



United States
Department of
Agriculture

Forest Service

Colorado
National Forests

May 2012



Rulemaking for Colorado Roadless Areas

Volume I

Executive Summary

Colorado national forests with roadless areas include:

Arapaho and Roosevelt; Grand Mesa, Uncompahgre, and Gunnison; Manti-La Sal (portion in Colorado); Pike and San Isabel; Rio Grande; Routt; San Juan; and White River National Forests



Commonly Used Acronyms

AR – Arapaho Roosevelt National Forests
BLM – Bureau of Land Management
CDNST – Continental Divide National Scenic Trail
CDPA – Congressional Designated Protection Area
CDPW – Colorado Division of Parks and Wildlife
CFR – Code of Federal Regulations
CFS – Colorado State Forest Service
CPZs – Community Protection Zones
CRAs – Colorado Roadless Areas
CWPP – Community Wildfire Protection Plan
DEIS – Draft Environmental Impact Statement
DNR – Department of Natural Resources
ESA – Endangered Species Act
FEIS – Final Environmental Impact Statement
FR – Federal Register
FSM – Forest Service Manual
GMUG – Grand Mesa, Uncompahgre, and Gunnison National Forest
IRAs – Inventoried Roadless Areas
LCZs – Linear Construction Zones
MIS – Management Indicator Species
NEPA – National Environmental Policy Act
NFMA – National Forest Management Act
NFS – National Forest System
NSO – No Surface Occupancy
OHV – Off Highway Vehicle
PSI – Pike San Isabel National Forests
RDEIS – Revised Draft Environmental Impact Statement
RFD – Regional Forester Determination
RFD(s) – Reasonable Foreseeable Development Scenarios
RG – Rio Grande National Forest
SJ – San Juan National Forest
TEPS – Threatened, Endangered, Proposed and Sensitive Species
USDA – United States Department of Agriculture
USDI – United States Department of Interior
USFWS – U.S. Fish and Wildlife Service
WR – White River National Forest

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**Rulemaking for Colorado Roadless Areas
Final Draft Environmental Impact Statement
Volume I: Executive Summary**

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Executive Summary

The Forest Service has prepared an environmental impact statement (EIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant federal laws and regulations. The final EIS (FEIS) discloses the potential environmental consequences that might result from the proposed action and alternatives.

Background

The Forest Service administers approximately 14,520,000 acres of public lands in Colorado, which are distributed among eight national forests and two national grasslands. These national forests and grasslands are characterized by a diverse array of landscapes, ecosystems, natural resources, and land use activities. Management of each national forest and grassland is directed by a forest plan, along with numerous land management laws, regulations, policies, and agency directives. Laws and regulations take precedence over management direction in the forest plans, if conflicts exist. There are no roadless areas on the two national grasslands in the state.

In January 2001, the Roadless Area Conservation Rule (2001 Roadless Rule) was adopted into regulations at Title 36 of the Code of Federal Regulations Part 294 (36 CFR 294), Subpart B (66 FR 3244). The 2001 Roadless Rule identified approximately 4.43 million acres, or about 31 percent, of the National Forest System (NFS) lands in Colorado, as “inventoried roadless areas” (IRAs), based on the existing inventories of roadless areas (Maps are available on the Internet at www.fs.usda.gov/goto/coroadlessrule). The IRAs contained generally undeveloped areas that were typically 5,000 acres or greater in size. They could be smaller if they were adjacent to Congressionally designated wilderness. As shown in Table 2-2 of Chapter 2, inventories for four national forests were conducted in 1979. The other four national forest inventories were finalized in 1996, 1997, 1998, and 2002, when forest plans were revised. The 2001 Roadless Rule applies nationwide (except Idaho) and incorporates these inventories, conducted from 1979 to 2002. It provides management direction for 49.2 million acres¹ of national forests (about 30% of total national forest lands) by prohibiting road construction and reconstruction and timber cutting, sale, or removal in IRAs, with certain exceptions.

Since its promulgation, the 2001 Roadless Rule has been through extensive litigation. In response to a court ruling, the State Petitions Rule was promulgated in May 2005; wherein governors had until November 13, 2006 to petition the Secretary of Agriculture to propose state-specific direction for managing roadless areas within their state. Ongoing uncertainty about the future of the 2001 Roadless Rule was a key factor that influenced Colorado Governor Bill Owens to initiate a state-specific petition to manage roadless areas in Colorado in 2005. The Colorado State Legislature passed Senate Bill 05-243 (C.R.S. 36-7-302) to form a 13-person, bipartisan task force to recommend management direction of roadless areas in Colorado. This task force was informed by a comprehensive public participation process that included nine public meetings throughout Colorado. The task force received

¹ Approximately 9.3 million acres of roadless areas in Alaska's Tongass National Forest was exempted from the 2001 Roadless Rule until the District Court for the District of Alaska vacated the exemption in March 2011. Therefore, the 2001 Roadless Rule applied to 49.2 million acres of NFS land when it was promulgated.



more than 40,000 comments regarding development of a formal petition to the Secretary of Agriculture for a state-based, roadless rule.

On September 20, 2006, the United States District Court for the Northern District of California set aside the 2005 State Petition Rule and reinstated the 2001 Roadless Rule. However, the Forest Service determined that new regulations based on state petitions could be developed under the Administrative Procedures Act. In November 2006, Colorado Governor Bill Owens used the task force's recommendations as the basis for petitioning the Secretary of Agriculture to undertake state-specific roadless rulemaking for Colorado. The State's petition was considered for rulemaking by the Secretary of Agriculture, in accordance with the Administrative Procedures Act, section 553(e) and the U.S. Department of Agriculture's (Department) rulemaking procedures in 7 CFR 1.28.

After Governor Bill Owens submitted the State's petition to the Department, Bill Ritter, Jr. was elected Governor of Colorado. In April 2007, Governor Ritter resubmitted the petition with minor modifications. The State's petition requested the rulemaking process do the following:

- ◆ Update roadless area boundaries to include additional roadless areas.
- ◆ Exclude Congressionally designated lands and private lands.
- ◆ Exclude roadless acres that have been substantially altered.

In June 2007, the State and the Forest Service presented this petition to the Department's Roadless Area Conservation National Advisory Committee (RACNAC). Based on the advisory committee's review and report (USDA RACNAC 2007a), the Secretary of Agriculture accepted the State's petition in August 2007. The Secretary of Agriculture directed the Forest Service to work in cooperation with the State of Colorado to initiate rulemaking. In January 2008, the Forest Service granted cooperating agency status to the State of Colorado. The Forest Service published a proposed rule and Draft Environmental Impact Statement (DEIS) to establish direction for conserving roadless areas on NFS land in Colorado on July 25, 2008 (73 FR 43544). The no-action alternative considered in that DEIS assumed the 2001 Roadless Rule would remain in effect in Colorado if a state-specific rule was not adopted.

However, the no-action alternative was impacted by further litigation developments. In August 2008, after the DEIS was released, the Wyoming District Court set aside and enjoined the 2001 Roadless Rule. Thus, the assumption that the 2001 Roadless Rule would remain in effect in Colorado absent a state-specific rule changed. Accordingly, the February 2011 Revised DEIS (RDEIS) evaluated continued management under existing forest plans as the likely scenario in the event that no state-specific rule was adopted (the so called no-action alternative).

In response to the proposed rule and DEIS, the Department, State, and Forest Service repeatedly heard public comment requesting changes to the proposed exceptions for road construction and tree cutting. Based on the public comments, the State asked the USDA to postpone further rulemaking efforts until the State considered revision of its petition.

The State revised their petition and held a comment period from August 3 to October 3, 2009. The State received approximately 22,000 comments, most of which were form letters. The result was a revised petition submitted to the Secretary of Agriculture on April 6, 2010. Based on the April 6, 2010 petition, the State and the Forest Service developed regulatory language for a proposed Colorado Roadless Rule (proposed rule) that would govern management of roadless areas on NFS



lands in Colorado. Because of the changes in the proposed rule, the Secretary of Agriculture initiated another public comment period on the revised proposed rule and the RDEIS. The revised proposed rule and RDEIS were published in April 15, 2011 and public comments were accepted on the proposal until July 14, 2011; about 56,000 comments were received. This FEIS considers all of the approximately 312,000 comments received throughout the analysis process.

The legal status quo was changed again by ongoing litigation on October 21, 2011, when the Tenth Circuit reversed the District Court's decision and remanded the case back the District Court to vacate the permanent injunction. The Tenth Circuit has since issued a mandate effectuating the October 21, 2011 opinion and requiring the injunction of the 2001 Roadless Rule to be vacated. Currently, the 2001 Roadless Rule is in effect nationwide, except in Idaho, which has its own state-specific roadless rule.

Purpose of and Need for Action

The Department, the Forest Service, and the State of Colorado agree that a need exists to provide management direction for conserving roadless area characteristics within roadless areas in Colorado. In its petition to the Secretary of Agriculture, the State of Colorado indicated a need to develop state-specific regulations for the management of Colorado's roadless areas for the following reasons:

- ◆ 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, including motorized and non-motorized recreation opportunities, and naturally appearing landscapes. A need exists to provide for the conservation and management of roadless area characteristics.
- ◆ The Department, the Forest Service, and the State of Colorado recognize that timber 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 characteristics. Therefore, there is a need to generally prohibit these activities in roadless areas. Some have argued that linear construction zones (LCZs) also need to be restricted.
- ◆ A need exists to accommodate state-specific situations and concerns in Colorado's roadless areas. These include the following:
 - reducing the risk of wildfire to communities and municipal water supply systems
 - facilitating exploration and development of coal resources in the North Fork coal mining area
 - permitting construction and maintenance of water conveyance structures
 - restrict LCZs, while permitting access to current and future electrical power lines
 - accommodating existing permitted or allocated ski areas
- ◆ There is a need to ensure that CRAs are accurately mapped.

Proposed Action

The Department, in cooperation with the State of Colorado, proposes to promulgate a state-specific rule to manage roadless areas and to conserve roadless area characteristics on NFS lands in Colorado. The proposed rule would establish a system of CRAs with management direction to conserve roadless area characteristics. These areas would replace the IRAs for national forests in Colorado. The



proposed rule conserves roadless area characteristics by prohibiting tree cutting, sale, or removal; road construction and reconstruction; and LCZs, with some limited exceptions.

In addition, the proposed rule establishes a system of upper tier acres within CRAs where additional restrictions apply, further limiting exceptions to the prohibitions. Chapter 2 describes these concepts in more detail.

The proposed CRAs encompass approximately 4.19 million acres of NFS land in Colorado, distributed among 363 separate roadless areas (Appendix A). The proposed rule provides for future adjustments to be made to CRA boundaries (Map Packet, Map 3), subject to a public review and comment period, and applicable NEPA or other requirements. In addition, the proposed rule provides for administrative corrections (defined as adjustments to remedy clerical and mapping errors) to upper tier boundaries, subject to a public review and comment period.

The proposed rule adjusted roadless area boundaries from the 2001 inventory in the following ways:

- ◆ correcting mapping errors that primarily resulted from improvements in inventory data and mapping technology
- ◆ excluding private land
- ◆ excluding land substantially altered by road construction and timber harvest activities
- ◆ excluding ski areas under permit or lands allocated in forest plans to ski area development
- ◆ excluding Congressionally designated lands, such as wilderness and other designations, that take legal precedence over roadless area regulations
- ◆ including unroaded areas outside IRAs that contain roadless area characteristics.

Official CRA and upper tier locations are contained in a set of maps at the Forest Service national headquarters. The Forest Service national headquarters office would maintain the official map of CRAs, including records of adjustments to such maps, pursuant to the final proposed rule. These maps will be available to the public.

Decision Framework

The Secretary of Agriculture will decide whether to promulgate the proposed rule as proposed, one of the other alternatives, or a combination of the alternatives analyzed in this EIS. Promulgation of a rule involves establishing regulations, which would be issued under 36 CFR Part 294 Subpart D. The decision to be made involves a choice among the four alternatives analyzed in detail in this EIS, which means determining whether to do one of the following:

1. Take no action. No state-specific roadless rule would be promulgated. Inventoried roadless areas (IRAs) in Colorado would be managed according to the 2001 Roadless Rule (Alternative 1).
2. Promulgate a state-specific rule to manage Colorado's CRAs based on the State's petition (Alternative 2) with portions of the CRAs identified as CRA upper tier acres.
3. Promulgate a state-specific roadless rule to exempt Colorado from the 2001 Roadless Rule. IRAs and CRAs in Colorado would be managed in accordance with the provisions of the forest plans in the eight national forests without additional management direction from a roadless rule (Alternative 3).



4. Promulgate a state-specific rule to manage Colorado's CRAs, based on the State's petition with portions of, or entire CRAs, identified as CRA upper tier acres different from those identified under Alternative 2 (Alternative 4).
5. Some combination of the provisions and inventories in the above four alternatives.

Public Involvement

The Forest Service and the State of Colorado have solicited public involvement and comments on the development of a proposed rule. Between the Forest Service and State efforts, five formal public involvement processes have occurred. These processes have resulted in approximately 312,000 public comments. Public involvement efforts of the Forest Service and the State of Colorado included the following:

- ◆ Senate Bill 05-243, which was signed into Colorado law on June 8, 2005, created and identified a 13-member, bipartisan task force. The task force held nine public meetings throughout the State, held six deliberative meetings that were open to the public, and reviewed and considered over 40,000 public comments.
- ◆ On December 27, 2007, the Forest Service published a notice of intent in the Federal Register to prepare an EIS on roadless area conservation on NFS lands in Colorado (72 FR 72982). The Forest Service also solicited comments from interested parties on the notice of intent from December 27, 2007 through February 25, 2008. Approximately 88,000 comments were received.
- ◆ On July 25, 2008, the Forest Service published a proposed rule to establish state-specific management direction for conserving roadless areas in Colorado (73 FR 43544). A notice of availability for the DEIS was published in the Federal Register (73 FR 44991). The availability of the regulatory risk assessment for the proposed rule was published in the Federal Register on September 18, 2008 (73 FR 54125). Nine public meetings were held in Washington, DC and throughout Colorado. All comment periods closed on October 23, 2008. In total, approximately 106,000 comments were received.
- ◆ The State of Colorado held a comment period from August 3 to October 3, 2009 on a State-modified version of the July 2008 proposed rule. Approximately 22,000 comments were received.
- ◆ On April 15, 2011, the Forest Service published a revised proposed rule (76 FR 21272). A notice of availability for the Revised DEIS was published in the Federal Register (76 FR 24021) on April 29, 2011. Nine public meetings were held around the State and in Washington D.C. during the comment period. Comment periods closed on July 14, 2011. Approximately 56,000 comments were received.

In addition to the five formal comment periods, the Forest Service and State participated in Roadless Area Conservation National Advisory Committee (RACNAC) meetings in Washington, D.C. in June of 2007, and January, July, and November of 2008. Also, a RACNAC meeting was held in Salt Lake City, Utah in October 2008. Public comments were accepted at these meetings, which helped the RACNAC develop its December 5, 2008 recommendations to the Secretary of Agriculture.

Tribal Consultation

Two resident Tribes live in Colorado, Ute Mountain Ute and Southern Ute, who retain some of their traditional land base as reservations. These two tribes retain specific hunting rights and other aboriginal rights throughout their traditional territory, including portions of the roadless areas in Colorado. Over a dozen other tribes located outside Colorado maintain tribal interests, including aboriginal and ceded territories, and inherent aboriginal rights within Colorado. In 1874, Congress approved an agreement between the United States and certain Ute Tribes in Colorado, known as the "Brunot Agreement". Under this agreement, the Utes ceded certain land to the United States, but reserved a right to hunt on those lands. These lands are primarily on the San Juan National Forest.

The Forest Service has consulted with Colorado-affiliated Tribes regarding this proposed rulemaking action and analysis process. Information on the proposed Colorado Roadless Rule was provided to the Ute Mountain Ute and Southern Ute Indian Tribes before the release of the Notice of Intent (NOI). The San Juan National Forest staff held meetings with both Tribes to discuss the proposed rule, as well as other Forest issues. In addition, an introductory letter and the NOI, along with background information on the proposed Colorado Roadless Rule and an offer for additional information or meetings, was sent to 25 Tribes based on their current proximity to Colorado, their current use of lands in Colorado, and their historic use of lands within Colorado.

The 2008 Proposed Rule and DEIS were sent to each of these Tribes and each was contacted by phone to determine its level of interest in meeting or obtaining information. The Tribes did not request additional government-to-government involvement, and no formal comments from any of the Tribes were received. A letter was sent to each Tribe outlining the key points of this revised proposed rule and the Forest Service met with those Tribes requesting further consultation.

In October 2010, the Forest Service met with Tribal members of the Ute Mountain Utes and Southern Utes to obtain information. In April 2011, the Proposed Rule was sent to 25 Tribes based on their current proximity to Colorado and their current and historic use of lands within Colorado to determine their interest in meeting or obtaining information. Follow-up phone calls were made to each of the 25 Tribes. Additional information was sent to Tribes as requested. The Tribes did not request additional government-to-government involvement, and no formal comments from any of the Tribes were received.

Issues

The NEPA implementing regulations (40 CFR 1501.2) require federal agencies to develop and evaluate alternatives to recommended courses of action in any proposal that involves unresolved conflict concerning alternative uses of available resources. Public involvement was used to identify points of disagreement about the proposed rule and to identify issues to use as a basis for developing and evaluating alternatives.

Comments that support the purpose and need of the proposed action are not listed below as "issues," but are evaluated in this EIS. Alternatives are evaluated for the degree to which they meet the stated purpose and the need to conserve roadless area characteristics within the context of Colorado-specific situations and concerns.

NEPA regulations require the agency to identify and eliminate from detailed study those issues that are not significant or that have been covered by prior environmental review, to narrow the scope of



the analysis. Reasons for eliminating issues from detailed study include when the issues are related to the following:

- ◆ General opinions or position statements not specific to the proposed action
- ◆ Items addressed by other laws, regulations, or policies
- ◆ Items not relevant to the potential effects of the proposed action, or otherwise outside the scope of this analysis.

The following issues were eliminated from detailed study in this EIS because they are outside the scope of the decision to be made by the Secretary of Agriculture on the proposed rule relative to other alternatives analyzed in this EIS (refer to sections on Decision Framework and Scope and Applicability of the Rule):

- ◆ National Park Service management issues
- ◆ General conditions of public lands
- ◆ Conditions of roads and facilities on national forests
- ◆ Political motivations or integrity of government officials
- ◆ Public participation processes or procedures
- ◆ Funding priorities and government expenditures
- ◆ Alternative energy on national forests
- ◆ Wilderness protection or recommendations for wilderness designation
- ◆ Motorized vehicle use and routes or other travel management topics
- ◆ Access associated with livestock grazing permits and allotment management
- ◆ How the proposed rule may set a precedent for managing roadless areas in other states.

The following issues were carried through the analysis process to evaluate differences in the consequences among the alternatives.

- ◆ **Potential effects to opportunities for community wildfire protection.** Prohibiting tree cutting, sale, or removal and road construction and reconstruction can influence the effectiveness of efforts to reduce wildfire impacts to communities and water supply systems.
- ◆ **Potential loss of roadless area characteristics.** The exceptions, in which tree cutting, sale, or removal; road construction and reconstruction; and LCZs, could result in a loss of roadless area characteristics. However, some of the exceptions (e.g., tree cutting to reduce hazardous fuels to an at-risk community) could prevent a loss of roadless area characteristics.
- ◆ **Potential loss of opportunities to explore and develop oil and gas resources.** Prohibiting road construction and reconstruction for oil and gas development in roadless areas that have not been leased before this proposed rule could result in a loss of opportunities to explore and develop these resources in roadless areas.
- ◆ **Potential loss of opportunities to explore and develop coal resources outside the North Fork coal mining area.** Prohibiting construction/reconstruction of roads to access coal reserves in areas that have not been leased (before the effective date of rulemaking) and/or are located outside the North Fork coal mining area could result in a loss of opportunities to explore and develop coal resources in roadless areas.

- ◆ **Potential loss of opportunity to feasibly transport oil and gas resources using pipelines.** Prohibiting oil and gas pipelines from going through roadless areas from lands outside roadless areas could result in a loss of opportunity to feasibly extract and transport oil and gas resources.
- ◆ **Potential reduction in native species diversity.** The exceptions, under which tree cutting, sale, or removal; road construction or reconstruction; use of LCZs; and some other activities might occur in roadless areas under the proposed rule, could affect populations of wildlife, fish, and plants, including the potential for the following:
 - An increase in the prevalence of invasive plants, animals, and other organisms that can out-compete and dominate diverse native plant and animal communities
 - A loss or reduction of wildlife or fish habitat or population viability, resulting from reductions in unfragmented interior habitat, migration corridor connections, and security and quality of habitat for some “at risk” species or important game species
 - A loss or reduction of threatened, endangered, or sensitive plant species habitat or populations
 - A reduction in opportunities to conduct wildlife habitat improvement projects that require tree cuttings, sale and/or removal.
- ◆ **Potential reduction in soil and water quality.** Reduced opportunities for fuel treatment projects due to proposed rule prohibitions could result in greater wildfire impacts. Such impacts could adversely affect soil and water quality. However, the exceptions in which tree cutting, sale, or removal; road construction and reconstruction; and LCZs could result in less risk of adverse impacts to soil or water quality.
- ◆ **Potential reduction in semi-primitive recreation and related values.** The exceptions in which tree cutting, sale, or removal; road construction or reconstruction; use of LCZs; and some other activities might occur in roadless areas under the proposed rule could reduce semi-primitive recreation opportunities away from the sights and sounds of human activities and built environments, including the potential for the following:
 - reduced opportunities for solitude
 - reduced scenic quality
 - reduced scientific and heritage benefits that might be derived from preserving the undeveloped nature of roadless areas for future generations.
- ◆ **Potential reduction in opportunities to efficiently manage public water supplies.** Prohibiting construction/reconstruction of roads to develop and maintain water facilities could impact the quantity and quality of the public water supply and infrastructure. Water facilities are needed to provide reliable year round supplies of water.

Alternatives, Including the Proposed Action

Each alternative offers a different approach to roadless area management, by providing a different mix of prohibitions on tree cutting, sale, and removal; road construction and reconstruction; use of LCZs; exceptions to prohibitions; and different circumstances for the exceptions. Alternative comparison tables summarize the differences in each alternative, as well as differences in the environmental consequences, or effects of each alternative. These comparisons are based on the detailed analysis of environmental consequences contained in Chapter 3 of the FEIS.



The following four alternatives are analyzed in detail:

- ◆ **Alternative 1: No Action. The 2001 Roadless Area Conservation Rule (2001 Roadless Rule)².** This alternative does not establish a state-specific roadless rule for Colorado, and all IRAs in Colorado would be managed according to the 2001 Roadless Rule.
- ◆ **Alternative 2: Proposed Action, Preferred Alternative, The Colorado Roadless Rule.** This alternative establishes a state-specific roadless rule for Colorado. It modifies Alternative 2 from the DEIS and RDEIS, based on public comments. It is based on the provisions of the 2001 Roadless Rule, but provides prohibitions and specific exceptions relevant to the State of Colorado. There are 1,219,200 acres identified as CRA upper tier under this alternative. Upper tier acres have fewer exceptions to the prohibitions than non-upper tier acres. If this alternative is selected, it would not revoke, suspend, or modify any permit, contract, or other legal instrument authorizing the occupancy and use of NFS lands issued before the date of the final rule.
- ◆ **Alternative 3: Forest Plan Direction.** This alternative establishes a state-specific roadless rule for Colorado, and all lands in the IRAs and CRAs would be managed according to the provisions of the forest plans. For information purposes, this alternative uses the boundaries of the roadless areas in the most recent forest plans, which are the same IRAs as those used for Alternative 1.
- ◆ **Alternative 4: The Proposed Rule with Additional Upper Tier Restrictions.** This alternative establishes a state-specific roadless rule for Colorado and provides the same prohibitions and exceptions as Alternative 2. The difference is that 2,614,200 acres are identified as CRAs upper tier acres in this alternative (almost 1.4 million more acres in upper tier than Alternative 2). If this alternative is selected, it would not revoke, suspend, or modify any permit, contract, or other legal instrument authorizing the occupancy and use of NFS lands issued before the date of the final rule.

Features Common to All Alternatives

The following describes the features that are common to all alternatives analyzed in detail in the FEIS.

Congressional Designations

Nine Congressionally designated areas, such as wilderness areas, overlap portions of IRAs, totaling about 185,000 acres. These areas are excluded from the roadless areas analyzed in this EIS. Those areas are not subject to state-specific rulemaking because statutory provisions supersede rule (regulatory) provisions.

Federal and State Requirements

Management of NFS lands in Colorado are governed by a variety of federal statutes, regulations, executive orders, and the Forest Service directive system (manuals and handbooks). In addition, some state laws and regulations apply on NFS lands within the State. The selection of any of the alternatives in this EIS would not affect the applicability of any federal or state requirements.

² "2001 Roadless Rule" is described in the *Federal Register*, January 12, 2001, Vol. 66, No 9, pages 3244 - 3273. The IRA boundaries are those inventoried roadless areas identified in the November 2000 Roadless Area Conservation FEIS.



Forest Plans

The National Forest Management Act (NFMA) and its implementing regulations at 36 CFR 219, obligate the Forest Service to develop, amend, or revise plans for each national forest. Forest plans provide guidance for management activities on a national forest; including establishing forest-wide management requirements and direction applicable to the entire forest or to specific management areas. When guidance in a forest plan is more restrictive than direction described under the alternatives, actions must be consistent with the more restrictive direction. For example, if a forest plan standard prohibits road construction where it is allowed under an alternative, road construction cannot occur.

None of the alternatives compel the Forest Service to amend or revise any forest plan. In addition, none of the alternatives limit the authority of a responsible official to amend or revise a forest plan. However, a responsible official would not be able to modify or reduce the restrictions of the adopted rule through a forest plan amendment or revision.

Project-Specific Environmental Analysis

None of the alternatives authorize any projects or other ground-disturbing activities to occur. Specific projects that include proposals for tree cutting, road construction and reconstruction, or LCZs must undergo site-specific environmental analysis required by NEPA.

Reserved and Outstanding Rights

Under all alternatives, the reasonable exercise of reserved or outstanding rights for access, occupancy, and use of NFS lands within roadless areas would not be affected. The rights include those that exist by law, by treaty, or by other authority. They include, but are not limited to, the right to provide reasonable access across NFS lands for access to private property, mining claims for locatable minerals under the 1872 Mining Law, and land uses protected by Native American treaty rights.

In 1874, Congress approved an agreement between the United States and certain Ute Tribes in Colorado, known as the "Brunot Agreement." Under this agreement, the Utes ceded certain land to the United States but reserved a right to hunt and gather on those lands. The lands are primarily on the San Juan National Forest. (Map 7 in the Map Packet displays the Brunot Agreement lands.)

Existing Land Use Authorizations

"Authorizations" refer to land uses allowed under a special use permit, contract, or similar legal instrument. Numerous types of lands and recreation-related authorizations are issued for occupancy and use of NFS lands. For example, the Bureau of Land Management issues oil, gas, and coal leases on NFS lands. All of the alternatives allow for the continuation, transfer, or renewal of existing land use authorizations for activities in roadless areas. "Existing authorizations" are those that are issued before the effective date of the final rule. Private recreational activities do not require an authorization and are not affected by any alternative.

Examples of land use authorizations not specifically prohibited or restricted under any alternative include, but are not limited to, the following:

- ◆ Outfitting and guiding for hunting, fishing, camping, horseback riding, rafting, etc.
- ◆ Commercial filming
- ◆ Temporary events

- ◆ Tribal and noncommercial group use
- ◆ Agricultural improvements such as fences
- ◆ Range facilities such as corrals, pens, fences, water developments, etc.
- ◆ Research, training and surveys
- ◆ Communication sites

Other Forest Activities

Activities that are otherwise not prohibited under the alternatives (other than tree cutting, sale, or removal; road construction and reconstruction; and use of LCZs) are permissible in roadless areas, if not restricted by other law, regulations, and policies. These activities include, but are not limited to, the following:

- ◆ Motorized and non-motorized trail construction or maintenance
- ◆ Public hunting, fishing, camping, or other dispersed recreational uses
- ◆ Use of a motorized vehicle on a trail open to motorized use
- ◆ Mountain biking on a trail open to mechanized use
- ◆ Prescribed burning, including tree cutting for fireline construction to manage a prescribed fire
- ◆ Livestock grazing

Key Definitions

For the FEIS, **Table S-1** provides the specific definitions used for these terms.

Table S-1. Definitions of Forest Road, Temporary Road, & LCZ Terms.

<i>Term</i>	<i>Definition</i>
Forest road	Generally refers to a road determined to be necessary for the long-term protection, administration, and use of NFS land or resources, and is managed as part of the national forest transportation system. Previously called “system” or permanent, roads.
Temporary road	A road necessary for emergency operations, or authorized by contract, permit, or other authorization that is not a forest road and that is not included on the forest transportation atlas.
Linear construction zone	A temporary linear area of surface disturbance over 50-inches wide that is used for motorized transport by vehicles or construction equipment to install or maintain a linear facility. It is not used as a motor vehicle route and is not engineered to road specifications. Linear facilities include pipelines, electrical power lines, telecommunication lines, ditches, canals, and reservoirs.

Implications of Ongoing Litigation

On October 21, 2011 the U.S. Tenth Circuit Court of Appeals reversed the Wyoming District Court’s decision to set aside the 2001 Roadless Rule and remanded the case back to the District Court to vacate the permanent injunction. On December 5, 2011, the plaintiff and intervenor requested a rehearing by the full Tenth Circuit (en banc review) of the October 2011 opinion. This request was subsequently denied on February 16, 2012. On February 24, 2012, the Tenth Circuit issued a mandate

effectuating the October 21, 2011 opinion and requiring the injunction of the 2001 Roadless Rule to be vacated.

Due to these recent judicial rulings, the 2001 Roadless Rule is in effect nationwide, except in Idaho, which has its own state-specific roadless rule. These rulings also change which alternative is considered the no action alternative. In the 2011 RDEIS, the no action alternative was Alternative 3, the Forest Plans. The no action alternative or continuation of current management is now Alternative 1, the 2001 Roadless Rule, which is now the environmental baseline in which to compare the environmental impacts of the other action alternatives to, as required by NEPA.

Comparison of Alternatives

Table S-2 compares each alternative by key elements of the proposed rule. Because the management direction in alternative 2 and 4 are the same, the table refers to both in the same column. Management direction related to tree cutting and road construction is more restrictive within CRA upper tier acres in Alternatives 2 and 4, and the differences are noted within the column. Table S-3 compares the estimated consequences of each alternative, summarized from the environmental consequences described in detail in Chapter 3 of the FEIS. The comparison tables focus on the key differences among the alternatives and their most likely consequences. Because the rulemaking and its alternatives are broad and programmatic, and do not involve any proposed site-specific actions, the consequences are appropriately broad and qualitative rather than quantitative. In the few places where alternatives 2 and 4 differ, the difference is noted. All other management direction in these two alternatives is the same in the CRAs, whether in the upper tier acres or not.



Table S-2. Comparison of Alternatives

<i>Descriptor</i>	<i>Alternative 1: 2001 Roadless Rule</i>	<i>Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier</i>	<i>Alternative 3: Provisions of Forest Plans</i>
Overview and Where Alternative Applies			
Roadless area management direction	The management of roadless areas on NFS lands in Colorado is governed by prohibitions and exceptions comparable to the 2001 Roadless Rule and by any additional limitations imposed by forest plans.	Management of roadless areas on NFS lands in Colorado would be governed by provisions of the proposed rule and by any additional limitations imposed by forest plans.	Management of roadless areas on NFS lands in Colorado would be governed exclusively by the applicable management direction in forest plans.
Roadless areas	4.24 million acres of IRAs, excluding 185,000 acres of wilderness and other Congressionally designated acres, as well as correcting mapping errors to remove areas identified as wilderness or private land from the inventory.	4.19 million acres of CRAs, excluding 185,000 acres of wilderness and other Congressionally designated acres, and modified by correcting map errors and updating NFS land boundaries. Removing 8,300 acres of allocated ski areas and 459,100 substantially altered areas Adding 409,500 acres of unroaded lands meeting roadless area criteria. Designating 1,219,200 acres as upper tier in Alternative 2. Designating 2,614,200 as upper tier in Alternative 4	4.24 million acres of IRAs are managed according to forest plan direction.
Changes to roadless area boundaries	No process provided for the Forest Service to make future changes to IRA boundaries.	Provides a process for the Forest Service to make changes to CRA boundaries. Changes are subject to public review and comment.	Roadless inventories completed during forest plan revision process, subject to public review and comment, and other NFMA and NEPA regulations.



<i>Descriptor</i>	<i>Alternative 1: 2001 Roadless Rule</i>	<i>Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier</i>	<i>Alternative 3: Provisions of Forest Plans</i>
Comparison of Tree cutting, Sale, or Removal by Alternative			
General tree cutting, sale, and removal provisions	Tree cutting, sale, or removal, is generally prohibited in roadless areas, with some exceptions (see below). In some IRAs forest plans add more restrictions related to conducting this activity, to protect other resource values, and the activity must be consistent with the forest plan. Tree cutting for all exceptions is expected to be infrequent.	Similar to the general prohibition in Alternative 1, although more exceptions exist under this alternative (see below). An additional limitation is that the Responsible Official must determine the activity is consistent with the forest plan. In some CRAs, forest plans add more restrictions related to conducting this activity to protect other resource values, and the activity must be consistent with the forest plan.	In some IRAs tree cutting is prohibited or limited to protect resource values. Forest plans in Colorado generally allow tree cutting for non-timber purposes on any NFS lands, subject to specific resource management direction. Forest plans identify lands suitable for timber harvest for timber production purposes.
Tree cutting, sale, or removal for incidental, personal, administrative uses	This activity is allowed in IRAs where it is incidental to other management activities (e.g., road or trail construction or maintenance, minerals operations, and other authorized uses). For personal or administrative uses, as provided for in 36 CFR 223 (e.g., firewood, Christmas trees).	This activity is allowed in CRAs, including upper tier acres where it is incidental to other management activities (e.g., road or trail construction or maintenance, minerals operations, and other authorized uses). For personal or administrative uses, as provided for in 36 CFR 223 (e.g., firewood, Christmas trees).	This activity is allowed in inventoried roadless areas (IRAs): Where incidental to other management activities (e.g., road or trail construction or maintenance, minerals operations, and other authorized uses). For personal or administrative uses, as provided for in 36 CFR 223 (e.g., firewood, Christmas trees).
Tree cutting, sale, or removal in substantially altered areas	This activity is not rule-limited in substantially altered areas that are the result of classified road construction and subsequent timber harvesting in IRAs and is only limited by applicable management direction in forest plans.	Substantially altered acres have been removed from CRAs and are only limited by applicable management direction in forest plans.	This activity is only limited by applicable management direction in forest plans.
Tree cutting to maintain or restore ecosystem composition and structure within the range of variability expected to occur under natural disturbance	An example of this activity given in the proposed rule is to reduce the risk of wildfire effects but could have other purposes.	Not allowed within CRA upper tier acres Language simplified and updated to take into account climate change: "to maintain or restore characteristics of ecosystem	Tree cutting is only limited by applicable management direction in forest plans.



Descriptor	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier	Alternative 3: Provisions of Forest Plans
regimes of the current climatic period	<p>Generally small-diameter trees and would maintain or improve one or more roadless area characteristics.</p> <p>This exception can also include treatments for prevention or suppression of insect and diseases in order to maintain or restore ecosystem characteristics.</p>	<p>composition, structure and processes". These are infrequent and one or more of the roadless area characteristics would be maintained or improved over the long-term.</p> <p>This exception can also include treatments for prevention or suppression of insect and diseases in order to maintain or restore ecosystem characteristics.</p> <p>Not limited to generally small diameter trees.</p>	
Tree cutting, sale, or removal for habitat improvement	<p>This activity is allowed in IRAs to improve habitat for threatened, endangered, proposed, or sensitive species, and to maintain or improve roadless area characteristics.</p> <p>Limited to generally small-diameter trees and would maintain or improve one or more roadless area characteristics</p>	<p>Not allowed within CRA upper tier acres.</p> <p>This activity is allowed in CRAs to improve habitat for threatened, endangered, proposed, or Agency designated sensitive species in coordination with the Colorado Department of Natural Resources including the Colorado Division of Parks and Wildlife.</p> <p>Not limited to generally small diameter trees. One or more of the roadless area characteristics would be maintained or improved over the long-term</p>	<p>Forest plans generally allow tree cutting in IRAs to improve habitat for all species including threatened, endangered, proposed, Regionally designated sensitive species or other species.</p>
Tree cutting, sale, or removal to reduce wildland fire hazard	<p>This activity is allowed in IRAs, to maintain or restore ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildland fire effects, within the range of variability expected to occur under natural disturbance regimes of the current climatic period, and would maintain or improve roadless area characteristics.</p>	<p>This activity is not allowed on upper tier acres within CRAs.</p> <p>On acres within CRAs that are not upper tier, this activity is allowed where the Regional Forester determines it is needed to reduce wildland fire hazard to an at-risk community or municipal water supply system within the first 0.5 mile of the CPZ.</p> <p>The CPZ can extend beyond the first 0.5</p>	<p>Forest plans allow tree cutting in most IRAs for purposes described in Alternatives 1 or 2, with exceptions in some specific management areas.</p> <p>Not limited to generally small-diameter trees, and does not preclude associated road construction/ reconstruction, except as precluded by specific forest plan</p>



Descriptor	<i>Alternative 1: 2001 Roadless Rule</i>	<i>Alternative 2: Proposed Action Colorado Roadless Rule</i> <i>Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier</i>	<i>Alternative 3: Provisions of Forest Plans</i>
	<p>Limited to generally small-diameter trees and prohibits associated road construction/reconstruction.</p>	<p>mile up to an additional 1 mile, if the land exhibits one of the following characteristics: a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community; has a geographic feature that aids in creating an effective fire break, such as a road or a ridge top; or is in condition class 3 as defined by Healthy Forests Restoration Act (Pub. L. 108–148).</p> <p>Where the CPZ extends up to an additional mile, the activity is allowed if within the area of a CWPP. If no CWPP exists, no projects using this exception would be proposed in this next one-mile.</p> <p>On acres within CRAs outside of the CPZ, this activity is allowed where the Regional Forester has determined there is a significant risk that a wildland fire disturbance event could affect a municipal water supply system or the maintenance of the system. A significant risk exists where the history of fire occurrence and fire hazard indicate a serious likelihood that a wildland fire disturbance event would have adverse effects to a municipal water supply system.</p> <p>Such projects would focus on small diameter trees to create strategic fuel breaks that modify fire behavior while large trees would be retained to the extent practical, as appropriate to the forest type. One or more of the roadless area characteristics would be maintained or improved over the long-term.</p>	<p>direction.</p> <p>Forest plan direction provides the basis for activities allowed within roadless areas.</p>



Descriptor	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier	Alternative 3: Provisions of Forest Plans
Tree cutting, sale or removal within newly designated roadless areas	These acres are not within the IRA inventory. No regulatory limitation on tree cutting, sale or removal.	Projects outside of the CPZ are expected to be infrequent. These acres are within the CRA inventory. Tree cutting, sale or removal is subject to the prohibitions in the proposed rule.	These acres are not within the IRA inventory These acres remain subject to forest plan direction.
Comparison of Road Construction and Reconstruction by Alternative			
General road construction provisions	Generally prohibits road construction or reconstruction in IRAs. Exceptions do not distinguish between forest roads and temporary roads. Rule language does not include additional requirements for environmental analysis or NEPA documentation. Does not include specific provisions about decommissioning and closing roads. Does not include provisions about closing roads to public motorized use.	Generally prohibits road construction or reconstruction in CRAs, distinguishing between forest roads and temporary roads. Includes additional environmental analysis and determination requirements for road construction determining that motorized access without road construction is not feasible; within a native cutthroat trout catchment or identified recovery watershed, road construction would not diminish conditions in the water influence zone and in occupied native cutthroat habitat over the long-term; road construction is consistent with the applicable forest plan; when proposing to build a forest road, a temporary road would not provide reasonable access. Includes specific provisions about decommissioning and closing roads. Roads are closed to public motorized use.	Forest plans include some IRAs where roads are generally prohibited. Some forest plan direction distinguishes between temporary and forest roads, and provides other direction to follow to protect resource values when proposing road construction. Does not include additional environmental analysis requirements for road construction. Includes some specific direction about road decommissioning. Some plans include some direction about road closures to public use for protection of resource values in specific areas.



<i>Descriptor</i>	<i>Alternative 1: 2001 Roadless Rule</i>	<i>Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier</i>	<i>Alternative 3: Provisions of Forest Plans</i>
Road construction in ski areas	Road construction or reconstruction is limited to within ski area permit boundaries established before [the effective date of this proposed rule] (~6,600 acres). The 8,300 acres of permitted and allocated to ski areas within IRAs remain within IRAs.	Ski areas acres in permitted ski areas or forest-plan allocated ski areas are removed from CRAs (8,300 acres). They are subject to forest plan direction.	Road construction allowed in these management areas.
Roads construction in substantially altered lands (~459,100 acres)	Road construction or reconstruction on substantially altered lands in IRAs is prohibited. Substantially altered acres remain in the IRAs.	These acres are excluded from CRAs. No rule-related limitations on road construction or reconstruction on the substantially altered lands; remain subject to forest plan direction.	Generally road construction is allowed in these management areas.
Road construction in newly identified roadless acres (~409,500 acres)	These acres are not within the IRAs. No rule-related limitations on road construction or reconstruction on the newly identified roadless acres; remain subject to forest plan direction.	These acres are within the CRAs. Road construction or reconstruction on newly identified roadless acres is subject to provisions within the proposed rule.	These areas are not within the IRAs. Road construction direction varies based on management designations within these areas.
Road construction pursuant to reserved or outstanding rights or as provided by statute or treaty	Support actions covered by laws or treaties, including those for purposes of CERCLA, Federal Highway Projects (23 USC), and locatable mineral operations (General Mining Law of 1872, as amended). .	Support actions covered by laws or treaties, including those for purposes of CERCLA, Federal Highway Projects (23 USC), and locatable mineral operations (General Mining Law of 1872, as amended) within CRAs and upper tier acres.	Support actions covered by laws or treaties, including those for purposes of CERCLA, Federal Highway Projects (23 USC), and locatable mineral operations (General Mining Law of 1872, as amended)
Road construction for public health & safety and resource protections	Road construction or reconstruction is allowed in IRAs where needed to: Prevent irreparable resource damage. Address road safety hazards. Protect public safety from imminent threat of flood, fire, and other catastrophic events that may threaten loss of life or property.	Same as Alternative 1 within both standard tier and upper tier. Additionally, only temporary roads may be constructed or reconstructed as needed for public health and safety in cases of imminent threat of flood, fire, and catastrophic events that, without intervention, might cause loss of life or property.	Road construction or reconstruction is allowed in IRAs where needed to prevent irreparable resource damage. Address road safety hazards. Protect public safety from imminent threat of flood, fire, and other catastrophic events that could threaten loss of life or property, per agency regulations and policy directives.



Descriptor	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier	Alternative 3: Provisions of Forest Plans
Road construction for leasable minerals operations, specifically oil and gas	<p>Road construction or reconstruction in IRAs related to oil and gas exploration and development is limited to roads needed pursuant to rights granted under an existing lease (issued before the effective date of the Colorado Rule) where lease stipulations and other regulations allow.</p> <p>Forest or temporary roads could be constructed.</p> <p>Road construction is prohibited on leases within IRAs issued after (the effective date of the Colorado Rule)</p>	<p>Road construction or reconstruction in CRAs related to oil and gas exploration and development is limited to roads needed, pursuant to rights granted under an existing lease (issued before the effective date of the Colorado Rule) where lease stipulations and other regulations allow.</p> <p>Roads are temporary roads. Road construction is prohibited on leases within CRAs issued after (the effective date of the Colorado Rule)</p> <p>8 conditions are to be considered for inclusion in approved Surface Use Plans of Operation.</p> <p>Alternative 2 has portions of 6 existing oil and gas leases within the upper tier acres.</p> <p>Alternative 4 upper tier acres include many existing current oil and gas leases where road construction could occur if allowed by lease terms and considering 8 conditions for inclusion in approved Surface Use Plans of Operation.</p> <p>Future oil and gas leases within upper tier acres will have a No Surface Occupancy provision.</p>	<p>Leasing stipulations from oil and gas leasing decisions may constrain surface occupancy and use in IRAs to protect resources, and include reclamation requirements and other resource protection measures. Future leases in IRAs are possible based on forest plans or oil and gas leasing decisions.</p>
Roads for leasable coal operations	<p>Road construction or reconstruction in IRAs for coal exploration and development are limited to areas under an existing lease (issued before the effective date of the Colorado Rule). This includes 5,900 acres</p>	<p>Road construction or reconstruction in CRAs is allowed for coal exploration and development in existing lease areas, and in future lease areas within the North Fork coal mining area (19,100 acres). This includes 4,000 acres currently leased in the North</p>	<p>Current forest plan direction does not limit road construction in areas where coal resources exist.</p> <p>Forest plans include management direction for areas where coal resources exist to protect sensitive</p>



Descriptor	<i>Alternative 1: 2001 Roadless Rule</i>	<i>Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier</i>	<i>Alternative 3: Provisions of Forest Plans</i>
	<p>currently leased within IRAs.</p> <p>No rule-related language on location of buried infrastructure needed for capture, collection, and use of coal mine methane.</p> <p>No regulatory prohibition on the use of roads constructed or reconstructed for purpose of collecting and transporting coal mine methane</p>	<p>Fork coal mining area.</p> <p>Roads constructed or reconstructed for coal exploration or coal related surface activities may also be used for the purpose of collecting and transporting coal mine methane in the North Fork coal mining area when authorized under a gas lease.</p> <p>Roads are temporary roads.</p> <p>Buried infrastructure needed for capture, collection, and use of coal mine methane would be located within road rights-of-way</p> <p>No CRA upper tier acres in either alternative are located in the North Fork coal mining area.</p>	<p>surface resources.</p> <p>Current forest plan direction does not limit location of buried infrastructure.</p>
Road construction for water conveyance facilities	<p>Road construction or reconstruction related to water conveyances is limited in IRAs to areas under an existing permit (issued before effective date of Colorado Rule).</p> <p>Road construction or reconstruction is not allowed for future water conveyance structures.</p>	<p>The Regional Forester determines road construction or reconstruction is needed related to authorized water conveyance structures operated pursuant to a pre-existing water court decree (filed before effective date of Colorado Rule).</p> <p>Water conveyances are defined as facilities associated with the transmission, storage, impoundment, and diversion of water on and across NFS lands.</p> <p>Not allowed within CRA upper tier acres.</p>	<p>Road construction/reconstruction activities in IRAs would be governed by forest plan direction.</p> <p>Forest plan direction includes areas where road construction is prohibited, limited, discouraged, or unrestricted.</p>
Road construction for reducing wildland fire hazards	Construction or reconstruction of a road is not allowed in IRAs to reduce wildland fire hazard to at-risk communities.	Construction or reconstruction of a temporary road is allowed with Regional Forester determination to facilitate tree cutting, sale or removal within the first one-0.5 mile of the CPZ	Road construction/reconstruction activities would be governed by forest plan direction, which varies by management area.



Descriptor	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier	Alternative 3: Provisions of Forest Plans
		to reduce the wildfire hazard to an at-risk community or municipal water supply. Not allowed within CRA upper tier acres.	
Road construction to facilitate maintenance and restoration of ecosystem characteristics.	Construction or reconstruction of a road is not allowed in IRAs for maintenance and restoration of ecosystem characteristics.	Construction or reconstruction of a temporary road is allowed with Regional Forester determination to facilitate tree cutting, sale or removal within the first one-0.5 mile of the CPZ to maintain or restore ecosystem characteristics. Not allowed within CRA upper tier acres.	Road construction/reconstruction activities would be governed by forest plan direction, which varies by management area.
Comparison of Linear Construction Zones by Alternative			
General LCZ provisions	Does not include any prohibition on LCZs Does not include additional environmental analysis requirements for LCZs. Does not include specific provisions about decommissioning and closing LCZs.	Generally prohibits LCZs in CRAs. Includes additional environmental analysis and determination requirements for LCZs determining that: motorized access without LCZs is not technically feasible; within a native cutthroat trout catchment or identified recovery watershed, an LCZ would not diminish conditions in the water influence zone and in occupied native cutthroat habitat over the long-term; an LCZ is consistent with the applicable forest plan; and use of watershed conservation practices. Includes specific provisions about decommissioning and closing LCZs. Standard and upper tier provisions are the same.	Some Forest plans provide direction to follow to protect resource values when proposing the use of an LCZ. Does not include additional environmental analysis requirements for LCZs. Does not include specific provisions about decommissioning and closing LCZs.



Descriptor	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier	Alternative 3: Provisions of Forest Plans
LCZs for water conveyance structures	No rule-related prohibition on LCZs.	<p>The Regional Forester determines an LCZ is needed related to an authorized water conveyance structure operated pursuant to a pre-existing water court decree (filed before effective date of Colorado Rule).</p> <p>Water conveyances are defined as facilities associated with the transmission, storage, impoundment, and diversion of water on and across NFS lands.</p>	Generally forest plan direction does not limit the use of LCZs.
LCZs for electrical power lines and telecommunication lines	No rule-related prohibition on LCZs or location of electrical power lines or telecommunication lines.	<p>Construction of an LCZ within non-upper tier, 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.</p> <p>Not allowed within CRA upper tier acres</p>	Generally forest plan direction does not limit the use of LCZs or the location of electrical power lines or telecommunication lines.
Use of an LCZs for construction or reconstruction of an oil and gas pipeline	There is no rule-related language prohibiting the use of an LCZ for this purpose.	Where the Regional Forester determines a LCZ is needed within non-upper tier 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	Generally forest plan direction does not limit the use of LCZs.



<i>Descriptor</i>	<i>Alternative 1: 2001 Roadless Rule</i>	<i>Alternative 2: Proposed Action Colorado Roadless Rule Alternative 4: CO Roadless Rule w/ Public Proposed Upper Tier</i>	<i>Alternative 3: Provisions of Forest Plans</i>
		connection would cause substantially less environmental damage than alternative routes. Not allowed within CRA upper tier acres.	
<i>Other Requirements for Management of Roadless Areas in Colorado</i>			
Oil and gas pipelines where the source(s) and destination(s) of the oil and natural gas is not within the roadless area	No prohibition on oil or gas pipelines through IRAs from sources outside IRAs.	The construction of pipelines for the purposes of transporting oil or natural gas through non-upper tier where the source(s) and destination(s) of the pipeline are located exclusively outside of a CRA shall not be authorized.	Forest plans generally allow oil or gas pipelines through IRAs from sources outside IRAs



Table S-3. Comparison of Alternatives by Environmental Consequences

Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
Minerals and Energy Development	<p>No roads for saleable mineral development in IRAs.</p> <p>No effect to the statutory right of reasonable access to prospect, explore, and develop locatable minerals.</p> <p>5,900 acres of accessible coal resources in IRAs.</p> <p>Least total disturbance associated with oil and gas development estimated at 143 miles of road, 705 wells, and 146 well pads.</p> <p>No roads for development of geothermal resources.</p>	<p>No roads for saleable mineral development in CRAs.</p> <p>No effects to the statutory right of reasonable access to prospect, explore, and develop locatable minerals.</p> <p>19,100 acres of accessible coal resources in CRAs in North Fork coal-mining area.</p> <p>Disturbance associated with oil and gas development estimated at 146 miles of road, 715 wells and 162 well pads.</p> <p>No roads for development of geothermal resources.</p>	<p>May allow for more saleable mineral development if road construction is allowed.</p> <p>No effects to the statutory right of reasonable access to prospect, explore, and develop locatable minerals.</p> <p>36,400 acres of accessible coal resources in IRA.</p> <p>Disturbance associated with oil and gas development estimated at 159 miles of road, 787 wells and 160 well pads.</p> <p>Roads for geothermal development allowed.</p>	<p>No roads for saleable mineral development in CRAs.</p> <p>No effects to the statutory right of reasonable access to prospect, explore, and develop locatable minerals.</p> <p>19,100 acres of accessible coal resources in CRAs in North Fork coal-mining area.</p> <p>Disturbance associated with oil and gas development estimated at 146 miles of road, 715 wells and 162 well pads.</p> <p>No roads for development of geothermal resources.</p>
Soils	<p>No major difference among alternatives related to the risk of soil impacts. Alternatives 1 and 4 would have the least risk of adverse effects, and Alternative 2 would have minimal risk, followed by Alternative 3. However, these differences are minimal because they would be small and spread over a wide geographic area. Most of the potential effects would be mitigated by site-specific mitigation measures. The risk of post-fire soil erosion might be higher under Alternative 1 and lowest under Alternative 3 as a result of projected levels of fuel treatments.</p>			
Water Resources	<p>Effects to water quality are expected to be small and of short duration. Alternative 1 would have little risk of impacts to water quality, quantity or stream flow and Alternative 3 would have the greatest potential for impacts. Alternatives 2 and 4 would have no risk within the upper tier and limited risk in the non-upper tier acres, with those risks focused in the CPZ and coal areas. Alternative 2 would have slightly more potential for impacts than Alternative 4.</p>			
Air Resources	<p>Differences in effects on air quality do not substantially differ between the alternatives. Atmospheric 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. Alternative 1 has slightly greater chance of smoke related impact because of the limited flexibility to treat hazardous fuels and Alternative 3 has the least.</p>			



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
Forest Vegetation, Forest Health and Timber Management	Opportunities across IRAs to use vegetation management actions to maintain and restore ecosystem characteristics, including to improve response to insect and disease outbreaks and climate-induced stressors, as long as tree cutting focuses on small-diameter trees to maintain one or more roadless area characteristics, and is used infrequently	No treatment in upper tier acres. Fewer opportunities than Alternatives 3, but more opportunities than Alternative 1 and 4, to use vegetation management actions to maintain and restore ecosystem characteristics, including to improve response to insect and disease outbreaks and climate-induced stressors. In non-upper tier, tree cutting would be infrequent and maintain or restore one more roadless area characteristics.	Greatest opportunities to use vegetation management actions maintain and restore ecosystem characteristics, including resilience to insect and disease outbreaks and climate induced stressors.	Impact to treatments is similar to Alternative 2 within non-upper tier acres, but fewer opportunities exist for treatments with additional upper tier acres.
Flexibility to Conduct Hazardous Fuels Treatments	Least flexibility to conduct hazardous fuel reduction around at-risk communities and municipal water supply systems.	More flexibility than the 2001 rule (and Alternative 4) to conduct hazardous fuel reduction and reduce fire risk to communities and municipal water supply systems. Less flexibility than forest plans. Tree cutting for hazardous fuels treatment prohibited in upper tier acres.	Greatest flexibility to conduct hazardous fuel reduction and reduce fire risk to communities and municipal water supply systems. A wide variety of options are available for fuel reduction which can include road construction as determined by forest plans if needed to facilitate treatment.	Impact for fuels treatments similar to Alternative 2 within non-upper tier CPZ acres, but with fewer opportunities for treatments where additional upper tier acres overlap with CPZs. Tree cutting for hazardous fuels treatments prohibited in upper tier acres.
Risk of Spread of Invasive Plants	Lowest risk of spread because of low projections of road construction or tree cutting.	No risk within upper tier acres. Low risk of spread within non-	Substantially greater risk of spread because of the greatest projections for road	Similar risk to Alternative 2, but less risk overall with additional upper tier



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
	Projects would be concentrated where existing oil/gas and coal leases allow road construction.	upper tier CRA acres. Projects would be focused within CPZs, where existing oil/gas leases allow road construction, and within the North Fork coal mining area.	construction, tree cutting, fuels management, as well as future oil, gas, and coal activities, compared to other alternatives.	acres.
Threatened, Endangered, or Sensitive Plants	No adverse impacts to threatened or endangered plants because no road construction or tree cutting, sale or removal is projected to occur where threatened or endangered plants exist. Little impact to sensitive plants overall, but some risk in those areas where activities are focused on existing oil/gas and coal leases.	No adverse impacts to threatened or endangered plants because no road construction or tree cutting, sale or removal is projected to occur where threatened or endangered plants exist. No risk of adverse impacts to sensitive plants in the upper tier acres, and little risk in non-upper tier where activities are likely to be focused, CPZs, coal area, and existing oil and gas leases.	No adverse impacts to threatened or endangered plants because no road construction or tree cutting, sale, or removal is projected to occur where threatened or endangered plants exist. Greatest risk of adverse impacts to sensitive plants with additional activities.	No adverse impacts to threatened or endangered plants because no road construction or tree cutting, sale, or removal is projected to occur where threatened or endangered plants exist. Risk to sensitive plants similar to Alternative 2, but less risk overall due to additional upper tier acres.
Aquatic Species and Habitat	No measurable declines are expected on threatened and endangered (T&E) species, sensitive species, and MIS population trends; downstream T&E species; or wetlands and riparian areas under any alternative. The assumption is that mitigation measures and best management practices would help avoid or minimize impacts from the projected activities.			
	High level of protection and some risk for adverse impacts with tree cutting, coal, and oil/gas activities. Provides protection level to cutthroat trout similar to Alternatives 2 and 4, but greater	Relatively high level of protection and a minimum risk of short-term impacts, especially in the CPZ, coal, and oil/gas areas. High level of protection with little to no activities within the upper tier	Least amount of protection and greatest potential for adverse impacts as compared to Alternatives 1, 2, and 4.	Similar impacts to Alternative 2, but additional acres of upper tier would provide greater protection with fewer fuels-related vegetation opportunities for activities on those acres.



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
	than Alternative 3.	acres, more protective than Alternative 1 or 3. Overall, provides greater protection for cutthroat trout compared to Alternative 3.		
Terrestrial Species and Habitat	For all alternatives, site-specific design criteria and mitigation measures are expected to avoid or minimize adverse effects from projected tree cutting and road construction. For all alternatives, projected activities are not likely to adversely affect federally listed species or designated critical habitat, or result in the loss of viability or cause a trend toward Federal listing for sensitive species. Given the large acreage afforded roadless protection under Alternatives 1, 2, and 4, any changes in population trends for MIS likely would be an increase above current Forest Plan projections.			
	Little risk to terrestrial species and habitat from projected tree cutting and road construction. Opportunities for tree cutting (when combined with prescribed fire) could improve habitat and reduce potential for adverse effects from severe wildfire.	Some increased risk to terrestrial species and habitat from projected tree cutting and road construction compared to Alternatives 1 and 4 within non-upper tier acres, mostly within CPZs (though effects are expected to be minimal and short-lived) and within the North Fork coal mining area. Less risk to terrestrial species and habitat in upper tier acres than Alternative 1. Opportunities for tree cutting (when combined with prescribed fire) could improve habitat and reduce potential for adverse effects from severe wildfire.	Greatest risk to terrestrial species and habitat from projected tree cutting and road construction. Greatest opportunity for tree cutting (in combination with prescribed fire) to improve habitat and reduce adverse effects from severe wildfire.	Similar impacts to Alternative 2, but with additional upper tier acres, even less risk could be expected with little activity in those areas.



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
		Updated inventory of roadless areas provides higher quality portfolio of wildlife habitat within roadless areas.		
Livestock Management	None of the alternatives would be expected to have any substantial beneficial or adverse impacts on livestock management operations in roadless area livestock grazing allotments.			
Scenic Quality	Projected activity levels (e.g., tree cutting) occur on relatively small percentages of total roadless area under all alternatives.			
	Maintains the most IRA acreage at high to very high scenic integrity levels where it exists. However, many substantially altered areas would continue to exhibit low scenic integrity.	Retains most CRAs at high or very high integrity, including CRAs in upper tiers; the scenic integrity of some areas would be reduced by the roads and road-related activities projected as likely to occur in CRAs. New unroaded areas would add to areas protected for high scenic integrity. Tree cutting associated with treatments may result in high quality scenic levels in the long-term.	Highest risk to scenic integrity, as more IRA acres might shift to a moderate to low scenic integrity as a result of road and tree cutting activities projected. Greater opportunities for treatments may contribute more to high quality scenic levels in the long-term.	Similar to Alternative 2 within CRAs that are not upper tier. Greater assurances about preserving high quality scenic levels in upper tier acres, compared to Alternative 2.
Recreation	The substantially altered portion of the IRA inventory would continue to be inconsistent with primitive or semi-primitive settings (11% of IRA acres). Likely to retain a high proportion of acreage in primitive or semi-primitive settings on the	Likely to retain a high proportion of acreage in primitive or semi-primitive settings. However, some areas where road construction and tree cutting, sale, or removal is projected to occur could shift to less primitive settings.	Least likely to retain a high proportion of acreage in primitive or semi-primitive settings; especially where road construction and tree cutting, sale, or removal is projected to occur.	Likely to retain the greatest proportion of acreage in primitive or semi-primitive settings than other alternatives within the roadless areas. The exclusion of the substantially altered acreage and inclusion of new roadless acres would create a



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
	<p>remaining 89% of IRA acres. The newly identified roadless acres (409,500 acres) where road construction and tree cutting, sale, or removal is projected to occur that are not within the IRAs could shift to less primitive settings.</p>	<p>The exclusion of the substantially altered acreage and inclusion of new roadless acres would create a more homogeneous primitive or semi-primitive recreation setting.</p>		<p>more homogeneous primitive or semi-primitive recreation setting.</p>
<p>Economics</p>	<p>Alternative 1 results in no increase of average annual production, employment or labor income.</p> <p>Jobs from energy development estimated at 2,100 annually.</p> <p>Federal mineral lease payments and tax revenues from oil and gas for are estimated to average \$13.1 million annually. Revenue from coal for Alternative 1 is estimated at \$15.7 million.</p> <p>Alternative 1 generally generates 85% of output, employment and labor as compared to Alternative 3.</p> <p>Alternative 1 places the highest priority on protection of non-market roadless area characteristics.</p> <p>This alternative offers the fewest</p>	<p>Alternative 2 results in increases in average annual production, employment and labor income.</p> <p>Jobs from energy development with Alternative 2 are estimated at 2,300 annually.</p> <p>Federal mineral lease payments and tax revenues from oil and gas are estimated at \$13.1 million annually, the same as Alternative 1 and 4.</p> <p>Payments and tax revenue from coal is estimated at \$18.1 million annually. Alternative 2 generally generates 95% of output, employment and labor, compared to Alternative 3.</p> <p>Alternative 2 places a high priority on protection of non-market roadless area characteristics, especially</p>	<p>Alternative 3 results in increases in average annual production, employment and labor income.</p> <p>Jobs from energy development with Alternative 3 are estimated at 2,400 annually.</p> <p>Federal mineral lease payments and tax revenues from oil and gas are estimated to be \$14.5 million annually.</p> <p>Payments and tax revenue from coal are estimated to be \$18.1 million annually, the same as Alternatives 2 and 4.</p> <p>Alternative 3 generates the highest level of outputs, employment and labor.</p>	<p>Alternative 4 results in increases in average annual production, employment and labor income. Revenue from oil and gas, and coal, outputs, employment and labor are the same as Alternative 2.</p> <p>Alternative 4 places a high priority on protection of non-market roadless area characteristics, especially within the upper tier acres.</p> <p>This alternative limits opportunities for hazardous fuel treatments near at-risk communities, some water conveyances, and coal extraction.</p>



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
	opportunities for hazardous fuel treatments near at-risk communities, and treatments for forest health. .	within the upper tier acres. This alternative offers focused opportunities for hazardous fuel treatments near at-risk communities, some water conveyances, and coal extraction.	This alternative includes the largest potential change to wildlife habitat along with the greatest opportunities for hazard fuel reduction for at-risk communities, forest health treatments, energy mineral development and production.	
Developed Ski Areas	Least opportunities for ski area development and expansion due to forest plan allocations for ski areas outside of existing permit areas (1,700 acres) would prohibit road construction. On the 6,600 acres within the IRA boundaries and under permit before the effective date of rulemaking for road construction and tree cutting, sale or removal would be allowed.	Greater opportunity for ski area development and expansion. Expansion and development can occur on the 8,300 acres removed from the CRAs, including the forest plan allocations for ski areas outside of existing permit areas (1,700 acres).	The greatest opportunity for ski area development and expansion can occur on the full 8,300 acres that is under a ski area permit and allocated to ski area development in forest plans. In addition, forest plans can be amended or revised to expand ski area allocations beyond the current allocation.	Same as Alternative 2.
Lands-Special Use Authorizations	Special use authorizations in IRAs would prohibit road construction. Road construction would be prohibited for the development of water resources. There would be no prohibition on	Special use authorizations in CRAs would prohibit road construction. Limited exceptions for the use of LCZ for future electrical power lines or telecommunication lines, water conveyance structures and oil	Current and future special use authorizations would generally allow for road construction; except where prohibited under forest plans. There would be no prohibition on the use of	More limited than Alternative 2 within the upper tier, because Alternative 4 contains a higher proportion of upper tier acres, and fewer restrictions than Alternative 1.



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
	the use of LCZs for future electrical power lines or telecommunication lines, water conveyance structures and oil and gas pipelines from sources outside of IRAs.	and gas pipelines from sources outside of CRAs.	LCZs for future electrical power lines or telecommunication lines, water conveyance structures or oil and gas pipelines.	
Abandoned Mines and Public Safety	All alternatives allow construction or reconstruction of roads needed to conduct a response action under CERCLA or to conduct a natural resource restoration Sec. 311 of the Clean Water Act, or the Oil Pollution Act.			
Wilderness	Alternatives 1 and 2 have a low likelihood of affecting wilderness characteristics because tree cutting, sale, or removal and road construction are prohibited in Wilderness areas and projected activities within roadless areas are not expected to occur adjacent to wilderness area boundaries.		Higher risk of adverse effect to wilderness areas because of the higher potential for tree cutting, sale, or removal and road construction and a higher potential that these activities could occur adjacent to wilderness boundaries.	Same as Alternatives 1 and 2.
Administratively and Congressionally Designated Areas	There are no differences between the alternatives to Congressionally designated areas. They have been removed from the IRA and CRA acreage as they are managed under Public Laws. None of the alternatives project tree cutting, sale, or removal, or road construction in administratively designated areas.			



Issue or Affected Resource	Alternative 1: 2001 Roadless Rule	Alternative 2: Proposed Action- Proposed Rule	Alternative 3: Provisions of Forest Plans	Alternative 4: Proposed Rule w/ Public Proposed Upper Tier
Roadless Area Characteristics	<p>Minimal effect to roadless area characteristics because there is little projected activity to occur.</p> <p>Substantially altered acres have reduced roadless area characteristics due to past road construction and tree cutting (11% of IRA acres).</p> <p>No consideration or regulatory protection of roadless area characteristics on 409,500 acres outside of IRA boundaries.</p>	<p>Minimal effect to roadless area characteristics because there is little projected activity to occur.</p> <p>Consideration and protection of roadless area characteristics on 409,500 acres within CRA boundaries.</p>	<p>More effect to roadless area characteristics because there is an increase in projected activities to occur compared to the other alternatives.</p> <p>Some risk of adverse effects to roadless area characteristics because there are no regulatory prohibitions on road construction, use of LCZs or tree cutting, sale or removal on any of the analysis area.</p>	<p>Minimal effect to roadless area characteristics because there is little projected activity to occur.</p> <p>Consideration and protection of roadless area characteristics on 409,500 acres within CRA boundaries.</p>
Social Values	<p>No disproportionate negative impact on minority or low-income groups as defined in the Bureau of the Census' Current Population Reports.</p> <p>Preference toward preservation of non-development social values.</p>	<p>No disproportionate negative impact on minority or low-income groups as defined in the Bureau of the Census' Current Population Reports.</p> <p>Preference toward non-development social values and some slight preference toward conservation.</p>	<p>No disproportionate negative impact on minority or low-income groups as defined in the Bureau of the Census' Current Population Reports.</p> <p>Less preference toward non-development social values than Alternatives 1, 2, and 4.</p>	<p>Similar to Alternative 2, but not preferred by conservation.</p>

