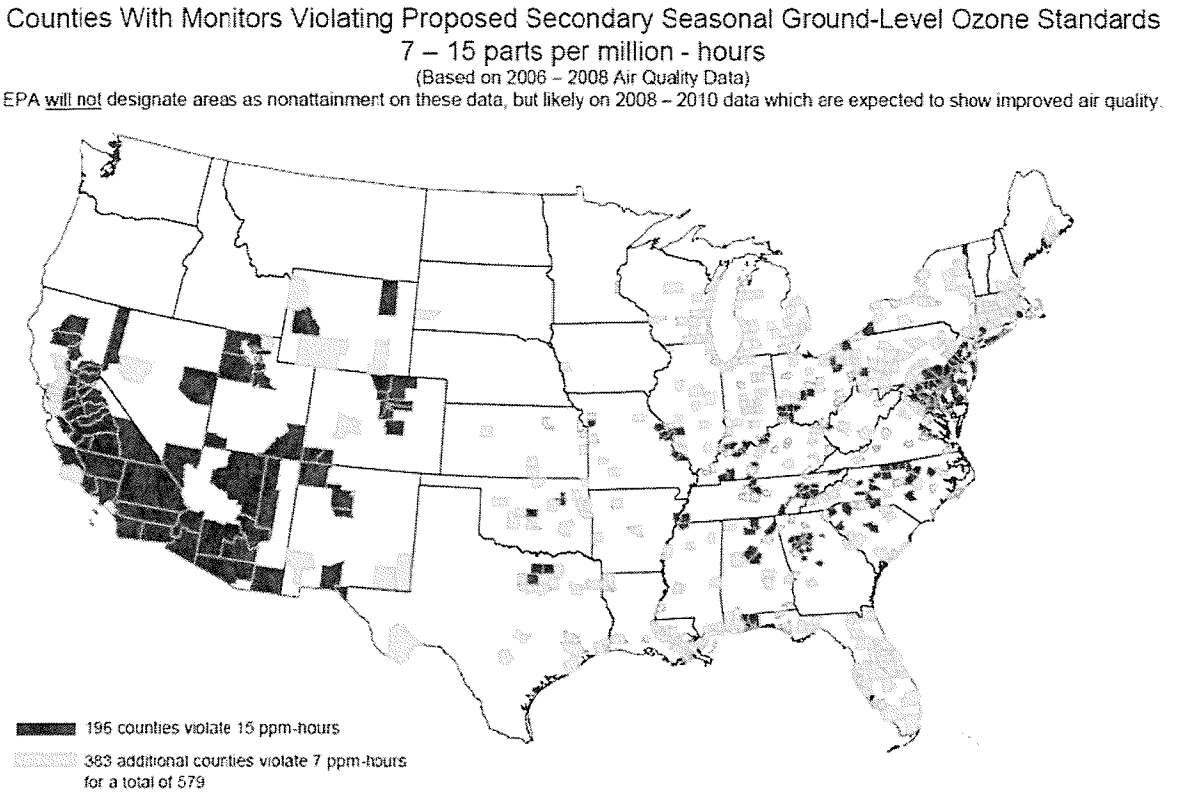
[90] See EPA, Ozone Map, available at http://www.epa.gov/groundlevelozone/pdfs/20100104maps.pdf (last viewed July 14, 2011), attached as Exh. 58.

[91] See CDPHE ozone table, available at http://www.colorado.gov/airquality/html_resources/ozone_summary_table.htm (last viewed May 5, 2011), attached as Exh. 59.



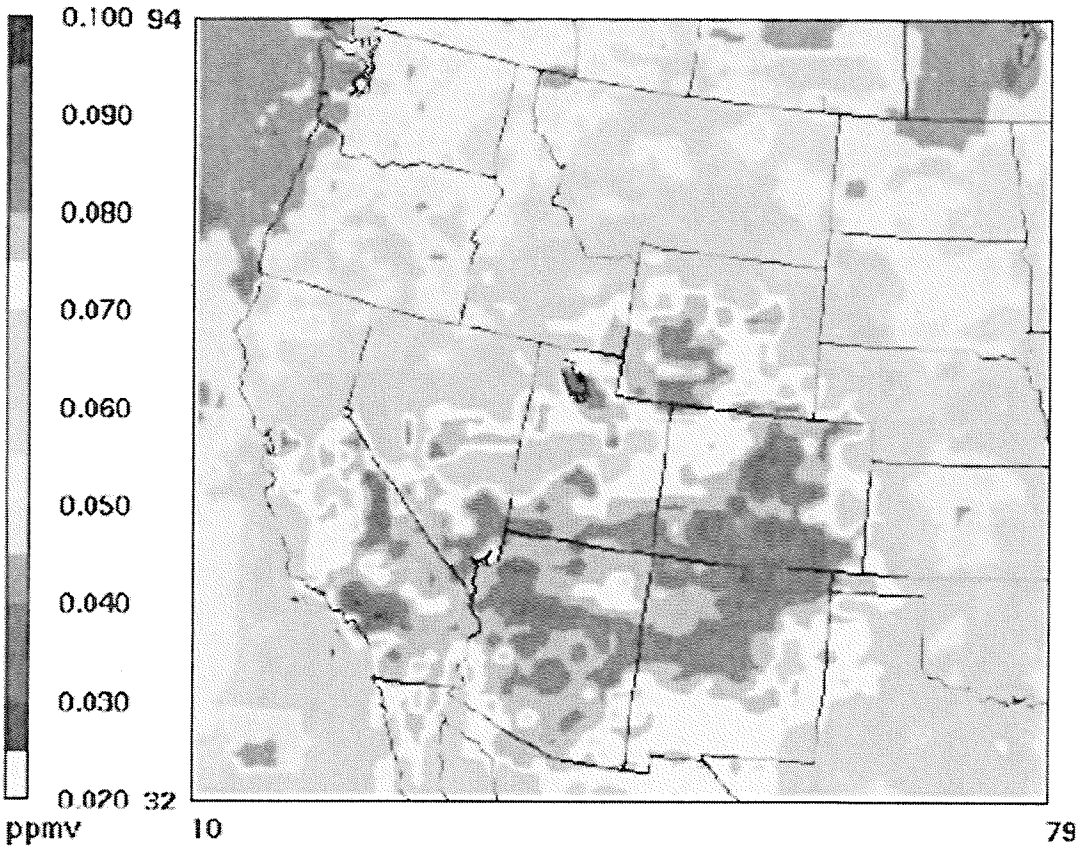
Furthermore, the EPA has also proposed secondary ozone NAAQS to protect public welfare in accordance with the Clean Air Act. Secondary NAAQS ensure protection of vegetation and other natural values. According to EPA's recent proposal, the secondary NAAQS will limit ground-level ozone on a seasonal basis to no more than 7-15 parts per million-hours, which is a measure of overall exposure. Under the EPA's proposal, Gunnison County, Colorado—the county in which the North Fork coal mines are located—would violate a secondary ozone NAAQS set at 7 parts per million-hours. The map below shows the counties expected to violate the new secondary ozone NAAQS.[92]

[92] EPA, Ozone Map (Exh. 58).



Recent modeling prepared for the Western Regional Air Partnership (WRAP) confirms that large areas of the Rocky Mountain West, in particular much of Colorado, are projected to exceed and/or violate the ozone NAAQS by 2018. In a 2008 presentation given at a WRAP Technical Analysis Meeting in Denver, it was reported that the modeling "predicts exceedance of the 8-hour average ozone standard in much of the southwestern U.S., mostly in spring."[93] The image below, presented at the WRAP Technical Analysis Meeting, shows areas projected to exceed and/or violate the current ozone NAAQS by 2018 in orange and red. Under the EPA's proposed ozone NAAQS, areas projected to exceed and/or violate the NAAQS include yellow and green. Importantly, much of western Colorado is expected to exceed and/or violate not only the current ozone NAAQS of 0.075 ppm, but also the EPA's proposed NAAQS of between 0.060 and 0.070 ppm.

[93] Tonnesen, G. et al., "Review of Ozone Performance in WRAP Modeling and Relevance to Future Regional Ozone Planning," presentation given at WRAP Technical Analysis Meeting (July 30, 2008) at unnumbered slide 30, available at http://wrapair.org/forums/toc/meetings/080729m/RMC_Denver_OzoneMPE_Final2.pdf (last viewed July 14, 2011), attached as Exh. 60.



Projected eight-hour ozone concentrations in Western U.S.[94]

In addition, findings of recent scientific studies show that ozone in the Western United States is uniquely influenced by atypical factors. For instance, the National Oceanic and Atmospheric Administration (NOAA) recently completed a study finding that ozone air pollution can be problematic in winter in the Rocky Mountain West. After studying the phenomenon in Western Colorado, NOAA stated in a press release:

> The NOAA team found ozone was rapidly produced on frigid February days in 2008 when three factors converged: ozone-forming chemicals from the natural gas field, a strong temperature inversion that trapped the chemicals close to the ground, and extensive snow cover, which provided enough reflected sunlight to jump-start the needed chemical reactions.[95]

NOAA reported, "the problem could be more widespread," explaining: "Rapid production of wintertime ozone is probably occurring in other regions of the western United States, in Canada,

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[94] Id. at unnumbered slide 28.

[95] See NOAA Press Release (Jan. 18, 2009), available at http://www.noaanews.noaa.gov/stories2009/20090118_ozone.html (last viewed July 14, 2011), attached as Exh. 61.

and around the world."[96] A 2008 Colorado Air Pollution Control Division analysis suggests that many areas of western Colorado could be susceptible to high wintertime ozone levels given the propensity for winter-time inversions and other conditions that favor ozone formation.[97]

The issue of wintertime ozone may be linked to coal mining, among other activities. The *Denver Post* reported in 2009:

> Since the initial [NOAA] findings were published January in the journal Nature GeoScience, there have been more incidents. Elevated ozone levels have been detected in eastern Wyoming in the Thunder Basin, where there is no oil and gas drilling, [NOAA researcher] Schnell said. But there are coal mines and the ozone may be linked to methane and the diesel fumes from large earth-moving machines, Schnell said.[98]

There is also increasing evidence that global warming is affecting ambient ozone concentrations. As the United Nations Environmental Programme (UNEP) notes, global warming is an increasingly significant factor "promot[ing] the formation of surface ozone."[99] One of the principle effects of global warming is an increase in the "frequency and intensity of heat waves."[100] As a result of the tendency of global warming to produce longer and hotter summer peak temperatures, the IPCC projects increases in July mean ozone concentrations over the industrialized continents of the northern hemisphere will climb above 0.07 ppm by the year 2100.[101] A 2007 study by scientists at Harvard, NASA, and the Argonne National Laboratory specifically reported that global warming is likely to increase maximum eight-hour ozone concentrations by 2-5 parts per billion (0.002-0.005 ppm) over large swaths of the United States, including Colorado, by mid-century.[102] A 2009 synthesis study further found that, although the impacts of climate change on ozone concentrations is anticipated to be uneven from region to region, climate change is expected to cause increases in summertime ozone concentrations over

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[96] Id.

[97] See P. Reddy, "Late Winter Early Spring Ozone in Wyoming, Implications for Colorado," presentation to Colorado Air Quality Control Commission (March 2008), attached as Exh. 62.

[98] See Jaffe, M., "The cold truth about ozone," *Denver Post* (Mar. 4, 2009), available at http://www.denverpost.com/ci_11829606 (last viewed July 14, 2011), attached as Exh. 63.

[99] UNEP, How Will Global Warming Affect My World: A Simplified Guide to the IPCC's "Climate Change 2001: Impacts, Adaptation and Vulnerability," 14, GE.03-03327-December 2003-2,000, attached as Exh. 64.

[100] Id. at 14.

[101] IPCC, Climate Change 2001: Working Group II: Impacts, Adaptation and Vulnerability, Technical Summary at Part 3.5.

[102] Shiliang Wu et al., Effects of 2000-2050 Global Climate Change on Ozone Air Quality in the United States, Journal of Geophysical Research, 113 (2008), available at http://acmg.seas.harvard.edu/publications/wu2008/2008a.pdf (last viewed July 14, 2011), attached as Exh. 65.

substantial regions of the country.[103] Additional research estimated that the area affected by elevated ozone within the continental United States was projected to increase (38% in areas with levels exceeding the 0.075 ppb ozone standard at least once a year), and that the length of the ozone season was projected to increase.[104]

This evidence demonstrates that ozone is a significant issue, and that the RDEIS should have analyzed and disclosed the impacts of the prolonging the life of three large coal mines on ozone levels in areas impacted by the mine's emissions. Bolstering this conclusion, EPA has noted the need for federal land management agencies to address impacts to ambient ozone concentrations. In comments to BLM regarding expansion of oil and gas drilling and production operations in the Pinedale Anticline Project Area of Wyoming, EPA commended BLM for "using the photochemical grid model, CAMx" in analyzing ozone impacts and noted: "This level of analysis is particularly important given the elevated ozone levels that have been recorded at ambient air monitoring stations neighboring the [project area]."[105] Similarly, in comments to the BLM regarding the West Tavaputs Plateau natural gas development project in Utah, EPA stated that "additional cumulative and project-specific air impact modeling should be completed" to address ozone impacts.[106] BLM undertook a rudimentary ozone analysis for the coal lease for the proposed, nearby Red Cliff Mine in Mesa County, Colorado, estimating NOx and VOC emissions caused by mine construction as well as mine operation.[107] The Forest Service cannot disavow any potentially significant ozone impacts associated with coal mining.[108]

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[103] C.P. Weaver et al., A Preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations, Bulletin of the American Meteorological Society 90:1843-1863 (2009) at 1858, attached as Exh. 66; see also EPA, Assessment of the impacts of global change on regional U.S. air quality: A synthesis of climate change impacts on ground-level ozone, An Interim Report of the U.S. EPA Global Change Research Program (2009), attached as Exh. 67.

[104] J. Chen et al., The effects of global changes upon regional ozone pollution in the United States, Atmospheric Chemistry and Physics 9:1125-1141 at 1137-1138 (2009), attached as Exh. 68.

[105] Letter from Robert E. Roberts, EPA Region 8 Administrator, to Robert A. Bennett, Wyo. BLM State Dir., re: Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project, Sublette County, Wyoming CEQ #20070542 at 3 (Feb. 14, 2008), attached as Exh. 69.

[106] Letter from Robert E. Roberts, EPA Region 8 Administrator, to Selma Sierra, Utah BLM State Director, re: West Tavaputs Plateau Natural Gas Full Field Development Plan, Draft Environmental Impact Statement Carbon County, Utah CEQ #20080028 (May 23, 2008), available at http://yosemite.epa.gov/oeca/webeis.nsf/(PDFView)/20080028/$file/20080028.PDF?OpenElement (last viewed July 14, 2011), attached as Exh. 70.

[107] BLM, Draft Environmental Impact Statement – Proposed Red Cliff Mine Project and Federal Coal Lease by Application at 4-66 – 4-67 (January 6, 2009), available at http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/rmp/red_cliff_mine/documents.html (last viewed July 14, 2011).

[108] Importantly, continued coal mine pollution of ozone precursors will be occurring against a backdrop of likely worsening ozone pollution in the coming years in western Colorado near the

Furthermore, state regulations will not ensure that the three North Fork coal mines will not cause or contribute to exceedances and/or violations of the ozone NAAQS. First, state regulations will not address any mobile source emissions, particularly exhaust emissions, that could cause or contribute to ozone exceedances and/or violations. At those three mines, air emissions – from trucks, rail transport, and other heavy equipment such as loaders – could be considerable. Second, the air permits issued by CDPHE for the mines do not even limit VOC emissions and do not appear to even limit NOx emissions.[109] Third, CDPHE does not analyze the impacts of permitting stationary sources to ambient ozone levels. CDPHE has explicitly stated that, "ozone modeling is not routinely requested for construction permits."[110]

The Forest Service is required to take a "hard look" at the potential impacts on ozone creation by an action that will prolong the life of the three mines when compared to Alternative 1, given: (1) growing concern over ozone in the Rocky Mountain West; (2) the fact that another federal land management agency – BLM – has analyzed ozone impacts elsewhere in the region; and (3) that state and federal regulations, including permitting requirements, fall short of ensuring full protection of the ozone NAAQS. The Forest Service cannot ensure that the less protective roadless area management alternatives – which will extend the life of the three North Fork coal mines for decades beyond the lives of those mines under Alternative 1 – will comply with the ozone NAAQS, both the current and the proposed, without first preparing a quantitative analysis of impacts.

The RDEIS's failure to even consider an analysis of varying alternatives on ozone violates NEPA.

Further, the Forest Service cannot merely rely on its hope – substantiated nowhere – that no state or federal air quality violations will occur in the future as a result of the agency's proposed management of roadless areas. Federal courts have repeatedly held that an action agency, like the Forest Service here, cannot rely on the mere fact that another agency may permit certain environmental impacts as an excuse for neglecting to disclose those impacts. See Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d. 1109 (D.C. Cir. 1971). In Calvert Cliffs', the D.C. Circuit held that doing so "neglects the mandated balancing analysis. Concerned members of the public are thereby precluded from raising a wide range of

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North Fork mines, given the huge increase in oil and gas drilling in the area. Since 1998, oil and gas production in the region has boomed. In Gunnison, and nearby Delta, Garfield, and Rio Blanco counties, 18,266 oil and gas permits were issued between 1999 and 2010. Colo. Oil & Gas Conservation Comm'n, Staff Report, at 19 (Jan. 13, 2011), attached as Exh. 71. In comparison, in the ten years before 1999 only 1,549 oil and gas permits were issued in these four counties. Id.

[109] See, e.g., Elk Creek East Apr. 2011 EA (Exh. 28) at 22.

[110] See, e.g., CDPHE, Colorado Modeling Guidance for Air Quality Permits at 21 (December 27, 2005), available at http://www.colorado.gov/airquality/permits/guide.pdf (last viewed July 14, 2011), attached as Exh. 72.

environmental issues in order to affect particular Commission decisions. And the special purpose of NEPA is subverted." Id. at 1123.

Even if the Forest Service could rely on state air permits, those permits fail to address the impacts to ozone levels resulting from mine operation because: (1) they fail to address mobile sources (such as heavy equipment, trucks and trains that move coal); (2) they fail to address VOCs and NOx; and (3) they fail to address contributions to ozone levels. It is perfectly reasonable to conclude that state issued air permits fail to sufficiently analyze air quality impacts and that the Forest Service is obligated to take such a hard look. After all, the state's permitting program is narrowly tailored so as to as only address a subset of stationary sources and air pollutants. It does not serve to ensure that all air polluting activities associated with a major federal action actually protect air quality. That is a duty that falls squarely on the Forest Service's shoulders.

Nor does BLM cite or tier to any prior analysis by any agency that addresses a decision to continue the operation for the three North Fork coal mines indefinitely because none exists.

The RDEIS fails to explain why no exceedances are expected, or how the Forest Service reached this conclusion since the agency apparently neither prepared nor obtained any information concerning air quality. Further, courts have rejected the argument that action agencies need not disclose environmental impacts simply because the impacts may not lead to violations of other laws. See, e.g., United States v. City of Detroit, 329 F.3d 515, 530 n.2 (6th Cir. 2003) (Moore, J., concurring) ("The decision whether to prepare a NEPA analysis does not depend on whether the proposed action will [meet other environmental standards]; if it did, federal agencies would have to consider the environmental consequences of their actions only if the action was prohibited by federal law.").

For all of these reasons, the RDEIS fails to take the required "hard look" at the impacts of varying alternatives on ambient ozone concentrations. The Forest Service must cure these defects in any subsequently prepared NEPA document.

B. The RDEIS Fails to Analyze the Impacts of Prolonging (or Shortening) the Life of North Fork Valley Coal Mines to $PM_{2.5}$ Concentrations.

The RDEIS also fails to analyze impacts to concentrations of $PM_{2.5}$, a harmful air pollutant. $PM_{2.5}$ includes all particles less than 2.5 microns in diameter, or $1/28^{th}$ the width of a human hair. According to EPA, the health effects of $PM_{2.5}$ include:

- Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing;
- Decreased lung function;
- Aggravated asthma;
- Development of chronic bronchitis;
- Irregular heartbeat;

- Nonfatal heart attacks; and
- Premature death.[111]

Although the NAAQS limited $PM_{2.5}$ concentrations to no more than 35 micrograms/cubic meter over a 24-hour period and 15 micrograms/cubic meter annually, the D.C. Circuit overturned these standards in 2009 on the basis that EPA failed to demonstrate that the standards sufficiently protected public health.[112] EPA's own Clean Air Scientific Advisory Committee has expressed "serious scientific concerns regarding the public health and welfare implications" of the $PM_{2.5}$ NAAQS.[113]

BLM has recognized the need to analyze and disclose $PM_{2.5}$ impacts that may result from coal mine operations, as it did in evaluating the proposed Red Cliff coal mine in Mesa County, Colorado.[114] That analysis, contained in a draft EIS, estimated likely $PM_{2.5}$ emissions and levels predicted to result from the mine during its production phase, as well as those caused by mine construction.[115] Both near- and far-field impacts were analyzed.[116]

The RDEIS fails to contain any analysis at all of the three North Fork coal mines' impacts to $PM_{2.5}$ concentrations, despite the fact that prolonging the lives of these mines is a central purpose of Alternative 2, 3 and 4. This oversight violates NEPA. Nor can the RDEIS rely on state permitting, since Colorado does not regulate $PM_{2.5}$ in permits.[117] We are unaware of any authority that supports the notion that an agency can rely on a state agency's failure to regulate a pollutant in a permit as a proxy for NEPA compliance.

The Forest Service's oversight is particularly troubling because EPA's 2002 National Emission Inventory data indicates that at that time, just one of the mines - the Elk Creek Mine - released 28

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[111] See U.S. EPA, Health and Environmental Effects of PM-2.5, available at http://www.epa.gov/particles/health.html (last viewed July 14, 2011).

[112] See American Farm Bureau Federation, et al. v. EPA, No. 06-1410 (D.C. Cir. Feb. 24, 2009). Although the D.C. Circuit remanded the $PM_{2.5}$ NAAQS, the standards remain in place until updated.

[113] See Clean Air Scientific Advisory Committee Letter to Stephen Johnson, EPA Administrator, EPA-CASAC-LTR-06-003 (September 29, 2006), available at http://yosemite.epa.gov/sab/sabproduct.nsf/1C69E987731CB775852571FC00499A10/$File/casac-ltr-06-003.pdf (last visited July 14, 2011), attached as Exh. 73.

[114] See BLM, Draft Environmental Impact Statement – Proposed Red Cliff Mine Project and Federal Coal Lease by Application (January 6, 2009) at Appendix H, attached as Exh. 74.

[115] See, e.g., id. at H-13 – H-15.

[116] Id. at H-1.

[117] Nor does CDPHE analyze the impacts of any stationary source to $PM_{2.5}$ concentrations prior to issuing any construction permit. See CDPHE Colorado Modeling Guidance (Exh. 72). This, however, is not due to the insignificance of $PM_{2.5}$ as a harmful air pollutant, but rather because of CDPHE's unwillingness to control this harmful air pollutant.

tons of $PM_{2.5}$, while West Elk Mine released 36 tons.[118] Although EPA's 2002 data may be outdated, it demonstrates that continued operation of just one of the three North Fork coal mines could pose potentially significant impacts to $PM_{2.5}$ concentrations, potentially significant impacts that have not yet been analyzed and assessed in accordance with NEPA.

Finally, as noted above, the fact that the Forest Service does not expect $PM_{2.5}$ NAAQS exceedances from prolonging the lives of the North Fork mines is irrelevant to the "hard look" NEPA requires. This is particularly true here, where EPA is under a court order to revisit the $PM_{2.5}$ NAAQS because EPA failed to show that the current standards sufficiently protect public health. Under NEPA, the Forest Service cannot simply avoid taking meaningful steps to analyze the impacts of prolonging (or shortening) the lives of the North Fork mines to ambient $PM_{2.5}$ concentrations.

C. The RDEIS Fails to Adequately Analyze the Mine's PM_{10} Impacts.

The Forest Service should have analyzed and assessed impacts to PM_{10}, or particulate matter less than 10 microns in diameter, which is currently limited by the NAAQS to no more than 150 micrograms/cubic meter over a 24 hour period.[119] PM_{10}, like $PM_{2.5}$, can have harmful health impacts.[120] Extending the lives of the North Fork coal mines will lead to additional construction at, prolonged operation of, and continued vehicle traffic to and from the Elk Creek Mine, both of which will cause PM_{10} emissions.[121]

As with $PM_{2.5}$, BLM has recognized the need to disclose and analyze PM_{10} impacts in NEPA documents for coal mine proposals. In proposing the Red Cliff Mine and coal lease in Colorado, BLM prepared a draft EIS that addressed and analyzed the mine's potential contributions to PM_{10} emissions.[122] BLM in Wyoming has also analyzed and assessed direct, indirect, and cumulative PM_{10} impacts prior to issuing coal leases.[123]

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[118] See EPA, National Emission Inventory Data for Oxbow Mining, Gunnison County, CO (2002), available at http://iaspub.epa.gov/airsdata/adnet.ranking?geotype=co&geocode=08051&geoinfo=co~08051~Gunnison+Co%2C+Colorado&pol=PM25&year=2002&fld=percent&fld=plt_name&fld=addr&fld=county&fld=state&fld=sic&rpp=25 (last viewed July 14, 2011), attached as Exh. 75.

[119] See 40 C.F.R. § 50.6.

[120] See EPA, Particulate Matter (PM-10), available at http://www.epa.gov/airtrends/aqtrnd95/pm10.html (last viewed July 14, 2011).

[121] As the RDEIS recognizes, Alternatives 2, 3 and 4 will allow additional construction at the mines, including the construction of roads and methane drainage well facilities.

[122] See Red Cliff Mine DEIS at Appendix H (Exh. 74).

[123] See, e.g., BLM, Wright Area Coal Lease by Applications Final EIS (July 2010) at 3-50 - 3-78 (analyzing direct and indirect impacts) and 4-46 ("The impacts for the baseline year (2004) and for 2015 and 2020 lower and upper coal production scenarios were directly modeled and the criteria pollutants modeled were particulates (PM_{10} and $PM_{2.5}$), NO2 [nitrogen dioxide], and SO2 [sulfur dioxide]"), available at http://www.blm.gov/wy/st/en/info/NEPA/documents/hpd/Wright-

It is important that the Forest Service sufficiently addresses PM_{10} emissions for at least two reasons. First, areas close to the North Fork have recorded exceedances of the NAAQS limits. Although there are no PM_{10} monitors in the coal mining areas of the North Fork Valley, PM_{10} in both Grand Junction, Colorado (approximately 60 miles from Elk Creek) and Delta, Colorado (less than 40 miles from Elk Creek) have registered exceedances of the PM_{10} NAAQS in the last several years. According to the EPA's AirExplorer website, the PM_{10} monitor in Delta exceeded the NAAQS in 2009.[124] Additionally, according to EPA's AirData website, Grand Junction exceeded the PM_{10} NAAQS six times between 2000 and 2008.[125]

Second, the State of Colorado recently brought enforcement actions against Oxbow and one of its subsidiaries for, among other things, violating PM_{10} limits in those permits at the Elk Creek Mine in the North Fork Valley. The State tallied fourteen violations of PM_{10} permit limits in Elk Creek's permits in 2008 and 2009.[126] The Forest Service therefore cannot simply assume that state issued air permits will sufficiently limit PM_{10} emissions. Thus, the Agency cannot rely on permit compliance at the North Fork coal mines, or on its assertion that no violations of state or federal standards are likely.

Despite the potential significance of PM_{10} emissions from North Fork coal mines, the RDEIS contains no analysis of PM_{10} concentrations with caused by the proposal in Alternatives 2, 3 and 4 to extend the mines' lives for decades beyond that proposed in Alternative 1. There is no analysis or assessment whatsoever of PM_{10} impacts. This omission violates NEPA.

Coal.html (last viewed July 14, 2011).

[124] See Delta County PM_{10} monitoring data for 2009, available at http://www.epa.gov/cgibin/broker?msaorcountyName=&msaorcountyValue=&poll=81102&county=08029&site=- 1&msa=-1&state=1&sy=2009&flag=Y&query=view&_debug=2&_service=data&_program=dataprog.query_daily 3P_dm.sas (last viewed May 5, 2011). According to this data, Delta County exceeded the PM_{10} standards on March 29, 2009. Through the EPA's AirExplorer website, one can download Google Earth map files that provide data gathered from PM_{10} monitors throughout the United States. See http://www.epa.gov/mxplorer/monitor_kml.htm (last viewed July 14, 2011).

[125] See EPA, AirData website at http://iaspub.epa.gov/airsdata/adaqs.monvals?geotype=co&geocode=08077&geoinfo=co~08077~Mesa+Co%2C+Colorado&pol=PM10&year=2008+2007+2006+2005+2004+2003+2002+2001+2000&fld=monid&fld=siteid&fld=address&fld=city&fld=county&fld=stabbr&fld=regn&rpp50 (last viewed May 5, 2011). See also EPA, AirExplorer website at http://www.epa.gov/cgibin/broker?msaorcountyName=&msaorcountyValue=&poll=81102&county=08077&site=-1&msa=-1&state=-1&sy=2010&flag=Y&query=view&_debug=2&_service=data&_program=dataprog.query_daily 3P_dm.sas (last viewed May 5, 2011). This data shows that Mesa County exceeded the PM_{10} NAAQS at three monitoring locations on May 23, 2010.

[126] See State of Colorado, Compliance Advisory (Aug. 5, 2010) at 2 ("Oxbow exceeded the permitted limits of PM_{10} on 14 days at Elk Creek "), attached as Exh. 76.

D. The RDEIS Fails To Adequately Analyze And Assess Volatile Organic Compound Emissions Associated with Methane Emissions.

The RDEIS fails to address a significant potential source of VOC emissions: VOCs that are emitted when methane is vented from the North Fork coal mines whose lives will be extended in Alterantives 2, 3 and 4 far beyond the life of the mines under Alternative 1. VOC emissions from methane have the potential to be significant based on at least three pieces of data.

First, the U.S. Geological Survey studies of coal gas in the Mesaverde Group have found that, although methane is the primary constituent, "[h]eavier hydrocarbon gas content ranges from 0.1 to almost 18 percent."[127] This is particularly the case for coals in the Piceance Basin, which include those that will be extracted from the North Fork coal mines.[128] While heavier hydrocarbons in the Mesaverde Group include ethane, they also may include other alkanes like propane, pentane, and hexane, as well as other hydrocarbon groups including alkenes, aldehydes, and benzene and benzene derivatives, all of which are regulated VOCs under the Clean Air Act. See 40 C.F.R. § 51.100(s).

Second, BLM has indicated that VOCs are released in addition to methane gas from the same coal formation. For the proposed Red Cliff Mine in Mesa County, Colorado, BLM disclosed that low concentrations of non-methane organic compounds would be released. This disclosure prompted the EPA to recommend that BLM disclose in any subsequent NEPA document for the Red Cliff Mine the NMOC (or VOC) emissions from the mine:

> [G]iven the high methane emission rates associated with the [Red Cliff] mine, the NMOC [nonmethane organic compound] emission rates may be considerable. The Final EIS should present an actual compositional analysis and estimate of emissions of major NMOCs for the mine. Furthermore, EPA recommends that air modeling for NMOCs be conducted for high NMOC emission rates.[129]

Third, testing of coal mine methane emissions from the West Elk Mine indicates that VOC emissions there are significant. Methane testing in 2009 indicates that non-methane hydrocarbon emissions account for about 2% of the amount of methane emitted.[130] If methane and non-methane hydrocarbons are vented in roughly the same relative amounts at each of the three North

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[127] See Charles W. Spencer, Uinta-Piceance Basin Province, at 22, available at http://certmapper.cr.usgs.gov/data/noga95/prov20/text/prov20.pdf (last viewed May 5, 2011), attached as Exh. 77.

[128] See Dudley D. Rice, Composition and Origins of Coalbed Gas 161(2000), available at http://www.searchanddiscovery.net/documents/rice/index.htm (last viewed July 14, 2011), attached as Exh. 78.

[129] See EPA Letter to Glenn Wallace re: Proposed Red Cliff Mine Project (Exh. 44).

[130] See Mountain Coal Co., West Elk Mine E-seam Gas Economic Evaluation Report (Sept. 24, 2009) at Appendix 2 to Appendix F, excerpts attached as Exh. 79.

Fork mines – which emit more than 25 million cubic feet a day of methane[131] – then the three mines could be expected to emit more than 10 tons of VOCs daily, or 3,869 tons/year,[132] which is more than 15 times greater than the 250 ton/year major source thresholds under the Clean Air Act's prevention of significant deterioration program.[133]

Thus, data shows that venting methane from the North Fork coal mines for many additional years, which the proposed action is designed to permit, may result in significant VOC emissions; emissions that the Forest Service failed to analyze in any way. The Forest Service's failure to take a hard look at VOC emissions related to methane venting violates NEPA. Given that VOCs are a precursor to ozone, it is doubly important that the Forest Service should analyze VOC emissions to ensure an adequate analysis and assessment under NEPA, and to ensure compliance with the ozone NAAQS.

E. The RDEIS Fails To Analyze and Assess Impacts to Other Air Quality Standards.

The RDEIS also entirely fails to analyze and assess the impacts of extending the life of the North Fork coal mines to the following air quality standards.

1. 1-hour Nitrogen Dioxide NAAQS.

The RDEIS failed to analyze and assess the potentially significant impacts to the current NAAQS for nitrogen dioxide. On February 9, 2010, EPA finalized revisions to the nitrogen dioxide NAAQS, supplementing the current annual standard of 53 parts per billion with a 1-hour standard of 100 parts per billion.[134] These NAAQS were originally proposed on July 15, 2009. See 74 Fed. Reg. 34404-34466 (July 15, 2009). These NAAQS became effective on April 12, 2010.

The RDEIS fails to even acknowledge the existence of this standard, let alone analyze the potential contribution of the North Fork coal mines to potentially violating the standard. The Forest Service's omission violates NEPA.

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[131] See EPA, "Coal Mine Methane Recovery at Active U.S. Coal Mines: Current Projects and Potential Opportunities" (2010) at 2 (showing the following methane emissions from North Fork mines: 14 million cubic feet per day from Bowie No. 2; 11.6 million cubic feet per day from the Elk Creek mine; and 6 million cubic feet per day from the West Elk Mine), available at http://www.epa.gov/cmop/resources/coal_mine_data_sheet.pdf (last viewed July 14, 2011), and attached as Exh. 80.

[132] According to the EPA, 25 million cubic feet of methane equals 530 tons per day. See EPA, Interactive Units Converter, http://www.epa.gov/cmop/resources/converter.html (last viewed July 14, 2011). This equals 193,450 tons per year (530 tons/day * 365 days/year). Assuming that VOCs are emitted at a rate equal to 2% of all methane emissions, this would equal 3,869 tons/year (193,450 * 0.02) of VOC emissions from the three North Fork coal mines.

[133] See 42 U.S.C. § 7491(g)(7).

[134] See 75 Fed. Reg. 6474-6537 (Feb. 9, 2010).

2. Class I Increments

The Forest Service also failed to analyze and assess the potentially significant impacts to PSD increments for Class I areas. Increments are similar air quality standards to the NAAQS, although they apply based on whether an area is designated as Class I or Class II. Under the Clean Air Act, increments "shall not be exceeded." 42 U.S.C. § 7473(a). EPA has established Class I increments for PM_{10}, nitrogen dioxide, and, most recently, $PM_{2.5}$.[135]

In this case, the Forest Service did not address impacts to PSD increments for Class I areas. This, despite the fact that in other NEPA documents prepared by BLM for other coal leasing activities, such as the Red Cliff EIS, such impacts have been addressed.[136] The oversight is significant given that there are several Class I areas near the Elk Creek East LBA site, including the West Elk Wilderness, Maroon Bells/Snowmass Wilderness, Flat Tops Wilderness, and Weminuche Wilderness. Given that PSD increments "shall not be exceeded," the Forest Service's failure to analyze and assess impacts to these air quality standards appears contrary to NEPA.

3. Visibility in Class I Areas

As explained, the Forest Service has an affirmative duty to protect visibility in Class I areas under the Clean Air Act.[137] Despite this, the Forest Service did not analyze or assess how Alternatives 2, 3, and 4would affect visibility in Class I areas, particularly areas near North Fork Valley, including the West Elk Wilderness Area, Maroon Bells/Snowmass Wilderness Area, and the Weminuche Wilderness Area. Although the RDEIS mentions visibility, noting that for all Class I areas, visibility is currently degraded by more than 100% (see RDEIS at 159), there is actually no analysis of impacts. This is disconcerting as the development of the North Fork coal mines will release pollutants that impair visibility, or create haze, including particulate matter, VOCs, and NOx. As BLM noted in the Red Cliff EIS:

> Examples of pollutants that directly contribute to regional haze include soot from diesel combustion, smoke from fires, fly ash from coal combustion, and wind-blown dust. Gaseous emissions that reduce visibility through the formation of

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[135] The PM10 and nitrogen dioxide increments are set forth at 40 C.F.R. §§ 51.166(c) and 52.21(c). The PM2.5 increments were adopted on October 20, 2010. See 75 Fed. Reg. 64864-64907.

[136] See, e.g., Red Cliff Mine Project DEIS at 3-35, available at available at http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/rmp/red_cliff_mine/documents.html (last viewed July 14, 2011).

[137] See 42 U.S.C. § 7476(d)(2)(B).

> secondary aerosols via chemical reactions in the atmosphere include emissions of SO_2, NO2, and VOCs, resulting primarily from fuel combustion.[138]

Despite the fact that other agencies have analyzed and assessed visibility impacts in other coal leasing NEPA documents, the Forest Service in this case made no effort to address such impacts.

V. THE RDEIS FAILS TO PROPERLY EVLAUATE THE PROPOSAL IN LIGHT OF CLIMATE CHANGE.

EPA has often pressed land management agencies to disclose an action's impact on climate change, and to evaluate an action in the context of climate change.[139] The Forest Service's analysis here, where it exists, is cursory, and fails to address many of the factors that EPA has previously addressed.

For example, the RDEIS neither mentions nor addresses state or regional plans to limit climate change, and how the various alternatives may impact those plans, something EPA repeatedly has urged land management agencies to address. The Forest Service thus ignores the fact that the State of Colorado has a "Climate Action Plan,"[140] and that then-Governor Bill Ritter in 2008 issued an Executive Order calling for, among other things, a 20% reduction in greenhouse gases below 2005 levels by 2020 and an 80% reduction below 2005 levels by 2050. According to Governor Ritter: "Many sectors of Colorado's economy, including agriculture, recreation, skiing, and tourism, could experience significant changes and impacts if emissions are not reduced."[141]

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[138] See Red Cliff Mine Project DEIS at 3-36 to 3-39, available at available at http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/rmp/red_cliff_mine/documents.html (last viewed July 14, 2011).

[139] See, e.g., Exh. 42 (EPA comment on New Elk mine); L. Svoboda, EPA to Forest Service re: Big Moose timber sale (Oct. 2010) (Exh. 25). EPA urges agencies to disclose the impacts of climate change on the proposed action, and the impacts of the proposal on regional and local climate change policies. EPA states that action agencies should:

> analyze whether potential effects from the proposal and alternatives may be exacerbated by regional climate change impacts; whether regional climate change may affect the proposal; and discuss how GHG emissions from the proposal and alternatives may affect federal, state, tribal, regional or local GHG plans, GHG inventories, Climate Action Plans, GHG Emissions Targets, policies or controls.

EPA New Elk Letter (Exh. 42) at 2 (emphasis added). EPA comments on a Colorado timber sale EIS echo this recommendation, stating that the Forest Service should: "describe any potential inconsistencies between the action and any relevant Regional, Tribal or State climate change plans or goals, as well as the extent to which the USFS would reconcile, through mitigation or otherwise, its actions with such plans." EPA Big Moose Letter (Exh. 25) at 7.

[140] See Colorado Climate Action Plan (November 2007), attached as Exh. 81.

[141] See Executive Order D 004 08, "Reducing Greenhouse Gas Emissions in Colorado" (April 22, 2008) at 1, attached as Exh. 82.

The Forest Service must correct this omission in any subsequently prepared NEPA document on the Colorado roadless rule.

VI. THE RDEIS MIS-IDENTIFIES THE "NO ACTION" ALTERNATIVE.

The Forest Service currently identifies Alternative 4 – the alternative evaluating road construction as permitted by existing forest plans – as the "no action" alternative. This is not accurate. As explained in the fact sheet attached as Exhibit 14, the U.S. Forest Service is currently enjoined nationwide from permitting any road construction that would violate the 2001 Roadless Rule, including in Colorado.[142] Thus, it is Alternative 1 – the 2001 Roadless Rule alternative – that is the actual "no action" alternative. Any subsequently prepared NEPA document must properly identify the nature of that injunction and identify Alternative 1 as the "no action" alternative.

CONCLUSION

Thank you for your attention to this matter. If you have any questions on this letter, please give me a call at 303-996-9622.

Sincerely,

Edward B. Zukoski
Attorney for WildEarth Guardians and Sierra Club

cc: Jeremy Nichols, WildEarth Guardians
Peter Morgan, Sierra Club
Roger Singer, Sierra Club

[142] M. Anderson, The Wilderness Society, Legal Status of the Roadless Area Conservation Rule (Mar. 4, 2011), attached as Exh. 83. The fact sheet is also available at http://wilderness.org/files/roadless-legal-primer.pdf (last viewed June 14, 2011).

TABLE OF EXHIBITS[143]

Exhibit 1	Power Consulting, Inc., "Greenhouse Gas Implications of Changes in North Fork Valley, CO, Coal Mining: A Critical Review of the Colorado Roadless Areas Rulemaking RDEIS" (July 2011)
Exhibit 2	L. Svoboda, EPA, Comments on South Gillette Area Coal Lease Applications Draft EIS (Dec. 19, 2008)
Exhibit 3	BLM, Final EIS for the South Gillette Area Coal Lease Applications (Aug. 2009) (excerpts)
Exhibit 4	BLM, Environmental Assessment, Elk Creek East Tract Coal Lease (June 2011) (excerpts)
Exhibit 5	E. Zukoski, photos of methane drainage well pads constructed for the West Elk Mine in the North Fork Valley (2009)
Exhibit 6	Forest Service, Colorado Roadless Rule Draft EIS at 108 (2008) (excerpts)
Exhibit 7	Interior Secretary Order No. 3289 (Sept. 14, 2009)
Exhibit 8	Governor Ritter Executive Order No. D 004 08 (Apr. 22, 2008)
Exhibit 9	CEQ Climate Change Guidance (Feb. 18, 2010)
Exhibit 10	Email from Aaron Worstell, BLM, to Barbara Sharrow, BLM (May 7, 2009)
Exhibit 11	P. Franklin, F. Ruiz, and J. Somers, "CEPA Activities to Promote Coal Mine Methane Recovery," presented at the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference (October 2010)
Exhibit 12	U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference, October 2010: M. Cote, Tai Xi Coal Group Coal Mine Methane Feasibility Study
Exhibit 13	J. D'Amico, Coal Mine Methane "Recovery & Utilization" Strategies (October 2010)
Exhibit 14	N. Duplessis, Pioneering VAM Oxidation
Exhibit 15	C. Talkington, "Achieving Near-zero Methane Emissions Coal Mining" (October 2010)
Exhibit 16	Yuecheng Coal Mine Methane Power Generation Project Clean Development Mechanism Project Design Document Form, March 25, 2011
Exhibit 17	GE, "Russia to begin producing Power from Coal Bed Methane," February 15, 2011
Exhibit 18	D. Claughton, "Clean Coal Projects Funded," ABC Rural (June 8, 2010)
Exhibit 19	IEIA, "Test Plan, Methane capture from the Zory Mine borehole, Methane to LNG Zory Coal Mine Project, Assistance Agreement: XA-83396101-0," (April 2009)
Exhibit 20	Global Methane Initiative, Projects

[143] Exhibits are provided in PDF format in separate emails from this letter.

Exhibit 21	United Nations ECE and Methane to Markets Partnership, Best Practice Guidance on Effective Methane Drainage and Use in Coal Mines, 2011
Exhibit 22	Settlement Agreement (Sept. 10, 2007)
Exhibit 23	L. Svoboda, EPA to C. Richmond, GMUG National Forest (Aug. 6, 2007)
Exhibit 24	Point Carbon Research, "US Offset Markets in 2010: The Road Not Yet Taken" (Mar. 1, 2010)
Exhibit 25	Letter of L. Svoboda, EPA Region 8 to T. Malecek, Rio Grande National Forest (Oct. 27, 2010)
Exhibit 26	Terrapass website, http://store.terrapass.com/store/c/18-Carbon-offsets.html (last viewed May 6, 2011)
Exhibit 27	U.S. EPA, U.S. Underground Coal Mine Ventilation Air Methane Exhaust Characterization (July 2010)
Exhibit 28	BLM, Elk Creek East Tract EA (April 2011)
Exhibit 29	J. Somers and H. Schultz, Coal mine ventilation air emissions: project development planning and mitigation technologies, 13th United States/North American Mine Ventilation Symposium, 2010
Exhibit 30	U.S. EPA, "Ventilation Air Methane (VAM) Utilization Technologies," September 2009
Exhibit 31	D. Kosmack, "Capture and Use of Coal Mine Ventilation Air Methane," (undated)
Exhibit 32	Durr Environmental and Energy Systems, "Securing Your VAM Investment with Proper RTO Technology," presented at the 6th session of the Ad Hoc Group of Experts on Coal Mine Methane, United Nations Economic Commission for Europe, (Oct. 2010)
Exhibit 33	E. Sherer, "MSHA and Coal Mine Methane," presented at the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference (October 2010)
Exhibit 34	U.S. EPA, Coal Mine Methane (CMM) Finance Guide, EPA-400-D-09-001(July 2009)
Exhibit 35	U.S. EPA CMOP, "Case Study: U.S. Demonstration of Ventilation Air Methane Oxidation Technology," (July 2010)
Exhibit 36	J. Somers and H. Schultz, "Thermal Oxidation of Coal Mine Ventilation Air Methane (VAM)," presented at 12th U.S./North American Mine Ventilation Symposium (June 9-11, 2008)
Exhibit 37	U.S. EPA, Coalbed Methane Extra, Summer 2010
Exhibit 38	PR Newswire, "Biothermica and Walter Energy Agree to develop Ventilation Air Methane Projects," October 5, 2010
Exhibit 39	Business Wire, "CONSOL ENE : Green Holdings Lists Landmark Coal Mine Methane Abatement Project with the Climate Action Reserve,"
Exhibit 40	BHP Billiton website, "World's First Power Plant To Use Coal Mine Ventilation Air As Fuel"
Exhibit 41	Environmental Protection Agency, Coalbed Methane Extra (Dec. 2009)
Exhibit 42	Letter from Larry Svoboda, EPA, to Melissa Smeins, BLM (Apr. 22, 2010)
Exhibit 43	Letter from Kerrigan G. Clough, EPA Region 8, to Charles Richmond, USFS (June 1, 2007)
Exhibit 44	Letter from Larry Svoboda, EPA, to Glenn Wallace, BLM (Mar. 31, 2009)

Exhibit 45	Daniel J. Brunner & Karl Schultz, Effective Gob Well Flaring 724 (1999)
Exhibit 46	EPA, International News Coalbed Methane Outreach Program,
Exhibit 47	United Kingdom's Coal Authority, Coal Mine Methane Activity Within The UK, Coal Mine Methane Operators Activities
Exhibit 48	J. Liebert, Extracting Value from Coal Mine Methane, Coal Age (June 2009)
Exhibit 49	Harworth Power Ltd., CMM Flaring PowerPoint (Sep. 2007
Exhibit 50	John C. Hempel, "Preliminary Assessment of the Feasibility of Capturing and Using Coalbed Methane Gas," (2008)
Exhibit 51	Email of Hubert E. Sherer, MSHA to Liane Mattson, US Forest Service (Oct. 26, 2007)
Exhibit 52	U.S. Environmental Protection Agency, Conceptual Design for Coal Mine Gob Well Flare (Aug. 1999)
Exhibit 53	Email of Hubert E. Sherer, MSHA to Liane Mattson, US Forest Service (Nov. 1, 2007)
Exhibit 54	Letter from Allyn Davis, MSHA, to Desty Dyer, BLM (May 18, 2010)
Exhibit 55	Wyoming Department of Environmental Quality news release, available at http://deq.state.wy.us/aqd/Ozone/Press%20Release_nonattainmentmarch12_3%2520CE.pdf (last viewed May 5, 2011)
Exhibit 56	Letter from Governor Freudenthal to Carol Rushin, EPA Region 8 (Mar. 12, 2009)
Exhibit 57	U.S. EPA, Declaration of Regina McCarthy (Dec. 8, 2010
Exhibit 58	EPA, Ozone Map
Exhibit 59	CDPHE ozone table
Exhibit 60	Tonnesen, G. et al., "Review of Ozone Performance in WRAP Modeling and Relevance to Future Regional Ozone Planning," presentation given at WRAP Technical Analysis Meeting (July 30, 2008)
Exhibit 61	NOAA Press Release (Jan. 18, 2009)
Exhibit 62	P. Reddy, "Late Winter Early Spring Ozone in Wyoming, Implications for Colorado," presentation to Colorado Air Quality Control Commission (March 2008)
Exhibit 63	Jaffe, M., "The cold truth about ozone," *Denver Post* (Mar. 4, 2009),
Exhibit 64	UNEP, How Will Global Warming Affect My World: A Simplified Guide to the IPCC's "Climate Change 2001: Impacts, Adaptation and Vulnerability," 14, GE.03-03327-December 2003-2,000
Exhibit 65	Shiliang Wu et al., Effects of 2000-2050 Global Climate Change on Ozone Air Quality in the United States, Journal of Geophysical Research, 113 (2008
Exhibit 66	C.P. Weaver et al., A Preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations, Bulletin of the American Meteorological Society 90:1843-1863 (2009)
Exhibit 67	EPA, Assessment of the impacts of global change on regional U.S. air quality: A synthesis of climate change impacts on ground-level ozone, An Interim Report of the U.S. EPA Global Change Research Program (2009)
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Exhibit 69	Letter from Robert E. Roberts, EPA Region 8 Administrator, to Robert A. Bennett, Wyo. BLM State Dir., (Feb. 14, 2008)

Exhibit 70	Letter from Robert E. Roberts, EPA Region 8 Administrator, to Selma Sierra, Utah BLM State Director (May 23, 2008)
Exhibit 71	Colo. Oil & Gas Conservation Comm'n, Staff Report (Jan. 13, 2011)
Exhibit 72	CDPHE, Colorado Modeling Guidance for Air Quality Permits at 21 (December 27, 2005)
Exhibit 73	Clean Air Scientific Advisory Committee Letter to Stephen Johnson, EPA Administrator, EPA-CASAC-LTR-06-003 (September 29, 2006)
Exhibit 74	BLM, Draft Environmental Impact Statement – Proposed Red Cliff Mine Project and Federal Coal Lease by Application (January 6, 2009), Appendix H
Exhibit 75	EPA, National Emission Inventory Data for Oxbow Mining, Gunnison County, CO (2002)
Exhibit 76	State of Colorado, Compliance Advisory (Aug. 5, 2010)
Exhibit 77	Charles W. Spencer, Uinta-Piceance Basin Province
Exhibit 78	Dudley D. Rice, Composition and Origins of Coalbed Gas (2000)
Exhibit 79	Mountain Coal Co., West Elk Mine E-seam Gas Economic Evaluation Report (Sept. 24, 2009)
Exhibit 80	EPA, "Coal Mine Methane Recovery at Active U.S. Coal Mines: Current Projects and Potential Opportunities" (2010)
Exhibit 81	Colorado Climate Action Plan (November 2007)
Exhibit 82	Executive Order D 004 08, "Reducing Greenhouse Gas Emissions in Colorado" (April 22, 2008)
Exhibit 83	M. Anderson, The Wilderness Society, Legal Status of the Roadless Area Conservation Rule (Mar. 4, 2011)