

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-N010-0118

PROJECT NAME: Peck Mesa Hydro-axe

LEGAL DESCRIPTION: T7N R97W Sections 17-21

APPLICANT: BLM and Colorado Division of Wildlife (CDOW)

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

Results: pg 25. The proposed project is within Management Unit 3: Little Snake River. Management Objectives for Unit 3 are to improve soil and watershed values, increase forage production and enhance livestock grazing. The project would be compatible with these objectives.

NEED FOR PROPOSED ACTION: Several land health assessments in greater sage-grouse habitat have identified encroaching pinyon/juniper as the primary factor for not meeting land health standards. Sage-grouse often avoid areas with tree encroachment due to the increased threat of predation. Trees provide perches for raptor species that prey on sage-grouse and can provide hiding cover for mammalian predators. In addition, if not mechanically treated or allowed to burn, pinyon and juniper trees continue to encroach and dominate sagebrush sites. Over time, sagebrush habitats can be completely converted to pinyon-juniper woodlands which are not conducive to the habitat needs of sage-grouse. In many sagebrush stands, the sagebrush is in good condition with a healthy understory of grasses and forbs and invading trees are the only factor making the habitat unusable for grouse. Removing the encroaching pinyon/juniper trees will set back succession and enhance sage-grouse habitat.

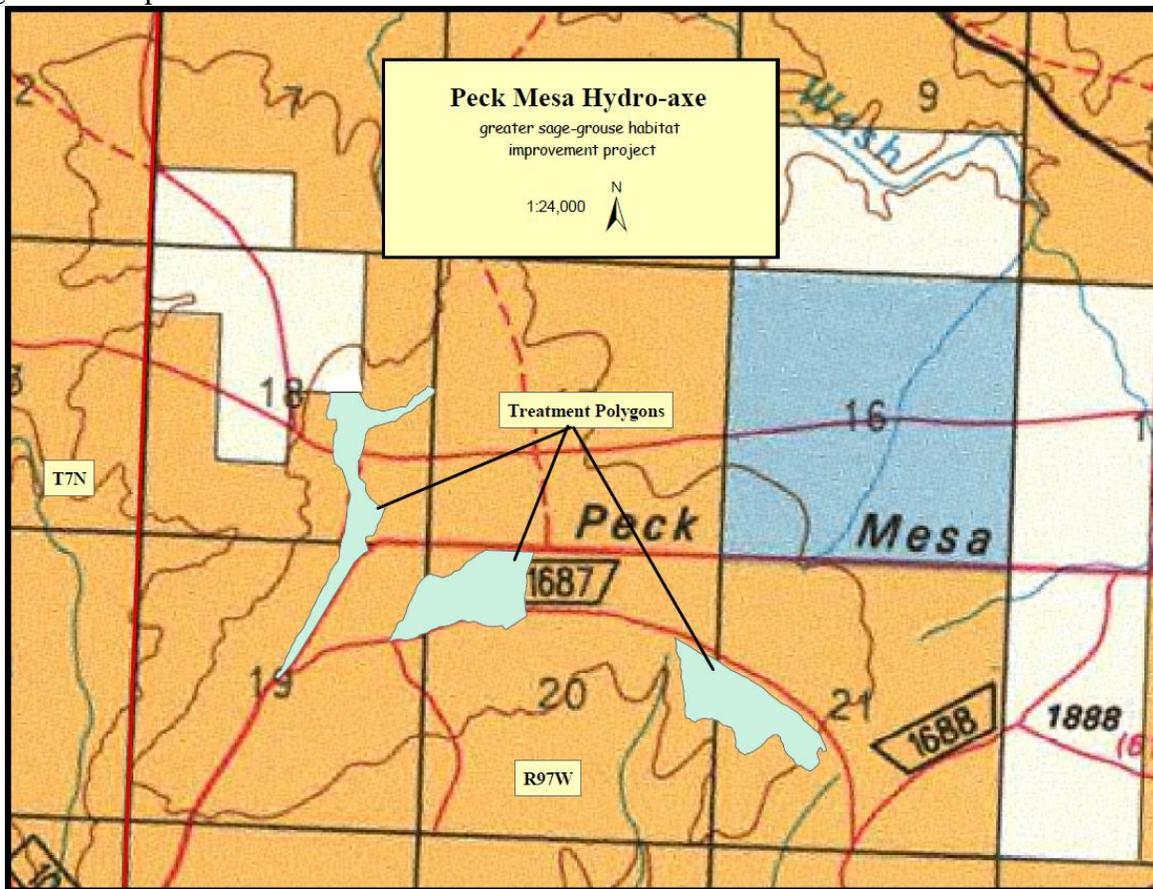
PUBLIC SCOPING PROCESS: The action in this EA is included in the NEPA log posted on the LSFO web site: http://www.blm.gov/co/st/en/BLM_Information/nepa/lisfo.html.

BACKGROUND: Sage-grouse populations have declined markedly across much of their historic range over the past 50 years. Habitat conditions have been identified as part of the problem contributing to population declines. Due to the population declines, the US Fish and Wildlife Service has received several petitions to list the greater sage-grouse under the Endangered Species Act through-out its range. In March of 2010, the USFWS found that greater sage-grouse were ‘warranted but precluded’ for federal protection at this time. Greater sage-grouse are now a Candidate for ESA listing. Sage-grouse conservation remains a high priority for BLM, as approximately half of the remaining sage-grouse habitat is under BLM management. The proposed action would improve and maintain habitats important for sage-grouse.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

The project area covers approximately 175 acres of greater sage-grouse habitat in the Peck Mesa area. The Proposed Action is to improve sage-grouse habitat by removing encroaching pinyon and juniper trees from sagebrush stands. Tree size within the project area varies, but most encroaching trees are generally small (up to 10 feet tall and 1-6 inches in diameter). The objective is to target/remove all trees within the project area regardless of size. No sagebrush would be treated.

Figure 1 – Map of treatment area



Trees would be removed via heavy equipment. Types of heavy equipment would most likely be a hydro-axe or boom mounted drum style brush cutter (see description below). Hydro-axing would be conducted in the summer or fall of 2010. Work would be conducted during daylight hours and duration is expected to be no more than 15 days barring unforeseen problems (weather, equipment, etc.).

Mechanical Thinning:

A variety of equipment options are available but the most commonly used in this vegetation and terrain are the hydro-axe mower type device and drum style brush cutters. The hydro-axe machines are essentially a medium to large size tractor with a 6' - 8' hydraulic powered mowing head, similar to a lawn mower, attached to a maneuverable platform on the front, or a track hoe mounted mower head on the extension boom. The machine is capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This treatment creates minimal surface disturbance, however flying debris from this equipment can be thrown several hundred feet away.

The drum style brush cutter mounts to the boom of an excavator (tracked vehicle similar but larger than a back-hoe) or a rubber tired tractor, and are usually 3' to 8' wide. The hydraulic powered drum turns on a horizontal shaft and the cutting teeth mounted along the length of the drum cut and shred the vegetation. Unlike the hydro-axe, the drum cutters can be used to cut sub-surface material where stumps and roots are to be removed, however this can cause significant soil disturbance. Certain styles are capable of shredding trees in excess of 5' in diameter and height is restricted to the height of the boom, typically 20-40' high. Debris is scattered near the device as it shreds, however material is typically not thrown as far as when using a hydro-axe mower.

Regardless of which specific device is used, the treatment would be designed to target only pinyon pine and juniper trees, leaving shrubs, grasses and forbs relatively undisturbed, thus protecting the soil from erosion. **Any type of mulching head used for this project would be required to be mounted on a rubber-tired tractor. The use of rubber tired equipment would be required in order to minimize impacts to soils, vegetation, and possible cultural resources.** To protect soil and water quality, operations would not be allowed in muddy conditions. Heavy equipment thinning is relatively expensive compared to burning and hand thinning, but is much more precise than burning. Heavy equipment is especially good where dense stands of pinyon and/or juniper trees have encroached on sagebrush parks, large expanses of brush such as oak or sagebrush, along existing roads or trails.



Photo of hydro-axe/fecon flail removing trees from a sagebrush stand.

Project activities would only be permitted from July 16 through December 1st. This would protect nesting sage-grouse, nesting migratory birds and winter big game species.

The following stipulations apply for this project:

Archeology:

1. Two Eligible or Needs Data (5MF7083 and 5MF7080.1) to determine eligibility to the National Register of Historic Places cultural properties were identified within the proposed action area. The two sites 5MF7083 and 5MF7080.1 must be avoided by a 100m buffer.

2. 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.

3. 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.

Paleontology: Ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities will effectively mitigate the potential impact to Paleontological resources. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

NO ACTION ALTERNATIVE: The habitat improvement project would not occur under the No Action Alternative.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

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

Environmental Consequences, Proposed Action: Mechanical treatments proposed would not affect air quality other than localized short term dust production.

Environmental Consequences, No Action: The direct environmental consequences associated with mechanical fuel treatments would be absent in the no action alternative.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/3/10

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 8/2/10

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: The proposed project, Peck Mesa Hydro-Ax Project, has undergone a Class III cultural resource survey:

Slaughter, Stephanie

2010 Colorado Division of Wildlife: A Class III Cultural Resource Inventory of Three Parcels for Wildlife Habitat Enhancement on Peck Mesa in Moffat County, Colorado (BLM 54.6.2010)

Two Eligible or Needs Data (5MF7083 and 5MF7080.1) to determine eligibility to the National Register of Historic Places cultural properties were identified.

The proposed project may proceed as described with the mitigative measures listed in the proposed action.

Mitigative Measures: Mitigation measures were incorporated into the proposed action.

Name of specialist and date: Robyn Watkins Morris, 8/4/10

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Recreation 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, 8/3/10

FLOOD PLAINS

Affected Environment: There are no 100-year floodplains present on public lands within the proposed project area.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/3/10

Source: USDA-NRCS Soil Data Viewer version 5.2.0016: <http://soildataviewer.nrcs.usda.gov/>

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in project area. Invasive annuals such as cheatgrass, halogeton and yellow allysum commonly occur. Additional invasive species of concern in the vicinity include white top, Canada thistle, knapweeds and other biennial thistles. These species are on the Colorado list B of noxious weeds. Cheatgrass is on the Colorado List C of noxious weeds. The BLM cooperates with the Moffat County Pest Management program to employ the principals of Integrated Pest Management to control noxious weeds on public lands.

Environmental Consequences, Proposed Action: The mechanical method 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 of the vegetative community in the long term. Adequate desirable vegetation exists in the understory which would provide competition to prevent weed invasions as well as maintain a desirable plant community.

Environmental Consequences, No Action Alternative: No new opportunities for weed establishment would occur under this alternative.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 7/29/10

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) Birds of Conservation Concern (BCC) list occupy these habitats within the LSFO.

Specific to the project area, native plant communities are comprised of sagebrush and grass with scattered pinyon and juniper trees. Sagebrush species occurring on the BCC list that may utilize sagebrush in the project area are sage sparrow, sage thrasher and Brewer's sparrow (also a BLM sensitive species). Old-growth pinyon-juniper woodlands occur adjacent to the project area. Two pinyon-juniper obligate species listed on the BCC List, the pinyon jay and juniper titmouse may nest in the general project area.

No raptor nests are located within the treatment polygon. There is one golden eagle nest located approximately one mile north of the treatment. Golden eagles likely forage in the Peck Mesa area.

Environmental Consequences, Proposed Action: Since project activities would not be permitted during the nesting period (May 15 – July 15), there would be little chance of take from the mechanical treatment. Individual birds would likely be displaced from the area during project implementation due to noise and an increase in human presence. This disturbance would be minimal and short in duration.

The removal of encroaching pinyon-juniper trees would result in long-term benefits to sagebrush dependent bird species. Tree removal will help to ensure the maintenance of contiguous blocks of sagebrush habitat. The removal of pinyon-juniper trees could have some negative impacts to pinyon-juniper obligate species. However, targeted trees are generally small and scattered and are within otherwise predominant sagebrush habitats. Old growth pinyon-juniper woodlands exist adjacent to the treatment area and provide more suitable habitat for these species.

Raptor species should not be affected as an abundance of upland foraging habitat exists in the general area. Some suitable perch trees would be eliminated, but this should have no impact to raptors in the area as an abundance of pinyon-juniper is found in the area to the west.

Environmental Consequences, No Action Alternative: There would be no disturbance impacts to migratory birds from this alternative. If the treatment does not occur, pinyon and juniper trees will continue to encroach into sagebrush stands in the Peck Mesa area. This will favor migratory birds that utilize pinyon and juniper habitats.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus, 8/17/10

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 followup 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, 8/4/10

PRIME & UNIQUE FARMLANDS

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

Environmental Consequences, both alternatives: None

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 8/3/10

Source: USDA-NRCS Soil Data Viewer version 5.2.0016: <http://soildataviewer.nrcs.usda.gov/>

T&E AND SENSITIVE ANIMAL SPECIES

Affected Environment: There are no federally listed or proposed species that inhabit or derive important benefit from habitats within the project area. The Proposed Action area provides habitat for greater sage-grouse, a BLM sensitive species and a candidate for federal listing under the Endangered Species Act. There are five active leks within a three mile radius of the proposed treatments. Sage-grouse utilize the Peck Mesa area for nesting and winter habitat.

Environmental Consequences, Proposed Action: The removal of encroaching pinyon-juniper trees from sagebrush parks will maintain habitats for sagebrush dependant species. This would improve habitats for greater sage-grouse. Encroachment of trees may be limiting grouse use of the treatment area. 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. Overall, the project would improve habitat for grouse and would likely increase use of habitat within the area.

Environmental Consequences, No Action: There would be no disturbance impacts to greater sage-grouse from this alternative. If the treatment does not occur, pinyon and juniper trees will continue to encroach into sagebrush stands in the Peck Mesa area. Greater sage-grouse will likely decrease use of the Peck Mesa area as sagebrush habitats are converted to pinyon-juniper woodlands.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 8/17/10

T&E AND SENSITIVE PLANTS

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

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim, 7/30/10

WASTES, HAZARDOUS OR SOLID

Affected Environment: The proposed habitat improvement project 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: Desa Ausmus 8/24/10

WATER QUALITY – GROUND

Affected Environment: Two water wells are located within the proposed project area, one in section 17 and one in section 19. Water level depths exceed 50 feet.

Environmental Consequences, Proposed Action: The proposed action would not impact ground water quality.

Environmental Consequences, No Action: There would be no effect on water quality. The conditions would stay the same.

Mitigative Measures: None

Name of specialist and date: Marty O'Mara, 8/6/10

WATER QUALITY – SURFACE

Affected Environment: Any surface runoff from the proposed project area would flow into ephemeral tributaries to the Little Snake River. Water quality for all tributaries of the Little Snake River (below its confluence with Fourmile Creek to its confluence with the Yampa River) are use protected and must support Aquatic Life Warm 2, Recreation N, and Agricultural beneficial uses. There are no water quality impairments or suspected water quality issues for waters influenced by the proposed project.

Environmental Consequences, Proposed Action: Minimal surface disturbance would occur and little to no effect to water quality would result from implementing the proposed mechanical fuel reduction treatments.

Environmental Consequences, No Action: The project would not be implemented. There would be no effect to water quality.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/3/10

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

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no naturally occurring lotic or lentic riparian systems identified in or near the proposed project areas. One developed (but dry) well (#070-18) occurs within a proposed hydro-axe area along BLM Road 1687 (T7N R97W Section 20), but it is not

considered a riparian area.

Environmental Consequences, Both Actions: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/3/10

WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 8/2/10

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Gina Robison, 8/2/10

NON-CRITICAL ELEMENTS

FORESTRY

Affected Environment: The project area contains scattered individual Utah juniper and pinyon trees. With a few exceptions, these trees are relatively young (<100 years) and small in size. Presently there is little to no commercial value associated with these trees.

Environmental Consequences, Proposed Action: Removing trees within the project area would halt the steady encroachment of pinyon and juniper that has been occurring since the last disturbance. The site is not considered a woodland site; therefore it is appropriate to remove these trees in the absence of some other natural disturbance.

Environmental Consequences, No Action: Pinyon/juniper encroachment into the sagebrush/grass community will slowly continue in the absence of disturbance. Eventually the trees will become dense enough to reduce brush, grass, and forb productivity and diversity.

Mitigation Measures: None

Name of specialist and date: Desa Ausmus, 8/17/10

PALEONTOLOGY

Affected Environment: The geologic formation at the surface is the Tertiary age Browns Park Formation (Tbp). This formation has been classified a Class Ia formation for the potential for occurrence of scientifically significant fossils.

Environmental Consequences: Scientifically significant fossils are found abundantly within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils within this formation is considered to be high; however, potential for discovery of fossils through a surface survey on this location is considered low because of the specific facies of the Browns Park Formation. Potential for buried fossils is considered moderate to low. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. The proposed action could also constitute a beneficial impact to Paleontological resources by increasing the chances for discovery of scientifically significant fossils.

Mitigative Measures: These measures have been incorporated into the Proposed Action.

Name of specialist and date: Marty O'Mara, 8/6/10

References: Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

RANGE MANAGEMENT

Affected Environment: The Proposed Action falls within two grazing allotments. South of CR 10 the Grounds Allotment #04222 authorizes cattle grazing from 4/20 – 10/15 in a pasture rotation system. North of CR 10 the Sand Wash Allotment #4219 authorizes sheep and cattle grazing for winter and spring use.

Environmental Consequences, Proposed Action: The area would not be closed to livestock grazing after the implementation of the Proposed Action. There would be no impacts to the livestock operation or the grazing permits. The thinning of encroaching juniper trees would likely result in a flush of native grasses in the understory which would draw cattle to the area in higher

numbers.

In the long term, the proposed treatment would provide a benefit to livestock management. Opening up closed stands of juniper communities would increase grasses and forbs that are important to livestock. This treatment would increase the density and vigor of key livestock forage species such as western wheatgrass, needle and thread and Indian rice grass, improving the nutritive quality and availability of these species to cattle.

Environment Consequences, No Action Alternative: Increasing juniper replacement of sagebrush communities would reduce key forage grasses and important forbs and reduce the overall grazing capacity of the allotment. Additionally, as diversity declines (a factor of climax conditions in sagebrush and pinyon-juniper communities), this area would become less resilient to impacts from livestock grazing and more susceptible to invasion by exotic annual species such as cheatgrass when inevitable wildfires do occur.

Mitigative Measures: None.

Name of specialist and date: Christina Rhyne, 8/9/10

SOILS

Affected Environment: The table below (Table 1) describes the major soil group within the project area. Surface soil characteristics are relatively stable with adequate herbaceous and shrub cover to protect from accelerated erosion. There is no evidence of accelerated erosion in the form of rills and gullies, though some pedestalling and compaction has been observed. Biological soil crusts are present under shrubs and trees. The main hazard for both soil types is erosion unless close-growing plant cover is maintained.

Table 1. Soil Summary for the Peck Mesa Hydro-axe Project

Soil Map Unit (MU) & Soil Name	Map Unit Setting	Description
MU 30 Carmody-Rock River-Crestman complex, 6 to 15% slopes	<i>Elevation:</i> 6,000 – 6,500 feet <i>Mean annual precipitation:</i> 11-13” <i>Ecological Site:</i> Rolling Loam	These plateau and hillslope soils are well to excessively drained with moderate to rapid permeability and medium to very high runoff potential. Available water capacity is moderate to very high and the soil profile can be 18 to 60 inches deep.
MU 90 Grieves-Crestman complex, 10 to 40% slopes	<i>Elevation:</i> 6,000 to 7,200 feet <i>Mean annual precipitation:</i> 11 to 12” <i>Ecological Site:</i> Sandy Foothills and Sandy Juniper	These soils are somewhat excessively to excessively drained with moderately rapid permeability and medium to very high runoff potential. Available water capacity is very low to moderate and the soil profile is typically 18 to 60 inches deep.

Environmental Consequences, Proposed Action: Any mechanical vegetation management activity that causes 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. The hydro-axe has rubber flotation-type tires that cause little disturbance to the surface of the ground and the resulting mulch creates a protective layer for the rubber tire tractor to travel over, thus further reducing surface disturbance and the likelihood of erosion. 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: Under the No Action Alternative, the mechanical fuel reduction project would not be implemented and there would be no further impacts to the soil resource.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 8/12/10

UPLAND VEGETATION

Affected Environment: The range site found within the proposed project area is a rolling loam. Vegetation within the area includes Wyoming big sagebrush, needleandthread, western wheatgrass, bluebunch wheatgrass, bottlebrush squirrel tail, Indian ricegrass, prairie junegrass, and a small portion of forbs.

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

Environmental Consequences, No Action Alternative: Under this alternative, no mechanical treatment would occur within the juniper dominated plant community in the proposed project area. Disturbances, especially fire, could occur at some point and in an uncontrolled manner. Depending upon when such events occur, heavy fuel buildups could lead to hot, extensive burns within the other plant communities resulting in widespread type-conversions within the plant communities.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 8/9/10

AQUATIC WILDLIFE

Affected Environment: No habitat for aquatic wildlife exists in the Proposed Action area.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Desa Ausmus, 8/11/10

TERRESTRIAL WILDLIFE

Affected Environment: A variety of wildlife habitats and their associated species occur in the project area. Common species such as coyotes, cottontail rabbits, chipmunks and wood rats likely use these habitats. Mule deer, pronghorn antelope and elk can be found in or near the proposed treatment year round. The Peck Mesa area is classified as mule deer critical winter range and pronghorn severe winter range by CDOW.

Environmental Consequences, Proposed Action: The removal of pinyon pine and juniper from the sagebrush park should benefit resident wildlife in the long-term, especially sagebrush dependent species that require larger blocks of intact habitat. Big game browse located within important winter ranges will be enhanced as foraging areas are maintained and improved through treatment. Abundant thermal and hiding cover in the form of dense pinyon-juniper woodlands is located adjacent to the project to the west. It is likely that the use of heavy equipment during tree removal will result in some short term disturbance to resident wildlife. Some species will be temporarily displaced from the area to adjacent habitats. Most species would return to the area once the project is complete. The Proposed Action would not allow treatment during the winter months, so mule deer and pronghorn would not be disturbed during this critical time period.

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

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 8/17/10

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 8/6/10		
Forest Management			See Forest Management
Hydrology/Ground			See Water Quality - Ground
Range Management			See Range Management
Realty Authorizations		LM 8/3/10	
Recreation/Travel Mgmt		GMR 8/2/10	
Socio-Economics		LM 8/3/10	
Solid Minerals		JAM 8/2/10	
Visual Resources		GMR 8/2/10	
Wild Horse & Burro Mgmt	DA 8/24/10		

CUMULATIVE IMPACTS SUMMARY: The project area is utilized by people for hunting, camping, antler “hunting” and livestock grazing. BLM lands within the project area are within a travel restricted area. The Proposed Action to remove juniper trees to improve sage-grouse habitat in this area is compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those already present.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Peck Mesa area provides habitat for a variety of mammals, songbirds and reptiles. The Proposed Action would improve habitat for species that utilize sagebrush ecosystems. The Proposed Action would meet this standard.

Name of specialist and date: Desa Ausmus, 8/17/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The Peck Mesa area provides habitat for greater sage-grouse and Brewer’s sparrow. The hydro-axe will maintain sagebrush ecosystems and improve habitat for these two species. The Proposed Action would meet this standard.

Name of specialist and date: Desa Ausmus, 8/17/10

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: This standard is being met within the Peck Mesa project area. The vegetation is healthy and diverse. The Proposed Action would continue to meet this standard as well as increase the productivity 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 juniper, the monoculture would lead to decreased productivity and vigor. Under this alternative the standard would eventually not be met.

Name of specialist and date: Christina Rhyne, 08/20/10

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, 7/30/10

RIPARIAN SYSTEMS STANDARD: RIPARIAN SYSTEMS STANDARD: There are no areas that are managed as natural riparian systems present within the Peck Mesa hydro-axe project area. This standard does not apply.

Name of specialist and date: Emily Spencer, 8/3/10

WATER QUALITY STANDARD: Any surface runoff from the proposed project area would flow into ephemeral tributaries of the Little Snake River. There are no water quality impairments or suspected water quality issues for waters influenced by the proposed project. Minimal surface disturbance would result from the proposed treatment technique, resulting in little to no effect to water quality. Either alternative would meet this standard.

Name of specialist and date: Emily Spencer, 8/3/10

UPLAND SOILS STANDARD: This standard is currently being met. Surface soil characteristics are relatively stable with adequate herbaceous and shrub cover to protect from accelerated erosion. The hydro-axe process creates little surface disturbance or compaction. Either alternative would meet this standard.

Name of specialist and date: Emily Spencer, 8/12/10

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

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: