

**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-N010-2009-0082-EA

PROJECT NUMBER: EQ39

PROJECT NAME: Jack Springs 2 Hazardous Fuels Reduction

LEGAL DESCRIPTION: T8NR102W Sections 10, 11, 14 & 15.

APPLICANT: Bureau of Land Management

PLAN CONFORMANCE REVIEW: The Proposed Action and Alternatives are subject to the following plan:

Name of Plan: Little Snake Resource Management Plan and Record of Decision

Date Approved: April 26, 1989,

Name of Plan: Northwest Colorado Fire Management Program Fire Management Plan

Date Approved: Approved annually since 2000.

Results: Little Snake Resource Management Plan and Record of Decision: The majority of the treatment area falls within Management Unit 5: Douglas Mountain. The management objectives for this unit, as outlined in the Little Snake Resource Management Plan, are to manage the forest and woodland resources to produce a variety of forest and woodland products on a sustained-yield basis. The development of other resource uses/values within this unit is allowed consistent with the management objectives for forest and woodland resources.

A small portion of the treatment area falls within Management Unit 2: Northern Central. The management objectives for this unit are to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas and forest resources.

The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed alternatives are in conformance with the objectives of the Little Snake Resource Management Plan.

Northwest Colorado Fire Management Program Fire Management Plan: The proposed action falls within a B4 Polygon, Ponderosa Pine. The resource management objective of the Fire Management Plan for this fire polygon is to sustain the yield of forest products. This is a high priority area for hazard fuels treatments to reduce the risk of urban-interface fires. The proposed action is consistent with the objectives of the Fire Management Plan.

NEED FOR PROPOSED ACTION: In accordance with the National Fire Plan of 1999, public land agencies are directed to take actions to reduce hazardous fuels, especially in those areas where communities and human development are at risk from wildfire. The Little Snake Fire Management Plan identifies areas where fuels reduction treatments are desired and needed. The Blacktail Mountain area is surrounded by ranches and residences and is identified as a wildland-urban interface by the Fire Management Plan for the Northwest Colorado Fire Management Program.

PUBLIC SCOPING PROCESS: The project is listed on the NEPA log on the Little Snake Field Office website.

BACKGROUND: The Douglas Mountain hazardous fuels reduction project was originally initiated in 2002 and various projects have been completed in the Douglas Mountain area since then. The Jack Springs area of Douglas Mountain has been identified for treatment by Little Snake Field Office Fire Management Staff due to the encroachment of Pinyon-Juniper and the build-up of shrubbery and sagebrush through years of fire suppression in the area. Removal of Pinyon-Juniper trees within this proposed fuel break is essential to ensuring protection for the residences in the immediate area.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: It is proposed to treat approximately 250 acres for hazardous fuel reduction purposes. This would improve wildfire protection for isolated residences in the area and provide more opportunities to allow future fires to burn for resource benefit. This treatment would be a combination of mechanical methods and prescribed fire. In the event that prescribed fire is unsuccessful, mechanical methods as described below may be utilized to treat the area designated for prescribed fire treatment.

Mechanical Treatment:

The mechanical portion of the project would involve thinning 21 acres of young to moderate aged (approx. 20 – 100 years old) pinyon and juniper trees. This treatment provides a fuel break along an existing two-track road. The fuel break would make prescribed burning the rest of the unit easier and safer. The preferred method utilizes a large rubber tired tractor (similar to a skidder) with a 6' – 8' mulching head to shred and mulch trees up to 16" diameter. It generally leaves small branches and wood chunks from pencil size up to bowling ball size. The mulch is fairly evenly scattered across the surface and stumps would be ground down to a height of 6" or less. Five to twenty trees per acre would be left uncut. Alternatively, hand thinning may be utilized where trees would be cut, limbed, and bucked with chainsaws and put into piles 5'- 15' in diameter and 4' – 8' tall. These piles would either be burned as they are cut or burned later under moist conditions.

Prescribed Fire:

The prescribed burn portion of the project would involve 241 acres of young to moderate aged pinyon and juniper trees as well as Wyoming big sagebrush that is scattered throughout the unit. The objective is to reduce fuels on 50% - 70% of the target area. This effectively changes the vegetation composition to mostly herbaceous species. Activities associated with prescribed burning would likely include off road vehicle use and hand line construction.

Any area proposed for prescribed burning consists of a target area and a larger project area. The target area is the area intended to be treated. The project area is a larger surrounding area where fire may burn into under specific criteria without being declared a wildfire but is not intended for treatment. In this case, any fire occurring outside the target area will be aggressively suppressed. The burn boss may declare the prescribed fire a wildfire at any time he/she feels the fire is beyond the capability of available resources to manage.

A prescribed fire plan prepared in accordance with the Interagency Prescribed Fire Planning and Implementation Procedures Guide is required for all prescribed burns. This plan describes exactly how and under what conditions prescribed burning would occur in order to meet the objectives described above. The prescribed fire will also be conducted in accordance with the State of Colorado Smoke Management Plan and MOU, and will be regulated under Colorado Department of Public Health and Environment, Air Pollution Control Division. The Air Pollution Control Division issues an open burning permit, which specifies smoke dispersal conditions under which burning may occur.

Project activities would not be permitted during the months of May 15 through July 15 to prevent disturbance to nesting migratory birds.

NO ACTION ALTERNATIVE: Under this alternative, hazardous fuel reduction activities would not occur.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: Air quality in the vicinity of the project area is considered to be in compliance with the National Ambient Air Quality Standards. There are six Class 1 (visibility) areas within 100 km of the resource area, two of which are in northwest Colorado (Mt. Zirkel Wilderness and Flat Tops Wilderness). There are no federal Class 1 areas in Utah or Wyoming within 100 km of the resource area.

Environmental Consequences, Proposed Action: Mechanical treatments proposed would not be expected to affect air quality other than localized short term dust production. Prescribed and wildland fires can contribute substantial emissions of air quality pollutants including particulate matter, volatile organic compounds, and carbon monoxide. Prescribed and wildland fires also

reduce visibility and contribute to regional haze. Prescribed fires are typically smaller than uncontrolled wildfires occurring during peak burning conditions. Prescribed fires involve less combustion and less total smoke emissions, since they are typically conducted under conditions when larger fuels (>3" diameter) are not consumed. Prescribed fires are also conducted under atmospheric conditions that would promote air pollutant dispersion. Each prescribed fire must be continually monitored to assure that the burning conditions remain within a previously determined prescription of controlled fire and smoke behavior. Although some impacts to regional air quality would be expected for a very short duration from implementing this project it is generally recognized that overall, impacts would be reduced in the long term by reducing the potential of having an uncontrolled wildfire.

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 wildfires. Wildfires tend to produce more smoke as a result of more fuel consumption, their larger size, and longer burning duration. A large fire in this area has the potential to impact air quality and reduce visibility within the two Class 1 areas in northwest Colorado.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/10/09

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Gina Robison, 8/6/09

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project, Jack Springs Fuel treatment, has not undergone a Class III cultural resource survey. The project area will be defined and a Class III survey will occur prior to the project beginning construction. Once the area is surveyed, the

COR will be notified as to any mitigation that must occur prior to the project beginning. The following standard mitigative measures (Discovery Stipulation) will be required regardless of the results of the Class III cultural resources survey.

Mitigative Measures:

The following standard stipulations apply for this project:

1. 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.

2. 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.

Name of specialist and date: Robyn Watkins Morris, 8/17/09

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Oil and gas development and ranching are the primary economic activities.

Environmental Consequences, both alternatives: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None.

Name of specialist and date: Louise McMinn, 08/10/09

FLOOD PLAINS

Affected Environment: There are no large floodplain areas in the proposed project location. The fuel break treatment is located in headwater stream segments.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/10/09

INVASIVE, NONNATIVE SPECIES

Affected Environment: The whole project area is susceptible to the introduction and establishment of noxious and invasive weeds. Downy brome (cheatgrass) is common along roads and on disturbed areas in the vicinity of the project. Other species of noxious weeds, including whitetop, Canada thistle and other biennial thistles are known to occur within the North Zenobia Creek Allotment #04339 and are all responsive to chemical control if needed. Current invasive species presence is low and of an acceptable level. New weed infestations can occur from vehicles carrying seed from other areas. The BLM is in cooperation with Moffat County Cooperative Weed Management program to locate and control weeds on public lands. All principals of Integrated Pest Management are employed to control noxious weeds on public lands.

Environmental Consequences, Proposed Action: The threat of weed infestation following mechanical treatments is relatively low because little soil disturbance occurs, adequate desirable vegetation exists in the understory, and livestock grazing rest is stipulated.

The threat of weed infestation (especially cheatgrass) following prescribed fire is greater. The threat is highest in areas with little desirable vegetation in the understory, thick duff, heavy fuels, and shallower soils, or burns conducted under extremely dry conditions. By removing vegetation, new areas are open to weed colonization. By conducting burns under moderate conditions in areas with adequate desirable understory vegetation, and providing rest from livestock grazing the threat of weed infestation will be minimized. Cheatgrass levels are expected to be higher than pre-burn levels for the first couple of years following burning but should return to pre-burn levels or less after desirable grasses and forbs expand to take advantage of soil nutrients, water, and sun made available through the removal of woody species.

Environmental Consequences, No Action Alternative: No new opportunities for weed establishment would occur under this alternative, but would not stop the spread of invasive species. The increasing threat of intense large fires exists. Any fires burning under extremely dry conditions leave an area with a higher chance of weed infestation.

Mitigation Measures: None

Name of specialist and date: Gail Martinez, 8/19/09

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 the 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 USFWS's List of Conservation Concern (2008) occupy these habitats within the LSFO.

Specific to the project area, native plant communities are comprised of pinyon-juniper woodlands with some scattered sagebrush. Two pinyon-juniper obligate species listed on USFWS's Bird of Conservation Concern List, the pinyon jay and juniper titmouse may nest in the general project area. Other species that are not on the BCC list but associated primarily with this habitat type include ash-throated flycatcher, gray flycatcher and black-throated gray warbler. There are no active raptor nests in the vicinity of the proposed action.

Environmental Consequences, Proposed Action: Since project activities would not be permitted during the nesting period, there would be little chance of take from either the prescribed burn or 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 Proposed Action would have some impacts to pinyon-juniper obligate birds as approximately 241 acres of habitat would be modified. The burn would not be expected to completely remove pinyon-juniper woodlands, but create a mosaic of habitat types with approximately 50 – 70 % of the target area treated. The prescribed burn is located in a pinyon-juniper stand that is over 3000 acres in size and these adjacent woodlands would provide habitat to birds displaced by the treatment. It is likely that many standing snags would be created, providing additional structures for cavity nesting birds. Creating an opening in the forest may increase the likelihood of brood parasitism by cow birds. Overall, the proposed treatment would tend to favor migratory birds that utilize early and mid-seral habitats.

Environmental Consequences, No Action Alternative: There would be no chance of take from the No Action Alternative. Pinyon-juniper woodland would not be treated and there would be no impacts to species that use this habitat.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus, 8/13/09

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A followup phone call was performed on June 16, 2008. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris, 8/17/09

PRIME & UNIQUE FARMLANDS

Affected Environment: No Prime and/or Unique Farmlands are present in the vicinity of the proposed project.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/10/09

T&E SENSITIVE ANIMALS

Affected Environment: There is no habitat for any T&E or BLM sensitive species within the Jack Springs Project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Desa Ausmus, 8/12/09

T&E AND SENSITIVE PLANTS

Affected Environment: Although there are no identified occurrences within the proposed project area, there exists the potential for the presence of narrow-leaf evening primrose (*Oenothera acutissima*), a BLM sensitive species, in areas immediately adjacent to the proposed project area. This species occurs on sandy, gravelly, or rocky soils in seasonally wet areas such as meadows, depressions, and drainages. Its presence is primarily limited to the ability of these areas to remain wet during much of the growing season. Although not identified there, private lands below Jack Springs provide conditions favorable to this species.

There are no federally listed threatened or endangered plant species present within or in the vicinity of the project.

Environmental Consequences, Proposed Action: Since Jack Springs lies outside of the planned project area, there would be no direct impact to any potential occurrence of narrow-leaf evening primrose. Individual plants could be destroyed or the ability of the spring to provide suitable

habitat could be compromised if support vehicles run through the wet areas below the spring, the spring is altered in any way, or if the spring or ponds below are utilized for suppression activities.

Reduction of large, woody species in the watershed above Jack Springs has the potential to improve habitat for this species. Reduction of pinyon and juniper resulting in the expansion of herbaceous species could allow more groundwater to reach Jack Springs, resulting in greater flow and reduce the amount of sedimentation from the watershed above.

Environmental Consequences, No Action: None

Mitigative Measures: None.

Name of specialist and date: Hunter Seim, 8/4/09

WASTES, HAZARDOUS OR SOLID

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment.

Environmental Consequences: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Mitigative Measures: None.

Name of specialist and date: Gail Martinez, 8/17/09

WATER QUALITY - GROUND

Affected Environment: The geology of the area affected by the Proposed Action suggests that there is potential for ground water aquifers. The ground water quality in the area ranges from useable to poor.

Environmental Consequences, both alternatives: The prescribed burn would have no adverse impacts to ground water quality within the Proposed Action area. If the burn did not occur, there would be no impacts to ground water quality.

Mitigative Measures: None

Name of specialist and date: Jennifer Maiolo, 8/10/2009

WATER QUALITY - SURFACE

Affected Environment: Waters from the proposed project location are directly tributary to the

main stems of the Yampa and Green rivers. None of these waters are identified by the state as water quality impaired (CDPHE, 2002). There are no perennial streams in the proposed project area, but there is one spring within the allowable burn areas. This spring has been developed by the BLM for livestock and wildlife uses.

Environmental Consequences, Proposed Action: The proposed action would have some short term effects to the water quality of ephemeral streams in the project area during times of runoff. The majority of these effects would be from the prescribed burning. Increases in sediment, nitrogen, phosphorous, and cation production are likely in the first couple of years after treatment. With the exception of sediment, these increases would be minor and short lived, returning to pre-treatment levels in a couple of years. Depending on the intensities of the burns and weather patterns following the burns, sediment yields could increase dramatically. The proposed fires are expected to be of varying intensities creating a mosaic pattern. This would keep sediment and nutrient yields from increasing to harmful levels. The effects of the proposed action would be short lived and not out of the natural variability of the area.

Little surface disturbance would occur with the proposed mechanical treatments. Therefore, there would be little effect to the water quality from them.

As a whole, the proposed action would have a positive impact to water quality in the future, due to the expected increase in plant diversity and ground cover.

Environmental Consequences, No Action Alternative: Under the No Action alternative, there would no effect on water quality. The conditions would stay the same. It is possible that there would be a long term negative effect as species diversity and ground cover diminishes.

Mitigation Measures: None

Name of specialist and date: Gail Martinez, 8/19/09

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian areas, wetlands or springs have been documented within the project area.

Environmental Consequences: None

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 8/10/09

WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 8/6/09

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 8/6/09

NON-CRITICAL ELEMENTS

FORESTRY

Affected Environment: The area is classified as typical pinyon/juniper woodland. Trees range in age from approximately 75 years old to 200 years old, with the majority tending towards the younger age class. Tree density is approximately 150 – 200 stems/acre. This is not an important area for wood products due to the remote location and limited access.

Environmental Consequences, Proposed Action: The proposed action will involve the removal or burning of 50% to 70% of the pinyon/juniper in the target area. These areas will likely remain devoid of trees for 10 to 20 years before scattered seedlings become established. 50 to 100 years will pass before the site has a forested appearance.

Environmental Consequences, No Action Alternative: The pinyon/juniper woodland will slowly increase in density, tree size, and cover until the site potential is reached. This will result in reduced herbaceous and shrub cover.

Mitigative Measures: None

Name of specialist and date: Dale Beckerman, 8/20/09

RANGE MANAGEMENT

Affected Environment: The proposed treatment area includes the West Douglas Mountain Allotment #04323 and the North Zenobia Peak Allotment, #04339. The West Douglas Mountain Allotment is permitted for 922 AUMs of cattle use from May 16th through October 31st. The North Zenobia Peak Allotment is permitted for 45 AUMs of cattle use from June 2nd through October 15th. There are no existing BLM range improvement projects on the public land parcels

in this allotment in the area of the Proposed Action.

Environmental Consequences, Proposed Action: The Proposed Action does not include growing season rest as the cattle do not use the area to be treated due to lack of water and forage. There should be no impacts to range management unless the prescribed burn gets out of the proposed treatment area and becomes larger than intended.

Environmental Consequences, No Action Alternative: There would be no impact to grazing operations or improvements under this alternative.

Mitigative Measures: None

Name of specialist and date: Kathy McKinstry, 08/05/09

SOILS

Affected Environment: The soils present in the area of the Proposed Action are a Joebas-Rock outcrop complex consisting of 5 to 40% slopes. The Joebas soil typical of the Joebas-Rock outcrop complex is shallow (10 to 20 inches to bedrock (lithic)), it has a very low water holding capacity, and exhibits very high runoff. The soil is non-saline and non-sodic. The range site associated with the Joebas soil is Sandy Juniper.

The rock outcrop associated with the site consists of a combination of escarpments and ledges and massive slab rock with 0 to 4 inches of soil material covering the rock. Pinyon pine and juniper trees commonly grow in the fractures in the rock outcrop. There is little to no water holding capacity and exhibits a very high runoff rate.

Environmental Consequences, Proposed Action: Any vegetation management activity that causes mechanical soil disturbance can have negative impacts to soil productivity, nutrient cycling, and soil cover and vegetation recovery. This is a common occurrence anytime the soil is disturbed. There is a risk of compaction from the equipment used to construct the fuels reduction project, which could increase surface flows and erosion. However, with proper cover limits being maintained and fuel break construction and maintenance methods that leave some overstory canopy and minimize exposure of bare ground, these effects would be reduced. Effects would also be reduced if the treatment is only performed when the ground is dry, thereby decreasing ruts and new overland flow patterns.

The prescribed fire could have impacts on the soil resource. The effects of burning are directly related to the duration and intensity of the fire as well as the on-site soil characteristics. An intense fire volatilizes excessive amounts of nitrogen and other essential nutrients, destroys organic matter, disrupts soil structure, alters the physical, chemical and biological properties of the soil and may induce water repellency. Erosion loss can permanently affect on-site productivity and cause undesirable off-site effects as well (Hafenfeld, Richard: *Mitigating the Adverse Impacts of Prescribed Burning, Cal-Neva Wildlife Transactions*, 1981). These effects

can be lessened or avoided if the fire intensity and duration are predicted and controlled through the use of fire prescriptions. In order to lessen impacts to soil resources, the burn should take place under weather and fuel conditions that result in low intensity fire (100TU/Sec./Ft. of fireline) with a maximum burning index (B.I.) of 38. Other measures that can be taken to lessen impacts to the soil resource include: burning when the soils are wet; limit new fireline construction to slopes of less than 40%; limit chaining and brush crushing preparation work to slopes of less than 30%; leave sparsely vegetated areas on slopes of greater than 50% unburned and to limit line construction as much as possible by making use of existing roads/trails, firebreaks and natural terrain barriers.

Environmental Consequences, No Action Alternative: Under the No Action Alternative, the fuel reduction project including mechanical and prescribed burning would not be implemented and there would be no further impacts to the soil resource. However, a possible future consequence of the No Action Alternative includes a large, stand replacement wildland fire which could lead to large scale erosion and invasion by non-native species.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/05/09

UPLAND VEGETATION

Affected Environment: One ecological site occurs in the area of the Proposed Action, Sandy Juniper. This ecological site typically supports native vegetation consisting of twoneedle pinyon, Utah juniper, Wyoming big sagebrush, streambank wheatgrass, antelope bitterbrush, needleleaf sedge, Indian ricegrass, Truckee rabbitbrush, bluebunch wheatgrass, bottlebrush squirreltail, needleandthread, prairie Junegrass and western wheatgrass. Pinyon pine and juniper may grow in the fractures of the rock outcrop in the area.

Environmental Consequences, Proposed Action: The construction of the proposed fuel break would likely disturb the vegetation that comprises the understory. This disturbance would consist of crushing the vegetation through the operation of the machinery. The disturbance would be temporary in nature and the understory vegetation would be expected to recover over time. The juniper and pinyon pine comprising the overstory would be completely removed along the fuelbreak. This is the objective of the Proposed Action. Over time, it is anticipated that pinyon pine and juniper seedlings would re-establish along the fuelbreak, unless future maintenance of the fuelbreak prevents this re-establishment.

The prescribed burning portion of the Proposed Action would improve plant diversity by reducing the pinyon/juniper component and increasing the understory of perennial grasses. In this type of a fire, the shrub species would be top killed and larger branches would survive the fire. Fire would make these shrubs more accessible to browsing animals by lowering the height of palatable growth. Removal of a portion of the sagebrush component would create additional resources (light, water, and nutrients) to become available to grasses and forbs in the understory.

As a result, the grass and forb component of the community would colonize the interspaces and increase in production. This would decrease soil erosion and increase sediment holding capabilities. Additionally, the burning of vegetative litter through a prescribed burn would accelerate the nutrient cycling within the plant community.

The proposed burn objective of 40 - 70% would improve the age class distribution of the vegetation. A mosaic type burn, as proposed, is most preferable for increasing the age and species diversity of a site. Sagebrush is susceptible to kill by fire while many forbs, grasses, and shrubs are only slightly damaged or relatively unharmed. Over time (10 - 20 years) the sagebrush would begin to reestablish. This treatment would improve the ability of the site to produce usable forage for livestock and wildlife.

Environmental Consequences, No Action Alternative: Under this alternative, sagebrush, pinyon pine and juniper would continue to occupy and encroach into the area reducing total production and diversity of the plant community. Fuel loads would continue to accumulate and increase the risk for catastrophic wildfires.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 8/05/09

WILDLIFE, AQUATIC

Affected Environment: There is no habitat for aquatic wildlife species located in the Jack Springs project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Desa Ausmus, 8/12/09

WILDLIFE, TERRESTRIAL

Affected Environment: Native plant communities in the project area are comprised of pinyon-juniper woodlands with some scattered sagebrush. Pinyon-juniper woodlands provide habitat for several big games species, small mammals, reptiles and birds. The project area is mapped as overall winter range for both mule deer and elk by the CDOW. CDOW released Merriam's turkeys in the general area in the early 2000s. The turkey population is establishing itself and is utilizing the Jack Springs area. The Proposed Action area does not provide critical habitat for any wildlife species.

Environmental Consequences, Proposed Action: The project would have minimal impacts to the majority of wildlife species. The Proposed Action would create a mosaic of grasslands and

shrublands within pinyon-juniper woodlands. Removing pinyon trees may impact wild turkeys as pinyon nuts are important in winter diets. However, since the treatment is located in a 3,000+ acre stand of pinyon-juniper, this impact would be negligible. Wildlife species 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. Overall, the project is compatible with maintaining healthy and productive habitats for a variety of wildlife species.

Environmental Consequences, No Action Alternative: The No Action Alternative would have no impact to wildlife habitat.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus, 8/12/09

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals		JAM 8/10/09	
Forest Management			DRB 8/20/09
Hydrology/Ground			See Water Quality, ground
Hydrology/Surface		GEM 8/1709	
Paleontology		JAM 8/10/09	
Range Management			KLM 08/05/09
Realty Authorizations	LM 08/10/09		
Recreation/Travel Mgmt	GMR 08/06/09		
Socio-Economics		LM 08/10/09	
Solid Minerals		JAM 8/10/09	
Visual Resources		GMR 08/06/09	
Wild Horse & Burro Mgmt	KLM 08/05/09		

CUMULATIVE IMPACTS SUMMARY: The Jack Springs area of Douglas Mountain is used by many people for hunting, camping, and antler “hunting”. This area is also utilized for livestock grazing. A large portion of this project area is on private land and will aid in protection of dwellings and outbuildings of the permanent residences in the area should a wildfire occur.

The Douglas Mountain Hazardous Fuels Reduction project incorporated a section of the Douglas Mountain Boulevard (Moffat County Road # 116). This project, named “Boulevard Fuel Break”, involved treating a 100 foot wide strip on both sides of County Rd. 116 from the intersection of County Rd. 10 west 9 miles to the Five Springs prescribed burn project. The vegetation along

the road was thinned to decrease the potential of a wildfire spreading to the opposite side of the road. The objective of producing a healthier stand and reducing the chance of a wildfire burning through the tree crowns is the same in both the Boulevard Fuel Break Project and the Jack Springs Project. The Boulevard Fuel Break project was implemented in the last 10 years. The proposed action combined with other activities and previous fuel reduction projects in the area will not negatively impact the Douglas Mountain area.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Jack Springs project area is currently meeting the standard for healthy animal communities. The treatment would create a mosaic of grasslands/shrublands within pinyon-juniper woodlands, resulting in suitable and productive habitat for a variety of wildlife species. This standard would continue to be met under both the Proposed Action and the No Action Alternative.

Name of specialist and date: Desa Ausmus, 8/13/09

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There is no habitat for any T&E or BLM sensitive species within the Jack Springs Project area. This standard does not apply.

Name of specialist and date: Desa Ausmus, 8/13/09

PLANT AND ANIMAL COMMUNITY (plant) STANDARD:

Proposed Action: This standard is being met within the West Douglas Mountain and North Zenobia Peak Allotments. The allotments contain healthy, diverse, native plant communities. The present plant communities are vigorous and productive. The Proposed Action would continue to meet this standard as well as increase the diversity and habitat structure of the vegetative community.

The No Action alternative would not increase the diversity or structure of the plant community and would continue to accumulate vegetative litter that could potentially fuel a wildfire. Over time, as the plant community became more dominated by sagebrush, the monoculture would lead to decreased productivity and vigor. Under this alternative the standard would eventually not be met.

Name of specialist and date: Kathy McKinstry, 08/05/09

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened or endangered plant species within or in the vicinity of the proposed project. There is the habitat for and the potential of one or more occurrences of narrow-leaf evening primrose, a BLM sensitive species, in seasonally wet areas

around and below Jack Springs. The planned project area is above and immediately adjacent to Jack Springs. The replacement of old stands of woody species with herbaceous species in the watershed immediately above has the potential to improve habitat for this plant. As long as there are no surface disturbing activities to the spring or supported wet areas below, this standard would be met.

The No Action Alternative would also meet this standard as no impacts to Jack Spring or adjacent areas would occur.

Name of specialist and date: Hunter Seim, 8/4/09

RIPARIAN SYSTEMS STANDARD:

There are no wetlands or riparian systems within the proposed project area. This standard does not apply.

Name of specialist and date: Timothy Novotny, 8/12/09

WATER QUALITY STANDARD:

Proposed Action: The water quality standard is met with selection of either of the alternatives. All stream segments are supporting the classified uses and no stream segments are considered to be impaired. No increase in sediments and nutrients are anticipated that would result in runoff waters from the project area. The project as proposed will enhance the management of this landscape for wildfires and reduce the continuity of fuels. Fire use and fuel management are considered to be Best Management Practices which will help to incrementally reduce the heavy fuel loading in sagebrush and pinyon-juniper woodlands, limiting the scale and intensity of a future unplanned wildfire and subsequent water quality degradation.

The No Action Alternative would also meet this standard as no impacts to Jack Spring or adjacent areas would occur.

Name of specialist and date: Emily Spencer, 8/10/09

UPLAND SOILS STANDARD:

Proposed Action: The upland soils standard is met under either alternative. The soil disturbance that would occur along the fuelbreak would be short-term and somewhat confined. Natural revegetation of the fuelbreak is expected to occur over time if the fuelbreak is not maintained. The forage resource is sufficient to provide the needed cover for upland soils. Upland soils would continue to have diverse plant communities for upland soil health.

The No Action Alternative would also continue to meet the upland soils standard; however, the possibility for a large, stand conversion type fire is greater under this alternative. Wildland fires

would destroy the native vegetation and could allow cheatgrass and other annual weeds to invade. Increased erosion of the upland soil resource would occur in these areas over time as the conversion to plants that are less capable of protecting soils proceeds. Eventually upland soil health could be diminished over large areas within the West Douglas Mountain Allotment and the North Zenobia Peak Allotment.

Name of specialist and date: Kathy McKinstry, 08/05/09

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

ATTACHMENTS: See attached map

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

Finding of No Significant Impact

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

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.

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

Jack Springs Hazardous Fuels Reduction Project

T6NR102W Sections: 10, 11, 14 & 15

Prescribed Fire: 241 acres
Mechanical Treatment: 21 acres

