

**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-N010-2010-0056-EA

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

**PROJECT NAME:** Dobbins Hazardous Fuels Reduction Project

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

T5N R99W Sections 15, 16, 21 & 22

**APPLICANT:** BLM

**PLAN CONFORMANCE REVIEW:** The proposed action is subject to the following plan:

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

**Date(s) Approved:** April 26, 1989

**Results:** The treatment area falls within Management Unit 3: Little Snake River, identified in the Little Snake Resource Management Plan and Record of Decision. The management objectives for this unit are to improve soil and watershed values, increase forage production and enhance livestock grazing. The development of other resource uses/values within this unit is allowed consistent with the management objectives for livestock grazing, forage production, soil and watershed resource objectives. 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 D1 polygon, West Little Snake & Disappointment. The vegetation description, as identified in the Fire Management Plan, of this polygon is described as supporting a mix of pinyon-juniper, sagebrush, and mountain shrub. The desire is to create a mosaic of vegetative age classes. The resource management objective of the Fire Management Plan for this fire polygon is to encourage fire to promote mosaic age classes in all plant communities.

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

The Proposed Action implements actions recommended in the National Fire Plan and the Little Snake Fire Management Plan. It is also consistent with the draft Moffat County Fire

Management Plan.

**NEED FOR PROPOSED ACTION:** Need for Proposed Action: In accordance with the National Fire Plan of 2000, public 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 (March 2000), identifies areas where fuels reduction treatments are desired and needed. Inherent to complying with these plans is the need to reduce fuels to help protect life, property, and natural resources. Reducing hazardous fuel loading would reduce fire behavior intensity and the range of environmental conditions under which fire can actively spread. This would allow fire suppression forces to be more effective and provide a safer fire environment to work in.

The primary objective for this project is hazardous fuels reduction, but wildlife habitat, range improvement, and general ecosystem restoration would also benefit.

**PUBLIC SCOPING PROCESS:** The project is listed on the NEPA log on the Little Snake Field Office website: [http://www.blm.gov/co/st/en/BLM\\_Information/nepa/lso.html](http://www.blm.gov/co/st/en/BLM_Information/nepa/lso.html)

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

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

**CHEMICAL TREATMENT ALTERNATIVE:** Using herbicides to kill woody vegetation was considered as a treatment option but dropped from further analysis because of the high volume of woody material left after treatment. Chemical treatment would not fully achieve hazardous fuels reduction objectives and visual resources would be impacted.

**PROPOSED ACTION:**

**Description of Proposed Action:** It is proposed to treat approximately 125 acres of pinyon/juniper for hazardous fuel reduction purposes. This is an area of young to middle aged pinyon and juniper trees intermixed with sagebrush and is in an area of relatively high fire occurrence. 90% to 100% of the area would be treated and in an irregular shape that imitates a wildland fire (see map).

The primary treatment would be mechanical mulching followed up by prescribed burning. Prescribed burning would further reduce fuel loading by removing the tree mulch scattered over the area after mechanical treatment. Burning would only be done if the threat of weed infestation is low or if the determination is made to seed the burned area. An interdisciplinary team will make the determination to burn or burn and seed following mechanical treatment. Following is a description of the treatment methods:

**Mechanical Treatment:**

This involves the reduction of whole trees to mulch and small limbs with a large rubber tired tractor (similar to a skidder) or a smaller tracked skidsteer powering a 6' – 8' mulching head. Most trees are young to moderate aged (approx. 50 – 120 years old) and would be ground down

to a height of 6 inches or less. Utilization of biomass would be offered to mechanical operator as a part of the contracting process. Biomass operator will be required to operate under the same stipulations as mechanical operator. Sagebrush would also be mulched to a height of approximately three inches. This effectively kills all sagebrush except very small or young plants. All operations would not be allowed in muddy conditions when ruts greater than three inches deep are being left by the machine, or from May 15 to July 15 due to migratory birds unless specifically inventoried and cleared by the LSFO wildlife staff.

#### Prescribed Fire:

Broadcast prescribed burning may be implemented 2 months to several years following mechanical treatment. This would likely occur in the spring or fall. The primary objective of burning is to reduce the residual tree mulch which inhibits plant establishment and growth. Activities associated with prescribed burning would likely include off road vehicle use and fire line construction. No fire line will be constructed until cleared by the LSFO cultural resources staff. No burning will be allowed from May 15 to July 15 due to migratory birds unless specifically inventoried and cleared by the LSFO wildlife staff. The project area will be required to undergo rest from livestock grazing for a minimum of two growing seasons post fire and/or seeding.

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 describe exactly how and under what conditions prescribed burning will 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 and other stipulations under which burning may occur.

#### Seeding:

If it is deemed necessary to seed the project area after burning, native species appropriate to the area will be utilized. Seed will be applied aurally or from ATV mounted spreaders. The likely application rate is 10 to 12 PLS lbs./acre. All seed utilized must be certified noxious-weed free.

**STANDARD OPERATING PROCEDURES:** The following procedures must be implemented in order achieve resource objectives of the proposed action.

#### CULTURAL RESOURCES:

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.

**PALEONTOLOGY:** This impact is usually effectively mitigated by ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed. The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils.

## **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 two Class 1 (visibility) areas located in Northwest Colorado. These are the Mt. Zirkel Wilderness 90 miles to the east and the Flat Tops Wilderness 75 miles to the southeast.

Environmental Consequences, Proposed Action: Prescribed and wildland fires can contribute substantial emissions of air quality pollutants including particulate matter, volatile organic compounds, and carbon monoxide. However, prescribed fires are typically smaller than uncontrolled wildfires occurring during peak burning conditions. Prescribed fires involve less combustion, and therefore 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 promote air pollutant dispersion.

Landscapes treated with prescribed fire and other 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 1 areas, or if they do would be of a much shorter duration.

The proposed prescribed fire will be conducted in accordance with existing laws that protect air quality. Specifically, all fire activities must comply with the applicable air quality regulations required by FLPMA and the Clean Air Act.

Mechanical treatments 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 two Class 1 areas.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 03/01/10

#### **AREA OF CRITICAL ENVIRONMENTAL CONCERN**

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 03/03/10

#### **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, Proposed Action: The proposed project, Dobbins hazardous fuels reduction project, has not undergone a Class III cultural resource survey. The project area will be flagged and a Class III survey will occur prior to the project beginning. Once the area is surveyed, the Northwest Colorado Fire Management Unit 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.

Environmental Consequences, No Action Alternative: There would be no project-related impacts to cultural resources.

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.

Name of specialist and date: Robyn Watkins Morris, 03/15/10

## **ENVIRONMENTAL JUSTICE**

Affected Environment: The proposed action is located in an area of isolated dwellings. Ranching and hunting are the primary economic activities.

Environmental Consequences: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of the proposed action. The proposed action would not 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, 03/03/2010

## **FLOOD PLAINS**

Affected Environment: There are no floodplain areas within the proposed project location.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 03/01/10

## **INVASIVE, NONNATIVE SPECIES**

Affected Environment: The project area is susceptible to the introduction and establishment of noxious and invasive weeds. Downy brome (cheatgrass), yellow alyssum, and other annual weeds are common along roadsides and in other disturbed areas. These are annual invasive species 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 white top, 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 relatively low. The mechanical methods as proposed would cause little long term disturbance to the herbaceous plant community. Removing the tree 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. Additional measures such as the potential re-seeding could be used to mitigate any infestations that may occur.

The threat cheatgrass infestation following prescribed fire is likely. 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, such as a prescribed burn, the threat of weed infestation would 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. The increasing threat of intense large fires would still exist. 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.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 03/08/10

## **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 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 pinyon-juniper woodlands with some scattered sagebrush. Two pinyon-juniper obligate species listed on USFWS's Bird of Conservation Concern (BCC) 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 (May 15 – July 15), 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 125 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 90 - 100 % of the target area treated. The prescribed burn is located in a pinyon-juniper stand and other 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: Gail Martinez, 03/01/10

### **NATIVE AMERICAN RELIGIOUS CONCERNS**

A letter was sent to the Eastern Shoshone, Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 26, 2009. The letter listed the FY2010 projects that the BLM would notify them on and projects that would not require notification. A follow-up phone call was performed on July 26, 2009. 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, 10/20/09

### **PRIME & UNIQUE FARMLANDS**

Affected Environment: No Prime and/or Unique Farmlands are present within the proposed project area.

Environmental Consequences: None

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 03/01/10

### **T&E SPECIES - SENSITIVE PLANTS**

Affected Environment: There are no BLM sensitive plants within or in the vicinity of the proposed project.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim, 03/05/10

### **T&E SPECIES – ANIMALS**

Affected Environment: No threatened or endangered animal species or suitable habitat is known to exist in the project area.

Environmental Consequences: None

Mitigation Measures: None

Name of specialist and date: Gail Martinez, 03/01/10

### **T&E SPECIES – PLANTS**

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of the proposed project.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim, 03/05/10

### **WASTES, HAZARDOUS OR SOLID**

Affected Environment: The area proposed for mechanical treatment and prescribed fire is in a remote area that has little influence from human activity. Currently, there are no hazardous materials present within or in the vicinity of the proposed project area.

Environmental Consequences, Proposed Action: Heavy equipment, pickup trucks, ATVs, and other support vehicles would be present during project activities. Fuel, oil, and coolant are potential hazardous materials that could be introduced to the project vicinity. 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. 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.

Environmental Consequences, No Action Alternative: There would be no impact under the No Action Alternative as no project activities would occur.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 03/01/10

### **WATER QUALITY - GROUND**

Affected Environment: There is no indication of water wells in the area affected by the Proposed Action.

Environmental Consequences, Proposed Action: None.

Mitigative Measures: None

Name of specialist and date: Marty O'Mara, 03/04/10

## **WATER QUALITY – SURFACE**

**Affected Environment:** The proposed project area is located on a gently sloping plateau northwest of Elk Springs where any surface runoff water would flow north in ephemeral tributaries, with the potential (in extreme runoff events) of reaching the mainstem of the Yampa River over four miles away. Water quality of the Yampa River in this area needs to support Aquatic Life Warm 1, Recreation E, Water Supply, and Agriculture. As of 2008, the Yampa River segment in this area (from Lay Creek to Green River) is on the Colorado Department of Public Health and Environment's (CDPHE) Section 303(d) list of Water Quality Limited Segments because of a high priority iron impairment (CDPHE 2008). This segment is also on CDPHE's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load (CDPHE 2008).

**Environmental Consequences, Proposed Action:** The proposed action may have some short term effects to the water quality of ephemeral streams in the project area during times of runoff. These effects would be from the prescribed burning treatment and would result from accelerated soil erosion. 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. Although increased sediment may enter these ephemeral tributaries, an unknown and varying amount of this sediment would be deposited and stabilized further downstream. Stabilized sediments could have beneficial effects to the function of these ephemeral streams and reduce the amount of sediment transport to active or perennial floodplains downstream. The prescribed burn would be ignited under prescribed (or favorable) conditions and would be expected to be of varying intensities in order to create a mosaic burn pattern. This is expected to keep sediment and nutrient yields from increasing to levels that would further degrade existing water quality. The effects of the proposed action would be short lived and not out of the natural variability of the area.

Minimal surface disturbance would occur with the proposed mechanical treatments. 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 and an expected increase in plant diversity and ground cover, resulting from the planned seeding treatment.

**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 and it would be derived from a larger area of the landscape.

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2008. Regulations #33, 37, 93 and 94. <http://www.cdphe.state.co.us/regulations/wqccregs/index.html>

Name of specialist and date: Emily Spencer, 03/01/10

## **WETLANDS/RIPARIAN ZONES**

Affected Environment: No riparian or wetland areas are known to be present on public lands within the treatment area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 03/01/10

## **WILD & SCENIC RIVERS**

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 03/03/10

## **WSAs, WILDERNESS CHARACTERISTICS**

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 03/03/10

## **NON-CRITICAL ELEMENTS**

### **SOILS**

Affected Environment: The table below (Table 1) describes the major soil groups included within the BLM portion of the proposed project area. Surface soil characteristics are relatively stable with adequate vegetative communities that help deter accelerated erosion. Overall in the watershed, there is some evidence of plant pedestalling, suspected to be caused by wind and/or water erosion. Soil compaction is not a problem. Biological soil communities were in place where expected. The main risk to these soils is erosion unless close-growing plant cover is maintained.

**Table 1: Soil Summary for BLM portion of the Dobbins Hazardous Fuels Reduction Project**

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
MU 50  Cushool fine sandy loam, 3 to 12% slopes  106 acres	<u>Elevation:</u> 6,000' – 6,800'  <u>Mean annual precipitation:</u> 11-13"  <u>Ecological Site:</u> Rolling Loam	These mountainside slope soils are well drained with moderate permeability and medium runoff potential. Available water capacity is low and the soil profile is typically 29 inches deep. This soil has limitations that restrict the choice of plants or that require very careful management, or both.
MU 111  Kemmerer-Grapt complex, 15 to 65% slopes  15 acres	<u>Elevation:</u> 6,200' – 7,000'  <u>Mean annual precipitation:</u> 16-20"  <u>Ecological Site:</u> <i>Juniperus osteosperma-Pinus edulis/Pleuraphis jamesii</i>	These hillslope soils are well drained with very slow to moderate permeability and high to very high runoff potential. Available water capacity is low and the soil profile is typically 31-60 inches deep. These soils are suitable for grazing, forestland, or wildlife habitat.

Data taken from *Soil Survey of Moffat County Area, Colorado (2004)*.

Environmental Consequences, Proposed Action: 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 (as planned) 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 and promote close-growing, herbaceous plant cover include burning when the soils are moist; limit new fireline construction to slopes of less than 40%; 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, natural firebreaks and precipitation barriers.

Although the prescribed fire treatment is likely to increase soil erosion from the project area in the short term it is considered to be at an acceptable level compared to soil erosion that would inevitably occur with a large intensely burning wildfire. The fuels reduction treatments would allow fire to be reintroduced into the pinõn/juniper forests and improve the capability for wildland fires to be managed for fire use or additional use of prescribed fire to maintain the appropriate understory vegetation conditions.

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, an identified hazard in this soil type. However, if cover limits are maintained and fuel break construction and maintenance

methods that leave an understory canopy and minimize bare ground are used, these effects would be reduced. Effects would also be reduced if the treatment is only performed on dry ground, thereby decreasing ruts and new overland flow patterns.

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.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 03/01/10

## **FORESTRY**

Affected Environment: The area is predominately young to middle aged pinyon and juniper woodland. This is not an important area for wood products due to the remote location, although some isolated firewood cutting does occur.

Environmental Consequences, Proposed Action: The proposed action would involve the removal of 90% - 100% of the trees over the 125 acre project area. The resulting mulch produced from tree mastication would have an inhibiting affect on seedling establishment until partially decomposed.

Environmental Consequences, No Action Alternative: None.

Mitigative Measures: None.

Name of specialist and date: Gail E. Martinez, 03/01/10

## **RANGE MANAGEMENT**

Affected Environment: The project area under the proposed action lies within the administrative boundaries of the Disappointment Grazing Allotment #04400. This allotment is comprised of 22,369 acres BLM land, 407 acres of Dinosaur National Monument land, 8,310 private land, and 1,240 State Land Board land, for a total of 32,326 acres. There are two pastures (east & west) in this allotment with the majority of the acreage in the western pasture. The project area is in the SW portion of the allotment. This allotment is authorized for the following livestock grazing:

1435 Sheep from 03/01 to 05/30 @ 93% Public Land for 799 Animal Unit Months (AUMs)  
6 Cattle from 04/01 to 05/31 @ 94% Public Land for 11 AUMs  
1435 Sheep from 12/01 to 02/28 @ 93 Public Land for 790 AUMs  
5 Cattle from 11/01 to 12/31 @ 93% Public Land for 9 AUMs

Environmental Consequences, Proposed Action: As per BLM policy any areas burned by either

wildfire or Rx fire must be rested from livestock grazing for a minimum of two growing seasons to promote vegetation reestablishment. Any Rx fire associated with this project must be coordinated with the grazing permit holder to assure that this mandatory rest is provided for and feasible. This coordination must be completed prior to any burn plans being implemented. The entire allotment does not need to be rested, just the burned or treated area. Due to the size of this allotment, rest would be able to be accomplished by herding sheep and cattle away from the burned area. If this is not possible temporary fencing must be used. Because of allotment size, seasons of use, and livestock class (primarily sheep), resting the burned area should have negligible effects to the grazing permit holder.

Environmental Consequences, No Action: No effect.

Name of specialist and date: Mark Lowrey, 03/12/10

## **VEGETATION**

Affected Environment: Although this area is unnaturally encroached with pinyon/juniper there is still a good component of native vegetation that would be expected for this site which includes, but is not limited to, western wheatgrass, needleandthread, Nevada bluegrass, and Indian ricegrass, prairie junegrass and bottlebrush squirreltail. Wyoming big sagebrush and rabbitbrush are the main shrubs. Cheatgrass is present in the project area but not degrading native vegetation.

Environmental Consequences, Proposed Action: The proposed action would be beneficial to vegetation resources by reintroducing a controlled disturbance into an ecosystem where disturbance is natural and necessary for sustainability. The mechanical, Rx fire, and seeding operations/options provide the necessary flexibility and toolset to ensure positive long-term results within the vegetative community.

Environmental Consequences, No Action Alternative: No treatment would allow pinyon/juniper to continue encroachment, further reducing understory native vegetation and diversity. In the event of high intensity wildfire, cheatgrass would become the dominant vegetative component within the project area.

Name of specialist and date: Mark Lowrey, 03/10/10

## **WILDLIFE, AQUATIC**

Affected Environment: No aquatic wildlife habitat is present within project area.

Environmental Consequences: Not Applicable

Name of specialist and date: Gail Martinez, 03/01/10

## WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area provides year round habitat for mule deer, elk 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 125 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.

Environmental Consequences, No Action Alternative: There would be no impacts to terrestrial wildlife or their habitats.

Mitigative Measures: None.

Name of specialist and date: Gail E. Martinez, 03/01/10

**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		EMO 3/4/10	
Forest Management			GEM 03/01/10
Hydrology/Ground		EMO 3/4/10	
Hydrology/Surface		ELS 3/1/10	
Paleontology		EMO 3/4/10	
Range Management			ML 03/10/10
Realty Authorizations	LM 03/03/10		
Recreation/Travel Mgmt		GMR 03/03/10	
Socio-Economics		LM 03/03/10	
Solid Minerals		JAM 03/12/10	
Visual Resources		GMR 03/03/10	
Wild Horse & Burro Mgmt	GEM 3/1/10		

### **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 not add any new or detrimental impacts to those already present.

## **STANDARDS**

An interdisciplinary team of BLM employees and interested publics visited the Sandhills Landscape in the Little Snake Resource Area during four days in June of 2001. A total of 30 sites were visited or described via the site checklist form in the landscape.

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** The Dobbins 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: Gail E. Martinez, 03/01/10

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** There are no known threatened or endangered animals or suitable habitat for such in or near the affected environment. The standard does not apply.

Name of specialist and date: Gail E. Martinez, 03/01/10

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** The 2001 Sandhills Landscape Health Assessment concluded that this standard is being met throughout the entire landscape, one stop on this assessment (site 1) is within the Disappointment grazing allotment #04400 . Site 1 of the Sandhills Landscape Health Assessment is approximately 1 mile from the project area is meeting this standard, site 1 is representative of the project area. Implementation of the proposed action would continue and maintain this standard being met.

Name of specialist and date: Mark Lowrey, 03/11/10

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

Name of specialist and date: Hunter Seim 03/05/10

**RIPARIAN SYSTEMS STANDARD:** There are no riparian systems present within or near the project area. This standard does not apply.

Name of specialist and date: Emily Spencer, 03/01/10

**WATER QUALITY STANDARD:** This standard is met for the project area. There are no perennial surface waters within the project area and any surface runoff would flow north into a system of ephemeral tributaries that eventually reach the mainstem of the Yampa River over four miles away from the project area. While there are no impaired water bodies within the project area, the reach of the Yampa River downslope of the project is identified as having an iron impairment and is on the monitoring list for a suspected sediment issue of unknown origin. The

project as planned is not expected to exacerbate any existing water quality issues of the Yampa River in this area.

Name of specialist and date: Emily Spencer, 03/01/10

**UPLAND SOILS STANDARD:** The 2001 landscape health assessment concluded that this standard is being met in Calico Draw near the proposed project area. The project may cause some short term soil instability on the area targeted for prescribed burning but burn and seeding plans as proposed are expected to encourage/facilitate ground cover growth that will reduce erosion over the long term. This standard would continue to be met with project implementation.

Name of specialist and date: Emily Spencer, 03/01/10

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

**ATTACHMENTS:** Map of project area illustrating area to receive prescribed fire treatment.

**SIGNATURE OF PREPARER:**

**DATE SIGNED:**

**SIGNATURE OF ENVIRONMENTAL REVIEWER:**

**DATE SIGNED:**

## **FONSI**

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:**



# Dobbins Hazardous Fuels Reduction Project

DOI-BLM-CO-N010-2010-0056

T5NR99W Sections 15, 16, 21 & 22

125 acres mechanical & prescribed fire

