

**U.S. Department of the Interior  
Bureau of Land Management  
Little Snake Field Office  
455 Emerson Street  
Craig, CO 81625-1129**

**ENVIRONMENTAL ASSESSMENT**

**EA-NUMBER:** DOI-BLM-CO-N010-2012-0027-EA

**PERMIT/LEASE NUMBER:** N/A

**PROJECT NAME:** 10 North Fuels Reduction

**LEGAL DESCRIPTION:** The project is located in all or a portion of the following sections:

6<sup>th</sup> p.m. T10N R101W section 2; T11N R101W sections 20 – 23, 26 – 28, 33 - 36  
Moffat County

**APPLICANT:** BLM

**LAND USE PLAN (LUP) CONFORMANCE REVIEW:** The proposed action was reviewed for conformance (43 CFR 1610.5, BLM 1617.3) with the following plan:

Name of Plan: Little Snake Record of Decision and Resource Management Plan (RMP)

Date Approved: October 2011

Results: The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP goals, objectives, and management decisions:

Section/Page:

Wildland Fire Management - page RMP-27.

Create an integrated approach to fire and resource management to meet land health standards. Objectives for achieving this goal include:

- Reduce fire hazards in ecosystems and restore ecological community functions.
- Use mechanical or other vegetation treatments to reduce fire hazards, when appropriate.

Vegetation – page RMP-15

Identify and initiate restoration and rehabilitation of sagebrush habitat while maintaining a mosaic of canopy cover and seral stages. Objectives for achieving this goal include:

- Reconnect large patches of sagebrush habitat, consistent with the natural range of variability for sagebrush communities in northwest Colorado.
- Reduce the encroachment of juniper and other large woody species into the sagebrush habitat.

Fish and Wildlife Habitat- page RMP-17

Identify and initiate restoration and rehabilitation of sagebrush habitat while maintaining a mosaic of canopy cover and seral stages. Objectives for achieving this goal include:

- Reduce encroachment of juniper and other large woody species into sagebrush habitat.

Manage habitat for a wide variety of wildlife species endemic to key vegetation types by maintaining adequate habitat quantity, quality, and continuity. Objectives for achieving this goal include:

- Maintain and promote high-quality habitat for big game populations.

Livestock Grazing – page RMP – 41

Manage resources, vegetation, and watersheds to sustain a variety of uses, including livestock grazing, and to maintain the long-term health of the rangelands.

### **RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS:**

Northwest Colorado Fire Management Program Fire Management Plan: The proposed action falls within the C13-L polygon, Cold Spring. One objective is to improve habitat for sage grouse and plover using prescribed fire and mechanical/chemical treatments.

The Proposed Action implements actions recommended in the following Plans, Acts, and Policies:

National Fire Plan of 2000

Collaborative Approach to Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan of May 2002.

Federal Land Assistance, Management and Assistance Act of 2009.

**PURPOSE AND NEED:** The project area is located north of Irish Canyon in an area characterized by pinyon/juniper and sagebrush. Many of the areas that are sagebrush/grass dominated are being invaded by pinyon and juniper trees. Eventually these areas will become dominated by pinyon/juniper and lose much of the shrub and grass production. This results in degraded habitat diversity and range condition as well as increased negative impacts when wildfires do occur.

By removing encroaching pinyon/juniper while its cover is still relatively low, shrub and grass abundance and productivity can be maintained. The grazing permittee originally proposed some of these areas for treatment, but it was also found to complement a similar treatment Colorado Parks and Wildlife is proposing several miles to the north for greater sage grouse habitat improvement. The Colorado Greater Sage-grouse Conservation Plan identifies pinyon-juniper encroachment as one potential issue affecting sage-grouse populations in Colorado and suggests that the western portion of Moffat County contains the largest extent of conifer encroachment affecting sage-grouse in the state. The project also fits in well with ongoing fuels reduction activities across the Little Snake Field Office (LSFO).

**PUBLIC SCOPING PROCESS:** The project was posted on the NEPA log on the Little Snake Field Office website: [http://www.blm.gov/co/st/en/BLM\\_Information/nepa/lisfo.html](http://www.blm.gov/co/st/en/BLM_Information/nepa/lisfo.html). No public comments or concerns were raised. The grazing permittee is aware of the proposed action and is supportive.

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**NO ACTION ALTERNATIVE:** Under this alternative, no vegetation treatment activities would occur. Barring any other natural event, pinyon and juniper tree cover will continue to increase while the sagebrush plant community will decrease.

**PROPOSED ACTION:** BLM proposes to reduce encroaching pinyon/juniper within a 3,500 acre area between Irish Canyon and Talamantes Creek by the mechanical means described below. One unit totaling 338 acres is specifically identified for treatment. There are approximately 517 additional acres with similar characteristics that may be treated later. Treatment units can be described as sagebrush/grass dominated with pinyon/juniper coverage between 2% to 15% and slopes of less than 20%. The attached map delineates the currently identified treatment units as well as potential treatment units. Trees would be masticated down to between 1” and 4” height above ground to avoid undue surface disturbance. No treatment activities would be allowed from May 15 – July 15 due to migratory birds or during muddy conditions. No treatment activities would be allowed during March 1 and June 30 due to breeding and nesting Greater sage-grouse. Project activities occurring in raptor nesting habitat would not be permitted from February 1 to August 15, except when the nest site is unoccupied.

The preferred tree removal method would be accomplished through the use of a mastication machine in which individual trees are shredded with either a horizontal carbide toothed drum or a rotary device similar to a very large mower (see Figures 1 – 3). The mastication implement is mounted on a tracked skid-steer or a large rubber tired tractor (similar to a skidder). Tracked carriers produce slightly more surface disturbance while turning than carriers with rubber tires although tracked carriers produce less ground pressure as the weight is spread over a larger area. Either method leaves a mulch of shredded woody material ¼” to 4” in diameter scattered in the vicinity of the tree (see figure 4). The drum style masticator has the ability to grind the stump down to ground level whereas the mower style (e.g. hydro-ax) tends to leave stumps several inches high. Although unlikely, other tree removal methods such as hand sawing with chainsaws or shearing with a skid-steer attachment in order to utilize the biomass off-site may also be employed. Some or all of the work would be contracted to experienced fuels reduction contractors. A portion of the work may be accomplished using BLM owned equipment and BLM employees.



Figure 1. Tracked carrier with horizontal rotary drum (Bull Hog Shredder).



Figure 2. Rubber tired carrier with horizontal rotary drum (Bull Hog shredder)



Figure 3. Rubber tired carrier with mower style shredder (Hydro-Ax).



Figure 4. Typical results of tree mastication.

**AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION**

For the following resources and issues, those brought forward for analysis will be addressed below.

<b>Resource/Issue</b>	<b>N/A or Not Present</b>	<b>Applicable or Present, No Impact</b>	<b>Applicable &amp; Present and Brought Forward for Analysis</b>
Air Quality			X
Areas of Critical Environmental Concern	X		
Cultural Resources			X
Environmental Justice		X	
Flood Plains	X		
Fluid Minerals		X	
Forest Management			X
Hydrology/Ground		X	
Hydrology/Surface			See Water Quality - Surface
Invasive, Non-native Species			X
Lands with Wilderness Characteristics	X		
Native American Religious Concerns		X	
Migratory Birds			X
Paleontology		X	
Prime and Unique Farmland	X		
Range Management		X	
Realty Authorizations			X
Recreation/Transportation		X	
Socioeconomics			X
Soils			X
Solid Minerals			X
T&E and Sensitive Animals			X
T&E and Sensitive Plants	X		
Upland Vegetation			X
Visual Resources		X	
Wastes, Hazardous or Solid			X
Water Quality - Ground		X	
Water Quality - Surface			X
Wetlands and Riparian Resources			X
Wild and Scenic Rivers	X		
Wilderness Study Areas (WSAs)	X		
Wildlife, Aquatic	X		
Wildlife, Terrestrial			X

## **AIR QUALITY**

Affected Environment: There are five federal Class I areas within 100 kilometers of the LSFO boundary, all of which occur in Colorado. There are no federal Class I areas in Utah or Wyoming within 100 kilometers of the LSFO boundary. There are no non-attainment areas nearby that would be affected by either alternative.

Environmental Consequences, Proposed Action: Landscapes treated with fuel reduction treatments are expected to cause fewer air quality impacts both in the short and the long term because of the incremental reduction of fuels and the periodic release of small amounts of air quality pollutants. Pollutant emissions released at this smaller scale are not expected to cause air quality impairment to urban areas or Class I areas, or if they do would be of a much shorter duration. Mechanical treatments as proposed would not be expected to affect air quality other than localized short term dust production.

Environmental Consequences, No Action Alternative: The direct environmental consequences associated with fuels reduction activities would be absent in the no action alternative. However, in the long term it would be possible to have a substantially greater air quality impairment episode as a result of increasing the potential for large scale uncontrolled wildfires. A large fire in this area has the potential to impact air quality of urban areas and reduce visibility within the five Class 1 areas.

Mitigation: None

## **CULTURAL RESOURCES**

Affected Environment: Mechanical treatment fuels reduction projects are considered undertakings under Section 106 of the National Historic Preservation Act (NHPA). BLM has the legal responsibility to take into account the effects of its actions on cultural resources located on federal land. BLM Manual 8100 Series, the Colorado State Protocol and BLM Colorado Handbook of Guidelines and Procedures for Identification, Evaluation, and Mitigation of Cultural Resources provide guidance on how to accomplish Section 106 requirements with the appropriate cultural resource standards. Section 106 of NHPA requires federal agencies to: 1) inventory cultural resources to be affected by federal undertakings, 2) evaluate the importance of cultural resources by determining their eligibility to the National Register of Historic Places (National Register), and 3) consult with the federal and state preservation agencies regarding inventory results, National Register eligibility determinations, and proposed methods to avoid or mitigate impact to eligible sites. Within the state of Colorado, BLM's NHPA obligations are carried out under a Programmatic Agreement between BLM, the Advisory Council on Historic Preservation, and the State Historic Preservation Officer. If the undertaking is determined to have "no effect" or "no adverse effect" by the BLM Little Snake Field Office Archaeologist then it may proceed under the terms of the Programmatic Agreement. If the undertaking is determined to have "adverse effects" then consultation is initiated with the SHPO.

The prehistoric and historic cultural context for northwestern Colorado has been described in several recent regional contexts. Reed and Metcalf's (1999) context for the Northern Colorado

River Basin is applicable for the prehistoric context and historical contexts include overviews compiled by Frederic J. Athearn (1982) and Michael B. Husband (1984). A historical archaeology context has also been prepared for the state of Colorado by Church and others (2007).

Environmental Consequences, Proposed Action: Impacts to cultural resources from the mechanical treatment involve the use of heavy tracked and rubber tired vehicles which can involve substantial ground disturbance which can destroy the integrity of a site. Prehistoric and historic structures are also threatened by mechanical treatment particularly those which are hard to identify from the natural environment such as wickiups. Scattered mulch has the potential to protect sites from the elements but does impact integrity. The piling of slash piles can also impact integrity of a cultural resource particularly if a pile is placed on a site or near a historic structure detracting from its integrity. Slash piles are usually removed or burned. Secondary impacts from mechanical treatment include increased visibility of surface artifacts until vegetation returns. This increased visibility can lead to artifact collecting by recreationalists and artifact hunters. Other secondary impacts to cultural resources include tree fall and increased erosion.

Mitigation, Proposed Action:

1. The proposed undertaking has not undergone a cultural resource study. All areas proposed for mechanical removal of vegetation will require a Class III cultural resource study prior to project implementation. Once the study has been completed, the project manager will be notified as to any mitigation that must occur prior to initiation of the undertaking.
2. Any cultural and/or paleontological (fossil) resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and the authorized officer will make any decision as to proper mitigation measures after consulting with the holder.
3. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:
  - Whether the materials appear eligible for the National Register of Historic Places;

- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
  - Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.
4. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Environmental Consequences, No Action Alternative: The direct environmental consequences associated with fuels reduction activities would be absent in the no action alternative. However, the increased potential for large scale uncontrolled wildfires if no mechanical thinning was undertaken increases the risk to any structural archaeological or historic sites in the area. Increased erosion after a large scale fire also has the potential to adversely affect buried cultural material.

Mitigation, No Action Alternative: None

## References

Athearn, Frederic J.

1982 *An Isolated Empire: A History of Northwest Colorado*. Bureau of Land Management-Colorado. Cultural Resource Series No. 2, Second Edition. Denver.

Church, Minette C., Steven G. Baker, Bonnie J. Clark, Richard f. Carrillo, Jonathan C. Horn, Carl D. Spath, David R. Guilfoyle, and E. Steve Cassells

2007 *Colorado History: A Context for Historical Archaeology*. Colorado Council of Professional Archaeologists, Denver.

Husband, Michael B.

1984 *Plateau Country Historic Context*. Office of Archaeology and Historic Preservation, State Historic Preservation Office, Denver.

Reed, Alan D. and Michael Metcalf

1999 *Colorado Prehistory: A Context for the Northern Colorado River Basin*. Colorado Council of Professional Archaeologists, Denver, Colorado.

## **FORESTRY**

**Affected Environment:** The proposed and potential treatment areas are comprised of low density stands of young pinyon (*pinus edulis*) and juniper trees (*juniperus osteosperma*). This low density of pinyon and juniper trees is a result of wildfires that occurred approximately 80 years ago and/or soil conditions that do not support dense stands. There are no forest products of value other than the occasional suitable Christmas tree or extremely low value biomass. In most of the project area the proposed and potential treatment areas are surrounded by older dense stands of pinyon/juniper.

**Environmental Consequences, Proposed Action:** The proposed action would remove all trees from the treatment areas except small seedlings under one foot in height. This will set back the natural increase and spread of tree species to an earlier seral stage; thereby retaining the mosaic of age classes that exists across the project area. Older trees are not targeted for treatment and therefore would not be affected.

**Environmental Consequences, No Action Alternative:** Under this alternative no trees would be masticated or removed from the site. Barring future disturbance, pinyon and juniper will continue to increase in size and density. Eventually pinyon and juniper trees will dominate the proposed treatment areas causing a corresponding decrease in shrub and herbaceous ground cover.

**Mitigation:** None.

## **INVASIVE, NONNATIVE SPECIES**

**Affected Environment:** The project area is susceptible to the introduction and establishment of noxious and invasive weeds. These are annual invasive species (primarily cheatgrass and annual mustards) common in the western part of the Little Snake Resource area which spread into disturbed or resource stressed areas. Additional invasive species of concern in the vicinity include halogeton, Canada thistle and other biennial thistles. These species are less likely to establish in undisturbed upland sites. Weed infestation can also occur from vehicles, animals, or wind carrying seed in from other areas. The BLM is in cooperation with Moffat County's Cooperative Weed Management program to control noxious weeds on public lands. Principals of Integrated Pest Management are employed to control noxious weeds on public lands.

**Environmental Consequences, Proposed Action:** The threat of weed infestation following the proposed action is low. The methods proposed cause little disturbance that would affect the herbaceous plant community. Removing the tree and shrub cover would provide additional resources to the herbaceous understory that would improve vigor and production in the long term. Adequate desirable vegetation exists in the understory which would provide competition to prevent weed invasions as well as maintain a desirable plant community.

**Environmental Consequences, No Action Alternative:** No new opportunities for weed establishment would occur under this alternative. The increasing threat of intense large fires

exists. Under this alternative the project area would have a greater fuel load in the tree canopy and the vigor and production of the understory would be limited. This would affect the ability of the plant community in the project area to recover and compete with invasive species if a wildfire were to occur.

Mitigation: None

## **LANDS WITH WILDERNESS CHARACTERISTICS**

Affected Environment: The proposed project areas were analyzed for lands with wilderness characteristics under WO-IM 2011-154, *Requirement to Conduct and Maintain Inventory Information for Wilderness Characteristics and to Consider Lands with Wilderness Characteristics in Land Use Plans*. Areas with wilderness characteristics can be identified by BLM as a part of managing the public lands or through external nominations by the public.

Environmental Consequences, Proposed Action: Subject to WO-IM 2011-154 and in accordance with BLM policy, the proposed project areas were evaluated for suitability as lands with wilderness characteristics and did not meet the criteria for an area greater than 5,000 acres. The area included in the inventory has the BLM designation CO-010-210 and is described as not roadless, has seismic activity throughout, noticeable chemical treatments, fencing, and the entire area is under oil and gas leasing. Therefore, the proposed action would not affect lands with wilderness characteristics.

Mitigation: None

Environmental Consequences, No Action Alternative: There would be no impacts to lands with wilderness characteristics from the No Action Alternative.

## **MIGRATORY BIRDS**

Affected Environment: BLM Instruction Memorandum No. 2008-050 provides guidance towards meeting BLM's responsibilities under the Migratory Bird Treaty Act (MBTA) and Executive Order (EO) 13186. The guidance emphasizes management of habitat for species of conservation concern by avoiding or minimizing negative impacts and restoring and enhancing habitat quality. The LSFO provides both foraging and nesting habitat for a variety of migratory bird species. Several species on the U.S. Fish & Wildlife Service (USFWS) List of Conservation Concern (2008) occupy these habitats within the LSFO.

Specific to the project area, native plant communities are comprised of sagebrush stands with encroaching junipers. Several sagebrush species occurring on the Birds of Conservation Concern list that may utilize sagebrush in the project area are sage sparrow, sage thrasher and Brewer's sparrow (also a BLM sensitive species). Habitat quality for sagebrush species has been reduced due to the encroachment of juniper trees. Golden Eagle nesting habitat is located to the north of the project area. The historic nesting site was surveyed in 2010 and two nests that were

deemed viable are located within 0.25 miles of the northern boundary of the project area.

Environmental Consequences, Proposed Action: Since project activities would not be permitted during the nesting period (May 15 – July 15), there would be little chance of take from the mechanical treatment. Individual birds would likely be displaced from the area during project implementation due to noise and an increase in human presence. This disturbance would be minimal and short in duration. The removal of encroaching juniper trees would result in long-term benefits to sagebrush dependent bird species. The treatment would also open up older sagebrush stands, allowing for a more productive understory. The proposed fuels treatment would be compatible with maintaining suitable and productive habitat for sagebrush obligate species that utilize semi-opened sagebrush stands. Since project activities occurring in raptor nesting habitat will not be permitted from February 1 to August 15 if the nest site is active, there would be little chance of take from the mechanical treatment.

Environmental Consequences, No Action Alternative: No vegetation treatments would occur under the No Action Alternative. Over time, sagebrush habitats would continue to be lost as pinyon-juniper woodland expansion continues. This may improve conditions for pinyon juniper woodland species.

Mitigation: None

## **NATIVE AMERICAN RELIGIOUS CONCERNS**

Letters will be sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, Shoshoni Tribal Historic Preservation Officer, and the Colorado Commission of Indian Affairs in the spring of 2012 discussing upcoming projects the BLM would be working on in FY2012. Letters will be followed up with phone calls. BLM LSFO requested review of the three leases to see if any traditional cultural properties or religious cultural values are present that BLM should be aware of prior to issuing the new leases. Letters were followed up with phone calls. No comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado). BLM LSFO consults semi-annually regarding undertakings. No comments specific to lease sales were brought to our attention. No Native American Religious Concerns or Traditional Cultural Properties (TCPs) are known in the area. In addition to the stipulations for the protection of Cultural Resources if new information is brought forward by Native Americans additional or edited terms and conditions for mitigation may have to be negotiated or enforced to protect resource values.

## **REALTY AUTHORIZATIONS**

Affected Environment: Public land in the proposed fuels reduction treatment area is encumbered with two authorized rights-of-way. An above ground power line is authorized on public land in the proposed project area. A telephone line, strung on the same utility poles as the power line, is also authorized by BLM.

Environmental Consequences, Proposed Action: Fuels treatment in close proximity to authorized rights-of-way is designed in such a manner that project activities should not result in

failures or service interruption of utilities. Existing aerial facilities could be accidentally damaged during vegetation treatment activities on public land. Impacts would be temporary until any damage is repaired. With implementation of the mitigation below, the project should result in no adverse impacts.

Mitigation: Potential damage to existing rights-of-way would be minimized by the following actions:

- Avoid existing rights-of-way during any fuels treatment activities.
- Provide 48-hour notice to the owner/operator of all facilities prior to performing any fuels treatment near existing rights-of-way.

Environmental Consequences, No Action Alternative: No impacts to existing realty authorizations would occur.

## **SOCIOECONOMICS**

Affected Environment: Agricultural practices, energy exploration and development, and hunting are the main economic activities of the area. In this region, livestock operations and public land management are strongly linked through grazing permits.

Environmental Consequences, Proposed Action: The local economy may have some direct but minimal, short-term benefit from support services to the contracted crew, but only a small number of people would be affected. Earned revenue from the contract would affect only a small number of people and not necessarily people from the socioeconomic area in the vicinity of the project.

It is not likely that the proposed project activities would generate high levels of concern, opposition, or dissatisfaction among local residents. A small, temporary increase in activity and noise disturbance may occur in rural subdivisions and areas primarily used for grazing or hunting.

Environmental Consequences, No Action Alternative: There would be minimal effects from this small project on the reduction in employment related to the contracted crew. There would also be minimal effects to the economy due to the lack of revenue related to support services. The no action alternative would cause minimal impact, either beneficial or adverse, to the present socioeconomic environment.

Mitigation: None

## **SOILS**

Affected Environment: Soils in the greater project area are sandy loams and gravelly loams on slopes ranging from gentle (3-12%) to more severe (10-40%). The main risk to these soils is erosion unless close-growing plant cover is maintained, as several soil types within the project

area are shallow and/or very dry.

Environmental Consequences, Proposed Action: Any vegetation management activity that causes mechanical soil disturbance can have negative impacts to soil productivity, nutrient cycling, soil cover, and vegetation recovery. These impacts are common to any type of soil disturbance. There is a risk of compaction from the equipment used in the project, which could increase surface flows and erosion, a potential hazard in this terrain. Equipment proposed for the project would involve a masticator that is mounted on a tracked or large rubber-tired skidder, either of which would reduce soil compaction. Compaction would also be reduced if the cover limits are maintained and if treatment is only performed on dry or frozen ground, thereby decreasing ruts and new overland flow patterns. Removing and/or thinning woody vegetation in the area would enable herbaceous vegetation to flourish over the short term, providing increased soil stability over the long term.

Environmental Consequences, No Action Alternative: There would be no direct impacts to the soil resource if no actions are implemented. However, the threat of larger more intense fires occurring under extremely dry conditions exists if fuel reduction treatments are not implemented. The scale and duration of adverse soil effects would be much higher under the extreme burning conditions that exist for large fire occurrence.

Mitigation: None

## **SOLID MINERALS**

Affected Environment: Moffat County operates a sand and gravel pit that is within the proposed area.

Environmental Consequences, Proposed Action: Operations at the operating sand and gravel pit may be affected by the treatment. Depending on the type of treatment, operations may have to be suspended during the duration of the treatment.

Environmental Consequences, No Action Alternative: None.

Mitigation: Notify Moffat County Road and Bridge Department when conducting fuels reduction operations within 200 yards of the sand and gravel pit.

## **T&E SPECIES – ANIMALS**

Affected Environment: There are no threatened or endangered species or habitats for such species present within the proposed project area. The project area does provide breeding and nesting habitat for Greater sage-grouse, a BLM special status species and a candidate for listing under the Endangered Species Act (ESA).

The project area is mapped as overall Greater sage-grouse habitat, Greater sage-grouse breeding habitat and Greater sage-grouse production range by the Colorado Division of Parks and Wildlife. The northern one-half of the project area is mapped as Priority Habitat (PH) and the

southern one half is mapped as General Habitat (GH) (per WO IM No. 2012-043). There is an active lek within 0.8 miles of the northern boundary of the project area. Greater sage-grouse nesting habitat is scattered in patches of heavier sagebrush. Quality nesting habitat has an understory of residual grass cover that provides hiding cover for incubating females. Important brood rearing habitat for sage-grouse is found along Talamantes Creek which borders the project area to the north. Sage-grouse broods require high protein forbs and associated invertebrates.

Environmental Consequences: Since habitat in the project area is of low quality due to the number of encroaching juniper trees, it has very little value to grouse in its current condition. Most shrubs in the stand are older, with very few younger sagebrush plants establishing. The removal of juniper trees would return the area to a sagebrush/grass dominated ecosystem and this would maintain habitat for Greater sage-grouse. Overall the project would be compatible with maintaining suitable Greater sage-grouse habitat. The Proposed Action is consistent with the conservation policies and procedures for integrated vegetation management projects in PH and GH as outlined in the Instruction Memorandum No. 2012-043.

Environmental Consequences, No Action Alternative: No mechanical treatments would occur under the No Action Alternative. Over time, sagebrush habitats would continue to be lost as pinyon-juniper woodland expansion continues.

Mitigation: None.

## **UPLAND VEGETATION**

Affected Environment: The proposed treatment would be located in sagebrush-grass and juniper woodland plant communities. Dominant plants present include Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), green rabbitbrush (*Chrysothamnus viscidiflorus*), Utah juniper (*Juniperus osteosperma*), pinyon pine (*Pinus edulis*), Hood's phlox (*Phlox hoodii*), scarlet globemallow (*Sphaeralcea coccinea*), woolly plantain (*Plantago patagonica*), Indian ricegrass (*Oryzopsis hymenoides*), needleandthread (*Stipa comata*), western wheatgrass (*Pascopyrum smithii*), bluebunch wheatgrass (*Pseudoroegneria spicata*), and Sandberg bluegrass (*Poa sandbergii*). The proposed treatment is located on a Rolling Loam ecological site. All expected species for this site are present, but the pinyon and juniper are considered invasive. This is a late seral sagebrush community as indicated by an abundance of younger to middle-aged pinyon and juniper intermixed within the sagebrush-dominated community.

Environmental Consequences, Proposed Action: Removal or mastication of pinyon and juniper will have the effect of maintaining and improving the shrub, forb, and grass components of shrub dominated plant communities by reducing or eliminating the increasing competition of trees for water and nutrients. Additionally, juniper possesses strong allelopathic characteristics which strongly suppress other competing plants once the stands become established. This treatment would eliminate threats to existing shrub dominated communities by arresting juniper allelopathy.

Since these are mechanical treatments, there would be no direct impact to the shrub or herbaceous component apart from the competitive advantage afforded by removal of the tree species.

Environmental Consequences, No Action Alternative: Barring future disturbance, pinyon and juniper will continue to increase in size and density. Eventually pinyon and juniper trees will dominate the proposed treatment areas causing a corresponding decrease in shrub and herbaceous ground cover. Disturbances, especially fire, could occur at some point and in an uncontrolled manner. Depending upon when such events occur, heavy fuel buildups could lead to hot, extensive burns which may result in widespread type-conversions to undesirable annual plants within the plant communities.

Mitigation: None.

## **WASTE, HAZARDOUS OR SOLID**

Affected Environment: The Resource Conservation and Recovery Act (RCRA) of 1976 established a comprehensive program for managing hazardous wastes from the time they are produced until their disposal. U.S. Environmental Protection Agency (EPA) regulations define solid wastes as any “discarded materials” subject to a number of exclusions. The Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980 regulates mitigation of the release of hazardous substances (spillage, leaking, dumping, accumulation, etc.) or threat of a release of hazardous substances into the environment. Civil and criminal penalties may be imposed if the hazardous waste is not managed in a safe manner and according to regulations. The Colorado Department of Public Health & Environment (CDPHE) administers hazardous waste regulations for oil and gas activities in Colorado. There are no known hazardous materials present in the fuels reduction area.

Environmental Consequences, Proposed Action: Potential releases of hazardous materials could occur due to vehicle and equipment operations on site. Coolant, oil, hydraulic fluid, and fuel are materials that could potentially be released during while fuels reduction equipment is operating. The potential for releases of any of these materials is low and if a release were to occur, it would be minimal and highly localized and not result in an adverse impact to the area.

Environmental Consequences, No Action Alternative: No additional threat of hazardous materials releases would be present beyond what little risk is already present from incidental vehicle use in the area.

Mitigation: None

## **WATER QUALITY – SURFACE**

The larger project area (includes both currently identified and potential treatment areas) is located southwest of the confluence of Talamantes Creek and Vermillion Creek. Surface runoff water would generally flow north or west into these two perennial streams. Water quality for Vermillion Creek, including all tributaries and wetlands (including Talamantes Creek) must

support Aquatic Life Warm 2, Recreation N, and Agriculture.

Environmental Consequences, Proposed Action: Minimal surface disturbance would occur with the proposed mechanical treatment. Equipment proposed for the project would involve a masticator/mulcher that is mounted on a tracked or large rubber-tired skidder, either of which would reduce soil compaction. Sedimentation/erosion would also be reduced if the cover limits are maintained, if treatment work is limited to gentle/moderate slopes, and is only performed on dry or frozen ground, thereby decreasing ruts and new overland flow patterns. The mulch that remains would help minimize runoff and soil compaction in the short-term until other vegetation becomes established following the treatment. Thus, little to no effect to water quality would be expected to result from implementing the mechanical fuel reduction treatments. In the long term, the proposed action would have a positive impact to water quality, as there will be a reduced potential for large scale wildfire.

Environmental Consequences, No Action Alternative: No direct effects on water quality are anticipated from selecting the No Action Alternative. Indirect negative effects could result if a large wildfire occurred in the area. In this event, substantially more sediment and nutrient loading of runoff waters would likely occur from a larger landscape.

Mitigation: None

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2010. Regulations #33, 37, and 93. <http://www.cdphe.state.co.us/regulations/wqccregs/index.html>

## **WETLAND AND RIPARIAN RESOURCES**

Affected Environment: While there are no riparian resources within the greater proposed project area, Talamantes Creek, a perennial tributary to Vermillion Creek, is a few hundred meters downslope of the northern project boundary where several treatment areas are identified.

Environmental Consequences, Proposed Action: Sedimentation from the project area into Talamantes Creek following a thunderstorm or snowmelt runoff is the most likely consequence of the proposed project. Equipment for the project would involve a masticator that mulches individual trees. The mulch that remains would help minimize runoff and soil compaction in the short-term until other vegetation becomes established following the treatment. Compaction would also be reduced if the cover limits are maintained and if treatment is only performed on dry or frozen ground, thereby decreasing ruts and new overland flow patterns.

Environmental Consequences, No Action Alternative: No direct effects on water quality are anticipated from selecting the No Action Alternative. Indirect negative effects could result if a large wildfire occurred in the area. In this event, substantially more sediment and nutrient loading of runoff waters would likely occur from a larger landscape into the Talamantes Creek drainage.

Mitigation: None

## **WILDLIFE, TERRESTRIAL**

Affected Environment: The proposed project area provides year round habitat for mule deer, elk, pronghorn and mountain lion. Both mule deer and elk may avoid using the area during the hardest winters when snow depths prevent use. A variety of small mammals, song birds and reptiles may also be found within the project area at various times of the year. The proposed mechanical treatment would treat approximately 855 acres of pinyon juniper habitat.

Environmental Consequences, Proposed Action: The Proposed Action would displace most wildlife species during the actual treatment. Once the treatment is completed, displaced wildlife would return to the project area. Some song birds that depend on juniper for nesting habitat would be displaced from the project area. Species that use early successional habitats and sagebrush dominated habitats would benefit from the treatment. Overall, the project would be compatible with maintaining productive habitat for wildlife species.

Environmental Consequences, No Action Alternative: Under the no action alternative, no fuels treatments would be implemented. Over time, sagebrush habitats would continue to be lost as pinyon-juniper woodland expansion continues. This may improve conditions for pinyon-juniper dwelling species while negatively impacting the sagebrush dependent species.

Mitigation: None.

### **CUMULATIVE IMPACTS SUMMARY:**

The project area is utilized primarily for hunting and livestock grazing. The proposed action is compatible with other uses, both historic and present, and would have a positive net benefit to present and foreseeable land uses in the area. Future similar vegetation treatment projects may occur in the general vicinity. The cumulative impacts of future treatments will take into consideration any wild fires that have occurred so as to retain the net beneficial effects described below. There are no other known past, present, or future actions that would alter or add to the cumulative impacts described in this section.

The only other known vegetative disturbances in the area are a series of wildfires that occurred approximately 80 years ago that are in various stages of succession. Some of the proposed treatments are in these old wildfire areas. The proposed action complements these other disturbances to provide a mosaic of plant successional stages across the landscape. This has a direct link to providing a varied habitat for wildlife and sustaining viable populations of various species. This also helps to sustain livestock grazing at current stocking levels. Without periodic vegetation treatments or disturbances, livestock carrying capacity gradually declines due to increasing shrub and tree cover and decreasing herbaceous production.

The cumulative impacts of vegetation treatments on soil erosion and watersheds should be one of stabilization. Although there could be short term increases in soil erosion due to temporarily exposed soil surface, herbaceous ground cover would likely increase beyond pretreatment conditions within one to three years, thereby providing better soil and watershed stability in the long term.

## **STANDARDS**

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** The project area provides habitat for a variety of terrestrial wildlife species. The treatment would return the area to a sagebrush/grass ecosystem and provide suitable habitat for wildlife species. The Proposed Action would meet this standard.

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** The project located in Greater sage-grouse habitat. This species is a BLM sensitive species and a candidate for federal ESA listing. Habitat quality has been reduced due to the encroachment of junipers into sagebrush stands. The proposed fuels project would open up older sagebrush stands and remove encroaching junipers. The Proposed Action would meet this standard.

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** The proposed treatment area is currently meeting this standard, although increasing juniper abundance and closing sagebrush canopies are beginning to suppress the herbaceous species that are expected on Sandy and Gravelly Loam ecological sites. The proposed action would cause the site to revert to an earlier seral stage resulting in increased diversity and abundance of native grasses and forbs. The proposed action would meet this standard.

The no action alternative would result in increased conversion of a shrub and grass dominated community to a juniper woodland. While juniper woodlands are appropriate and expected communities on a number of sites in the vicinity, they are normally restricted to steeper slopes and thinner soils that what is present at the proposed treatment site. While the site is currently meeting this standard, this alternative would result in the site failing this standard in the long term.

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD:** There are no federally listed threatened or endangered or BLM sensitive plant species present within the proposed treatment area. This standard does not apply.

**RIPARIAN SYSTEMS STANDARD:** The proposed action would meet the public land health standard for riparian systems. Surface disturbance as described would be insufficient to cause water quality issues as a result of accelerated soil erosion or sedimentation into nearby perennial waters.

**WATER QUALITY STANDARD:** The proposed action would meet the public land health standard for water quality. Surface disturbance would be insufficient to cause water quality issues as a result of accelerated soil erosion. There are no water quality impairments or suspected water quality issues for waters immediately influenced by the project area.

**UPLAND SOILS STANDARD:** The project may cause some short term soil instability on the area targeted for fuel reduction but mitigating to the extent possible the potential for large wildfires will reduce large scale erosion over the long term. This standard would continue to be met with project implementation.

**PERSONS/AGENCIES CONSULTED:** A. Wright Dickinson, grazing permittee.

**ATTACHMENTS:** BLM produced map of project area.

**SIGNATURE OF PREPARER:** /s/ Dale Beckerman

**DATE SIGNED:** 02/29/12

**SIGNATURE OF ENVIRONMENTAL REVIEWER:** /s/ Barbara Sterling

**DATE SIGNED:** 03/02/12

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
DOI-BLM-CO-N010-2012-0027-EA

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.
9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.
10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in EA No. DOI-BLM-N010-2012-0027 EA. I have also reviewed the project record for this analysis and the impacts of the proposed action and alternatives as disclosed in the Alternatives and Environmental Impacts sections of the EA. Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Because there would not be any significant impact, an environmental impact statement is not required.

**SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Matt Anderson for  
Wendy Reynolds, Field Manager**

**DATE SIGNED: 03/21/12**

## **Decision Record**

DOI-BLM-CO-N010- 2012-0027-EA

### **DECISION AND RATIONALE:**

I have determined that approving this fuels reduction project is in conformance with the approved land use plan. It is my decision to implement the project with the specified mitigation measures. The project will be monitored as stated in the Compliance Plan outlined below.

**MITIGATION MEASURES:** The mitigation measures for this project are described in the environmental impacts section of the environmental analysis for cultural resources, paleontology, hazardous materials, and realty authorizations.

### **Compliance Schedule**

Compliance will be conducted during the implementation phase to insure that all specifications and mitigative measures outlined in EA No. DOI-BLM-N010-2012-0027 EA is followed. If contracted, contractor performance and progress will be documented by the assigned Contracting Officers Representative.

### **Monitoring Plan**

Following implementation, the treated area will be mapped and filed with the project file and a copy given to the range and wildlife staff. Photo plots will be established and new photos taken each year for the following three years to document vegetation response to the treatment. This monitoring will help determine the treatment effectiveness and document the need for additional mitigation or specification changes for future projects.

### **Assignment of Responsibility**

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fire Management Specialist in the Little Snake Field Office.

### **Administrative Review or Appeal Opportunities**

This decision shall take effect immediately upon the date it is signed by the Authorized Officer, and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay (43 CFR 2801.10(b)). Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4.

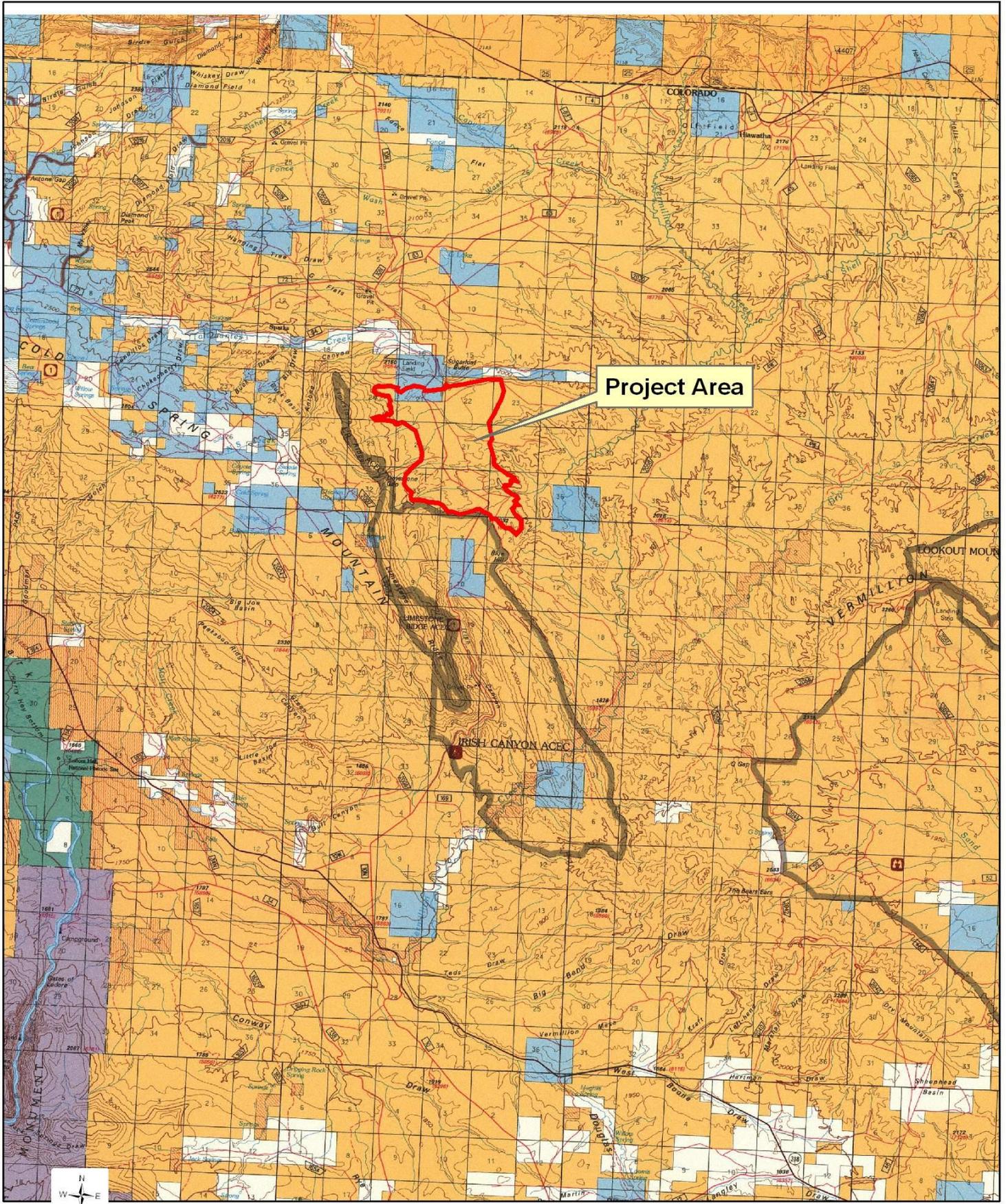
Within 30 days of the decision, a notice of appeal must be filed in the office of the Authorized Officer at the Little Snake Field Office, 455 Emerson St., Craig, CO 81625. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

Contact Person

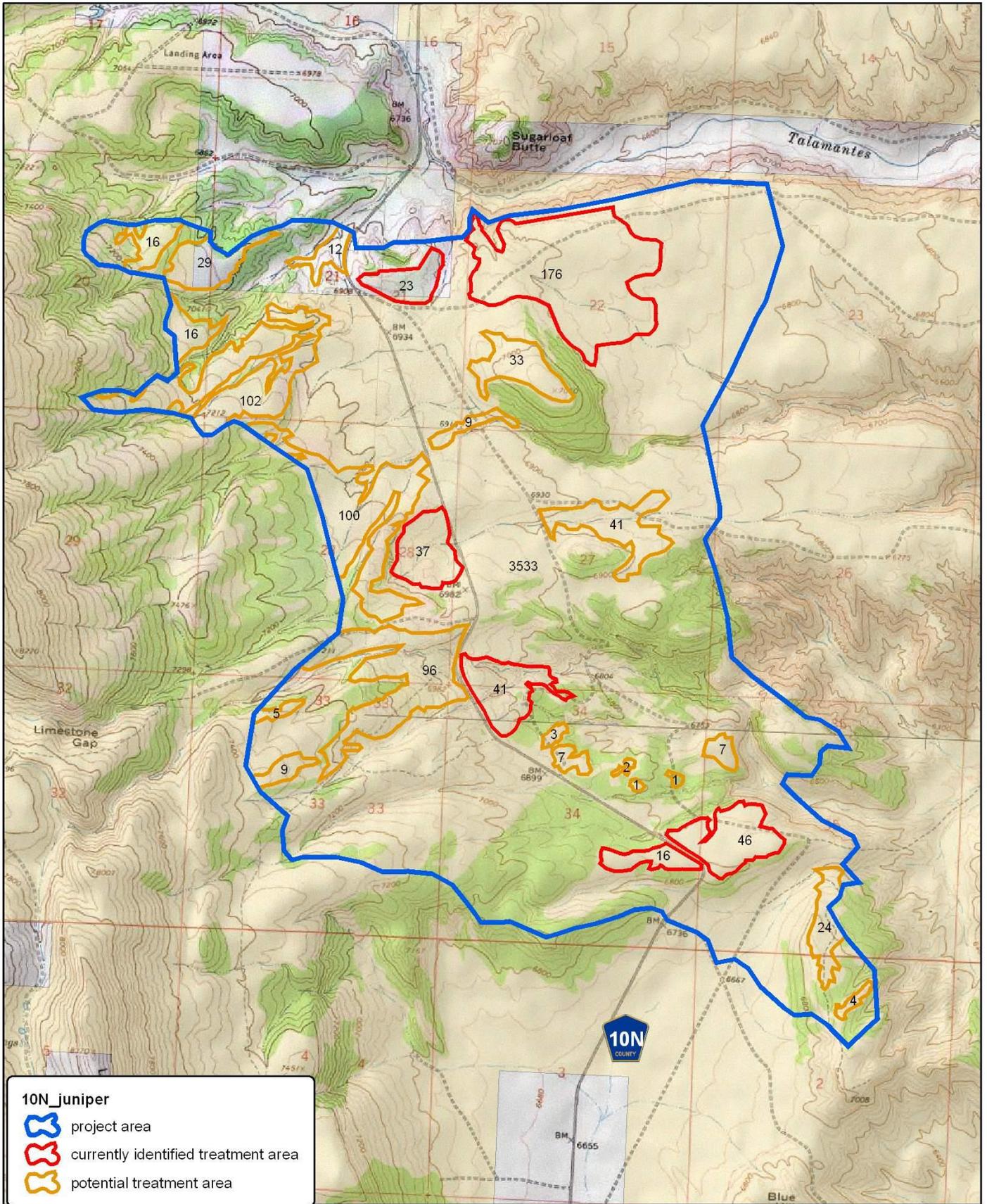
For additional information concerning this decision, contact Dale Beckerman, Fire Management Specialist, Little Snake Field Office, 455 Emerson Street, Craig, CO 81625, Phone (970) 826-5004.

**SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Matt Anderson for  
Wendy Reynolds, Field Manager**

**DATE SIGNED: 03/21/12**



**10N Fuels Reduction Project  
Vicinity Map**



### 10N Fuels Reduction Project

