

**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-N010-2010-0049-EA

PERMIT/LEASE NUMBER: N/A

PROJECT NAME: Long Mountain Prescribed Fire

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

T11N R89W Sections 11, 12, 13 & 14

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 2: Northern Central, identified in the Little Snake Resource Management Plan and Record of Decision. 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 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 B1 polygon, Urban-Interface. The vegetation description, as identified in the Fire Management Plan, of this polygon is described as supporting isolated stands of sagebrush, mountain shrub, aspen and rangeland. The resource management objective of the Fire Management Plan for this fire polygon is to protect big game severe winter range, sage grouse habitat, and potential lynx habitat. In this polygon, fire is desired for habitat improvement and it is recognized as a priority area for hazardous fuels treatments to reduce the risk of urban-interface fires.

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: 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 will reduce fire behavior intensity and the range of environmental conditions under which fire can actively spread. This will 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 will 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

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:

It is proposed to implement a prescribed burn approximately 722 acres (250 acres private and 472 BLM) on the southwestern side of Long Mountain in northeastern Moffat County. Vegetation is predominately sagebrush with a small component of oakbrush and serviceberry. Total acreage consumed by fire would be limited to 40 – 70% (289 – 505 acres) of the targeted area to create mosaic and edge effects for improved wildlife habitat. This would effectively kill sagebrush, stimulate mountain shrub resprouting, and increase grass and forb production.

Burning would be implemented in the springtime before vegetation is greening up but when there is still some snow or moist conditions on northerly aspects. These conditions would limit fire spread to the prescribed area. Additional burning may be done in the fall if spring burning provided sufficient burned area to contain additional burning to the interior of the target area. All prescribed fire activities will be conducted by the Northwest Colorado Fire Management Unit and is referred to as “operator” in this document. Hand-line construction is not planned for the project, but may need to be utilized in the event of an emergency during burn operations.

Prior to burning, a prescribed fire smoke permit will be obtained from the Colorado Air Pollution Control Division. This permit specifies the atmospheric conditions under which burning is

allowed.

1. Operations will not be allowed from May 15 to July 15 due to migratory birds.
3. Operations will not be allowed from Oct. 1 – Oct.11 to accommodate hunting season.
4. Operations may not begin until the final cultural report is completed.

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 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: 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, 02/09/10

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Kimberly Miller, 02/09/10

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, Long Mountain prescribed fire, 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, 10/20/09

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Oil & gas, 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, 02/09/10

FLOOD PLAINS

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

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 02/08/10

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in project area. Invasive annuals such as cheatgrass and Japanese brome commonly occur. Cheatgrass is on the Colorado List C of noxious weeds. Colorado List B noxious weeds that may be found in the area include Canada thistle, musk thistle and other biennial thistles. There are also known populations of Russian and spotted knapweed in the vicinity of the affected area. There is potential to have leafy spurge, yellow and Dalmatian toadflax in the area. The BLM is in cooperation 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: Following a prescribed fire there is the potential for early seral stage species such as cheatgrass and allysum to establish. Targeting the burn to achieve removal of 40 – 70% of the sagebrush and shrub cover would help prevent this establishment by leaving a mosaic of desirable forbs and grasses to compete with the invasive weeds. Additionally, these desirable species would have more resources (light, nutrients) available to compete with invasive species.

Environmental Consequences, No Action Alternative: This alternative would have no immediate effect on the invasive species community. However, if a wildfire were to occur in the area the potential weed invasion would be high and more costly to control. Additional fuels from the oakbrush and sagebrush not being removed would cause a hotter fire that would deplete the resources of established vegetation and their ability to compete with invasive species post-fire.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 02/16/10

MIGRATORY BIRDS

Affected Environment: The Long Mountain area provides habitat for a variety of passerine species. The project area is dominated with Gambel's Oak, serviceberry, chokecherry and sagebrush. Isolated stands of aspen are located at the northern edge of the treatment area.

Environmental Consequences, Proposed Action: Much of the sagebrush and mountain shrub community in the area has reached climax state and reintroducing fire into the ecosystem would improve the quality of the habitat by stimulating new growth. Burning should also improve habitat diversity by creating a mosaic of vegetation in different seral stages. The area has the potential to be used as both foraging and nesting habitat for neotropical birds and raptors. It is unlikely that there would be any direct take of avian species with this project, as prescribed burns will be conducted in the spring before nesting and in the fall. Common nongame bird species that use the woodlands and sagebrush would lose habitat, but this effect would not be substantial, due to the availability of adjacent habitat. Islands of shrubs that remain intact in the area would still provide some cover and foraging areas for avian species. Timing restrictions for nesting migratory birds discussed in the proposed action would eliminate concern for disturbance of nesting raptors or other bird species. Fire escaping into the allowable area may have an effect on wildlife in the area. This would increase the number of acres treated, thus increasing the amount of disturbance to wildlife.

Environmental Consequences, No Action Alternative: Under this alternative, the woodland, shrubland and sagebrush/grassland areas would continue to exist in its climax stage. These areas, in its climax stage, are susceptible to disease and there is a potential for large catastrophic wildfires. If this area becomes susceptible to either disease or a large stand replacement wildfire, the migratory bird habitat would be degraded if not destroyed entirely until the area could recover. The decadent age class of the project area does not promote new growth and healthy vigor among plants and trees, which would eventually decrease the quality of habitat for migratory birds.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 2/10/10

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 in the vicinity of the proposed project.

Environmental Consequences, all alternatives: None

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 02/08/10

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species within or in the vicinity of the proposed treatment.

Environmental Consequences, all alternatives: None

Mitigation Measures: None

Name of specialist and date: Hunter Seim, 02/16/10

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, all alternatives: None

Mitigation Measures: None

Name of specialist and date: Gail Martinez, 02/08/10

T&E SPECIES – PLANTS

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

Environmental Consequences, all alternatives: None

Mitigation Measures: None

Name of specialist and date: Hunter Seim, 02/16/10

WASTES, HAZARDOUS OR SOLID

Affected Environment: The area proposed for 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, 02/08/10

WATER QUALITY - GROUND

Affected Environment: The area affected by the Proposed Area has a water well approximately ¼ mile to the west. The well is active with potable water found a depth of 200 feet.

Environmental Consequences, Proposed Action: There would be no impacts under the Proposed Action due to the depth of potential potable water.

Mitigative Measures: None

Name of specialist and date: Marty O'Mara, 02/19/10

WATER QUALITY - SURFACE

Affected Environment: Any surface runoff from the proposed project area flows into an unnamed tributary to Slater Creek. Water quality of the mainstem of Slater Creek, including all tributaries and wetlands from the source to a point just below the confluence with Second Creek, must support Aquatic Cold Life 1, Recreation P, Water Supply, and Agriculture beneficial uses. As of 2008 Slater Creek, including all tributaries from its source to the Little Snake River, is on the Colorado Department of Public Health and Environment's (CDPHE) Monitoring and

Evaluation List for a suspected selenium water quality issue (CDPHE 2008). There are no water quality impairments identified for stream segments that could be affected by the proposed action.

Environmental Consequences, Proposed Action: The proposed action would have some short term effects to the water quality of streams in the project area during times of runoff. 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 spring timing of the proposed project is expected to yield a burn of varying intensities, thereby 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. 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. The proposed project is not expected to exacerbate any existing selenium issues.

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: Emily Spencer, 02/08/10

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>

WETLANDS/RIPARIAN ZONES

Affected Environment: There is one perennial spring identified within the BLM portion of the proposed project area (Hard Spring # 015-08). There is no record of the spring being assessed since initial inventory in 1983.

Environmental Consequences, Proposed Action: The spring timing of the proposed project is expected to yield a burn of varying intensities, thereby creating a mosaic pattern that is not expected to adversely impact the spring and surrounding vegetation, and perhaps might improve the quality and quantity of herbaceous wetland plants.

Environmental Consequences, No Action Alternative: Under the No Action alternative, there would no effect to the spring.

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 02/09/10

WILDERNESS, WSA, AND WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigation Measures: Not Applicable

Name of specialist and date: Kimberly Miller, 02/09/10

NON-CRITICAL ELEMENTS

RANGE MANAGEMENT

Affected Environment: The proposed treatment area is contained within two grazing allotments. The Long Mountain Sec. 15 Allotment #04022 is permitted for 210 AUMs (Animal Unit Months) consisting of 85 sheep between May 1 and October 30 (102 AUMs) and 18 cattle between May 1 and October 30 (108 AUMs). The West Long Mountain Allotment #04028 permits 205 AUMs consisting of 80 cattle between April 1 and June 15 (200 AUMs), one horse between April 1 and June 15 (2 AUMs), and one horse between October 1 and January 1 (3 AUMs). There are two existing range improvement projects in the project area - the Duncan Spring #203616 which was constructed in 1964 and the Long Mountain Reservoir #201562 which was constructed in 1960.

Environmental Consequences, Proposed Action: The area which would be treated with prescribed fire will be rested from livestock grazing for a minimum of two growing seasons. There would be no additional impacts to range management unless the prescribed burn gets out of the proposed treatment area and becomes larger than intended. The proposed treatments may provide a benefit to livestock management and forage over the long term. Removing the shrub and brush cover in a mosaic pattern would increase grasses and forbs that are important to grazing livestock.

Environmental Consequences, No Action: There would be no impact to grazing operations or improvements under this alternative. The area within the allotment would continue to be available for use by livestock. However, as shrub and sagebrush density increase production of grass and forb available forage production may decrease.

Mitigation Measures: None

Name of specialist and date: Christina Rhyne, 02/16/10

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 healthy vegetative communities that help deter accelerated erosion. There is some evidence in the overall watershed of plant pedestalling, soil compaction, and erosion associated with roads. Land capability classification states these (nonirrigated) soils are limited to grazing,

forestland, or wildlife habitat. The main hazard is the risk of erosion unless close-growing plant cover is maintained. Generally, the plant canopy, litter, and basal ground cover are sufficiently high to preclude large biological soil communities.

Table 1: Soil Summary for BLM portion of the Proposed Long Mountain Prescribed Fire Plan

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
MU 221 Youga-Gelkie-Clayburn, warm complex, 25 to 45% slopes, extremely bouldery	<u>Elevation:</u> 7,000' – 8,600' <u>Mean annual precipitation:</u> 16-18" <u>Ecological Site:</u> Stony Loam, Dry Mountain Loam, Mountain Loam	These mountainside slope soils are well drained with moderate permeability and high runoff potential. Available water capacity is moderate and the soil profile is typically 60 inches deep.
MU 206 Ustorhents, frigid-Borolls complex, 25 to 75% slopes	<u>Elevation:</u> 7,000' – 8,500' <u>Mean annual precipitation:</u> 16-20" <u>Ecological Site:</u> not identified	These mountainside soils are well drained with moderately slow to moderate permeability and high to very high runoff potential. Available water capacity is low to very low and the soil profile is typically 32-34 inches deep.
MU 84 Gebson, moist-Youga complex, 5 to 25 % slopes, extremely stony	<u>Elevation:</u> 7,000' – 8,600' <u>Mean annual precipitation:</u> 16-18" <u>Ecological Site:</u> Stony Loam, Mountain Loam	These soils are well drained with moderate permeability and medium runoff potential. Available water capacity is low to moderate and the soil profile is typically 60 inches deep.

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 wet; 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, firebreaks and natural terrain and precipitation barriers.

Environmental Consequences, No Action Alternative: Under the No Action Alternative there is greater potential for a larger wildland fire that could lead to large scale erosion and invasion by non-native species.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 02/09/10

VEGETATION

Affected Environment: Vegetation composition and productivity vary with elevation and topography in the project area. Upland vegetation composition can be generalized as sagebrush/grass in the lower elevations transitioning into a mountain shrub community and then into aspen stands as elevation increases. North slopes tend to hold snow longer and are more shaded resulting in denser more productive vegetation than southern slopes which are drier and hotter. Vegetation within the area includes of serviceberry, Gambel's oak, snowberry, sagebrush and bitterbrush, wild onion, sego lily, prickly pear, hairy golden aster, Oregon grape, spineless horsebrush, pussy toes, western wheatgrass, needle and thread, squirreltail, prairie junegrass, cheatgrass, and Japanese brome.

Environmental Consequences, Proposed Action: The Proposed Action would improve plant diversity by reducing the mountain shrub component and increasing the understory of perennial grasses along with providing the benefit of fuels reduction in the area. The proposed prescribed fire would make 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 to target 40 to 70% of the sagebrush 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, mountain brush species 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.

Mitigation Measures: None

Name of specialist and date: Christina Rhyne, 02/17/10

WILDLIFE, AQUATIC

Affected Environment: There are no perennial streams located in the project area. There is one mapped spring within the project area (Hard Spring # 015-08).

Environmental Consequences: It is likely that small amphibians use the spring in the area and the associated vegetation surrounding these springs. The effects would be minimized on these species since a spring burn is planned and a mosaic burn pattern is the objective of the project. The project may lead to increased run off and sediment. This effect would be minor and temporary and should not affect aquatic wildlife in the area.

No Action Alternative: There would be no impact to aquatic wildlife with this alternative.

Mitigative Measures: None

Name of specialist and date: Gail E. Martinez, 02/10/10

WILDLIFE, TERRESTRIAL

Affected Environment: The Long Mountain area is an area rich in vegetation and wildlife. The area provides habitat for mule deer, elk, black bear, mountain lion and Greater sage-grouse. It is also used by raptors and small non game birds and mammals. The project area is dominated with Gambel oak, serviceberry, chokecherry and sagebrush. Isolated stands of aspen are located at the northern edge of the treatment area.

Environmental Consequences, Proposed Action: The mountain shrub communities of the Long Mountain area provide habitat for a variety of wildlife species. Much of the serviceberry in the area has reached climax state and reintroducing fire into the ecosystem should improve the quality of the habitat by stimulating new growth. Burning should also improve habitat diversity by creating a mosaic of vegetation in different seral stages. Common non-game bird species and small mammals that use the mountain shrub community and sagebrush would lose habitat, but this effect would not be substantial. Islands of shrubs that remain intact in the area would still provide some cover and foraging areas for these species.

Environmental Consequences, No Action Alternative: There would be no direct impact to wildlife if no treatments are done, however the threat of large wildfires occurring under dry conditions exists if nothing is done. The impacts to wildlife would be greater if a catastrophic wildfire burns large areas.

Mitigative Measures: None

Name of specialist and date: Gail E. Martinez, 02/10/10

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 2/18/10	
Forest Management	DB 2/24/10		
Hydrology/Ground			See Ground Water
Hydrology/Surface		ES 2/09/10	
Paleontology		EMO 2/18/10	
Range Management			CR 02/16/10
Realty Authorizations	LM 02/09/10		
Recreation/Travel Mgmt		KMM 2/09/10	
Socio-Economics		LM 02/09/10	
Solid Minerals		JAM 2/11/10	
Visual Resources		KMM 2/09/10	
Wild Horse & Burro Mgmt	02/10/10 GEM		

CUMULATIVE IMPACTS SUMMARY:

The project area is utilized primarily for hunting, and livestock grazing. BLM lands within the project area are within a travel restricted area. 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 visited the Slater Landscape in the Little Snake Field Office (LSFO) jurisdiction over five days during September and October 1999, to assess whether or not the five Colorado Public Land Health Standards were being met. A total of 28 sites were visited within the landscape and described via the site assessment forms.

The project area is within the administrative boundaries of the Long Mountain and West Long Mountain Allotments which was included in the Slater Landscape Land Health Assessment, and had two points of assessment completed. In each of the two assessment sites, all standards were met.

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Long Mountain and West Long Mountain Allotments and the Slater Landscape provide productive habitat for a variety of mammalian and avian species. In 1999, all sites in the Long Mountain and West Long Mountain Allotments met this standard and this standard was met on the landscape scale. The proposed action should aid in continuing to meet this standard because it would return more decadent areas to a younger, healthier and more productive state. The greater potential under this alternative for creating landscapes composed of several plant communities that vary in

successional stages and patterns would contribute to meeting this standard.

Name of specialist and date: Gail Martinez, 02/10/10

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, 02/08/10

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: Species diversity within the project area is high with composition appropriate for the site. Overall density of the dominant species (bitterbrush) is appropriate. Plant production within the allotment is high. Plant community is contributing to desired objectives and providing resilience from human activities. This standard is currently being met for the plant community and would continue to be met under the proposed action.

Name of specialist and date: Christina Rhyne, 02/17/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed treatment. This standard does not apply.

Name of specialist and date: Hunter Seim, 02/16/10

RIPARIAN SYSTEMS STANDARD: This standard would continue to be met under the proposed action. There is one perennial spring identified within the BLM portion of the proposed project area (Hard Spring # 015-08). The proposed burn plan using a spring burn is expected to create a mosaic pattern that will not impact the spring and surrounding vegetation, and perhaps may improve the quality and quantity of herbaceous wetland plants.

Name of specialist and date: Emily Spencer, 02/09/10

WATER QUALITY STANDARD: The water quality standard would continue to be met. Any runoff following the burn from snowmelt and summer storms would drain from the project area into streams that are presently supporting classified uses. Fire use as part of an overall fuel management strategy is considered to be a Best Management Practice that would help to limit 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 Long Mountain or adjacent areas would occur.

Name of specialist and date: Emily Spencer, 02/09/10

UPLAND SOILS STANDARD: The upland soils standard is met under either alternative. 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 larger wildland fire is greater under this alternative that would compromise native vegetation and could promote weed invasion. 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 occurs. Eventually upland soil health and wildlife habitat overall could be diminished.

Name of specialist and date: Emily Spencer, 02/09/10

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. 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:

Long Mountain Prescribed Fire

DOI-BLM-CO-N010-2010-0049-EA
T11NR89W Sections 11, 12, 13 & 14

Legend
[Red outline] Long Mountain Rx

