

ENVIRONMENTAL ASSESSMENT

DOI-BLM-CO-040-2015-0027 EA

Lookout Mountain Communications Site Hazardous Fuels Reduction



prepared by:

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BLM

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LOCATION.

Garfield County; east of Glenwood Springs, CO.

LEGAL DESCRIPTIONS.

T6S., R89W., Section 11

APPLICANT(S).

None - Project initiated by the Colorado River Valley Field Office

PURPOSE AND NEED FOR ACTION.

The communication site is vulnerable to wildfire due to its topographical setting, continuity of fuels adjacent to the communication facilities as well as lack of defensible space around each individual facility. Public safety could be impacted if communication services provided by this site are damaged or destroyed by fire. The 2004 hazardous fuels treatment was effective in providing defensible space but needs to be maintained as vegetation begins to recolonize the previously treated areas. An additional 14-acre treatment is needed to increase the defensible space surrounding these facilities.

SCOPING AND PUBLIC INVOLVEMENT AND ISSUES.

The public was provided an opportunity to offer any comment through the BLM NEPA Register listing this project. No comments were received.

BACKGROUND.

The communication site has facilities for several entities that provide services to the general public and governmental organizations throughout the western slope of Colorado. The government communication services include 911 communications and emergency services for Garfield County, a Federal Aviation Administration relay site, and a radio repeater for the Bureau of Land Management. Little to no vegetative clearing occurred when the communication facilities were constructed. In 2004 hazardous fuels were reduced on 11 acres of BLM lands and

on 1.23 acres of City of Glenwood Springs lands to reduce the threat of wildfire to these facilities.

PROPOSED ACTION.

The proposed action is to maintain the effectiveness of the 2004 treatment by using hand tools (including power equipment such as chain saws) or machinery to remove re-sprouting Gambel oak/mountain shrub vegetation that is recolonizing the original 11-acre treatment site and to use machinery to remove vegetation in a mosaic pattern on an additional 14-acres. The treatment will increase the defensible space around the structures by breaking up the continuity of fuels. The 14 acres of initial entry will be treated to create an open park appearance with scattered clumps of Gambel oak and mountain shrubs. The Mountain Brush canopy will be thinned in an irregular pattern, reducing the existing canopy by approximately 50-80%.

Mechanical Thinning: Machinery could be used on gentle slopes and areas without high densities of exposed rock. Equipment most commonly used in this vegetation type and terrain are the hydro-axe and fecon flail. These machines are mounted on either rubber-tired or tracked carriers similar to a skid steer with a hydraulically-driven mastication head. The machine generally leaves small branchlets and pieces of wood from pencil to small log size scattered across the surface of the treatment area. Treatments with these machines generally will create minimal surface disturbance, however can throw flying debris for some distance. To protect soil and water quality, operations would not be allowed in muddy conditions. It is anticipated that 50-80% of the 14 acre initial entry unit will be treated with machinery.

To prevent the spread of invasive, non-native plants, all equipment and vehicles must be power washed or similarly cleaned to remove noxious weed seeds before entering the project area.

Hand Thinning: Thinning may occur anywhere in the 25-acre area. Hand thinning would be used where machinery cannot operate due to steep slopes or areas too rocky for mechanical treatment and may be used for a more selective removal than mastication. The material generated from hand thinning may be piled and burned at a later date or chipped and dispersed on site.

Pile Burning: Pile burning may be performed to remove material generated from hand thinning activities. Piles would be burned under conditions that are not conducive to fire spread. This can be a combination of factors including rain, forecasted rain, snow cover on the ground or low fire danger indices. Qualified burn personnel would perform the pile burning operations with necessary equipment being determined on the day of burning. All pile burning would be performed with an approved burn plan and a smoke permit from the State of Colorado Department of Public and Environmental Health.

NO ACTION ALTERNATIVE.

The 2004 treatment would not be maintained and no additional fuels reduction or vegetative treatments would occur under the No Action Alternative.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL.

The use of broadcast prescribed fire is not feasible due to the inability to predict impacts to communication facilities from radiant heat and difficulty of controlling a fire in close proximity to communication structures.

PLAN CONFORMANCE REVIEW.

The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3).

Name of Plan. Colorado River Valley Field Office Record of Decision (ROD) and Approved Resource Management Plan (RMP) (BLM 2015b).

Date Approved. June 2015.

Decision Number/Page. WFM-OBJ-01/Page 61. Integrate fire and fuels management across all BLM programs and across all jurisdictional boundaries to achieve land health standards, address wildland-urban interface issues and achieve commensurate resource and resource use objectives.

In addition the fire management plan titled Wildland Fire Management and Prescriptive Vegetative Treatment Guidance is applicable. The proposed action would occur within Fire Management Zones B-140-03 and Fire Management Zone A-140-03. Zone B is defined as an area where unplanned wildland fire is not desired because of current conditions. The principal resource area-wide goal (part 6, page 12) is to protect human life and property. One of the major goals of vegetation treatments in this zone is to reduce hazardous fuel loading and the risks of wildfire escaping public lands to an acceptable level. The southwest side of the project area falls into Fire Management Zone A-140-03. Zone A is designated as an area where fire is not desired at all. The west side of Lookout Mountain is designated as a debris flow hazard zone due to the steep slopes and any treatments below the facility would be within the debris flow hazard zone.

RELATIONSHIP TO STATUTES, REGULATIONS, OTHER PLANS.

- Federal Land Policy and Management Act of 1976;
- Endangered Species Act of 1973;
- National Environmental Policy Act of 1969;
- Migratory Bird Treaty Act of 1918;
- National Historic Preservation Act (16 USC 470f);
- Archeological Resources Protection Act;

- Native American Graves Protection and Repatriation Act;
- Indian Sacred Sites – EO 13007; and
- Consultation and Coordination with Indian Tribal Governments – EO 13175

STANDARDS FOR PUBLIC LAND HEALTH.

In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards pertain to the ecological health of: upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

A formal land health assessment was conducted in the Roaring Fork Watershed in 2010 which included the Lookout Mtn. allotment. The land health assessment listed the Lookout Mtn. Allotment as meeting Standards 1 soils and standard 3 plant and animal communities, but did not specifically state any concern for 2 riparian systems, 4 threatened and endangered species, or 5 water quality. The summary did not list this Allotment as not meeting any of the standards.

The impact analysis addresses whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for each of the five standards. These analyses are located in the program-specific analysis in this document.

AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES.

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and alternatives. In addition, the section presents comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain environmental elements. Not all programs, resources or uses are present in the area, or if they are present, may not be affected by the proposed action and alternatives (Table 13). Only those elements that are present and potentially affected are described and brought forth for detailed analysis.

Table 13. Programs, Resources, and Uses(Including Supplemental Authorities).

Programs, Resources, and Uses (Including Supplemental Authorities)	Potentially Affected?	
	Yes	No
Access and Transportation		X
Air Quality	X	
Areas of Critical Environmental Concern	X	

Cadastral Survey		X
Cultural Resources	X	
Native American Religious Concerns	X	
Environmental Justice		X
Farmlands, Prime or Unique		X
Fire/Fuels Management	X	
Floodplains		X
Forests		X
Geology and Minerals		X
Law Enforcement		X
Livestock Grazing Management	X	
Noise		X
Paleontology		X
Plants: Invasive, Non-native Species (Noxious Weeds)	X	
Plants: Sensitive, Threatened, or Endangered		X
Plants: Vegetation	X	
Realty Authorizations		X
Recreation		X
Social and/or Economics		X
Soils	X	
Visual Resources		X
Wastes, Hazardous or Solid	X	
Water Quality, Surface and Ground		X
Water Rights		X
Wetlands and Riparian Zones		X
Wild and Scenic Rivers		X
Wilderness/WSAs/Wilderness Characteristics		X
Wildlife: Aquatic / Fisheries		X
Wildlife: Migratory Birds	X	
Wildlife: Sensitive, Threatened, and Endangered Species	X	
Wildlife: Terrestrial	X	

AIR QUALITY

AFFECTED ENVIRONMENT.

The proposed action area (Garfield County) has been described as an attainment areas according to the Colorado Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). An attainment area is an area where ambient air pollution amounts are determined to be below NAAQS standards.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. It is anticipated that the proposed action would not produce adverse effects to air quality. Vehicle and equipment exhaust emissions would be short-lived and localized.

No Action Alternative. Under the no action alternative, air quality would likely persist under present conditions.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

AFFECTED ENVIRONMENT.

The west side of Lookout Mountain is designated as part of the Glenwood Springs Debris Flow Hazard Zone ACEC due to the steep slopes and erosive soils situated directly adjacent to and above Glenwood Springs. The objective of the ACEC is to prevent debris flows resulting from authorized surface-disturbing activities. Approximately one-half of the project area falls within this ACEC.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The use of heavy machinery, such as a hydroaxe or fecon flail, on a rubber-tired or tracked vehicle has the potential to create some soil disturbance and a short-term increase in erosion potential. The proposed action would not authorize heavy machinery use when soils are saturated; thus minimizing any potential surface disturbance. The existing understory of grasses and forbs also provides adequate cover to prevent accelerated runoff and erosion. Hand thinning would create negligible soil disturbance. The resulting mulched material would protect soils from raindrop impact or snowmelt runoff until the material decomposes. Reducing the shrubby canopy may facilitate an increase in the herbaceous understory which would further protect soils from erosion and reduce the potential for a debris flow. Pile burning would result in localized areas of bare soil. Pile burning would be conducted during periods of low fire potential so as to reduce the likelihood of fire escaping the confines of the individual piles. Given the mesic nature of the project area, vegetation is expected to recover rapidly following burning. The proposed action would have a negligible effect on debris flow potential and the overall ACEC values would remain unaffected.

No Action Alternative. Under the No Action Alternative, no vegetation cutting would occur and no heavy equipment would be used, thus there would be no change in debris flow potential and the ACEC would be unaffected.

CULTURAL RESOURCES

AFFECTED ENVIRONMENT.

A records search of the general project area, and a Class III inventory of the Area of Potential Effect (APE), as defined in the National Historic Preservation Act (NHPA), was completed by certified cultural resource contractors (CRVFO CRIR# 25, 1193, 1279, 5499-10, 1004-29, and 1015-30). A total of 26.8 acres have been inventoried at the Class III level surrounding the communications site. Two cultural resources have been identified within the project area. One is a prehistoric isolated find that is not eligible and the second is a historic site (5GF2776) that is eligible for the National Register of Historic Places (NRHP). The project inventory and evaluation is in compliance with the NHPA, the Colorado State Protocol Agreement, and other federal law, regulation, policy, and guidelines regarding cultural resources.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The project area contains one eligible site (5GF2776) to the NRHP which will be protected and avoided during project implementation. Reducing fuels within the project area has the potential to be beneficial to cultural resources, specifically the historic site, because if a fire occurs in the area it is less likely to burn through the site and cause impacts. Fuels reduction will help reduce fuel load and protect sensitive sites from potential threats cause by wildfire. The project has a determination of no adverse effect if design criteria and cultural resource stipulation measures are followed.

Additional areas or changes in the methodology to achieve the proposed effect may require additional archaeological inspection by a qualified archae ologist. These changes include but are not limited to prescribed burn, aerator treatment, or other ground disturbing equipment.

Mitigation: Avoid and protect site 5EA2776 through no direct impacts during mechanical or hand-thinning treatment.

Cultural Resource Stipulations. If subsurface cultural values are uncovered during operations, all work in the vicinity of the resource will cease and the authorized officer with the BLM notified immediately. The operator shall take any additional measures requested by the BLM to protect discoveries until they can be adequately evaluated by the permitted archaeologist. Within 48 hours of the discovery, the State Historic Preservation Officer (SHPO) and consulting parties will be notified of the discovery and consultation will begin to determine an appropriate mitigation measure. BLM in cooperation with the operator will ensure that the discovery is protected from further disturbance until mitigation is completed.

Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

Native American Human Remains. Pursuant to 43 CFR 10.4(g), the holder must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony on federal land. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery that could adversely affect the discovery. The holder shall make a reasonable effort to protect the human remains, funerary items, sacred objects, or objects of cultural patrimony for a period of thirty days after written notice is provided to the authorized officer, or until the authorized officer has issued a written notice to proceed, whichever occurs first.

No Action Alternative. Under this alternative, no fuels reduction activities would occur which would have little to no impact on cultural resources.

NATIVE AMERICAN RELIGIOUS CONCERNS

AFFECTED ENVIRONMENT.

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and ARPA, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. This project area does not contain cultural resources that are known to be significant to Native American tribes. No traditional cultural properties, unique natural resources, or properties of a type previously identified as being of interest to local tribes, were identified during the cultural resources inventory of the project area. No additional Native American Indian consultation was conducted for the proposed project.

No Action Alternative. Under this alternative, no fuels reduction activities would occur which would have little to no impact on Native American religious concerns.

PLANTS: INVASIVE NON-NATIVE SPECIES (NOXIOUS WEEDS)

AFFECTED ENVIRONMENT.

An inventory for noxious weeds has not been completed on the project area described in the Proposed Action. However, monitoring and other inventories have shown that several species of noxious weeds occur within the area of the Proposed Action. Table 1-1 lists species noxious weeds species known to occur.

Table 1-1. Noxious Weeds Infestation Known to Occur in Area of the Proposed Action.

Scientific Name	Common Name	Statewide List Type
<i>Linaria vulgaris</i>	Yellow toadflax	B List
<i>Carduus nutans</i>	Musk thistle	B List
<i>Cirsium arvense</i>	Canada thistle	B List
<i>Cynoglossum officinale L.</i>	Houndstongue	B List
<i>Carduus acanthoides L.</i>	Plumeless thistle	B List
<i>Cirsium vulgare</i>	Bull thistle	B List
<i>Verbascum Thapsus L.</i>	Common mullein	C List
<i>Arctium minus Bernh.</i>	Common burdock	C List

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Under this alternative, noxious and invasive plant species could potentially increase as a result of disturbance associated with mechanical thinning outlined in the Proposed Action. Disturbance provides a niche for noxious and invasive plant species to become established. Equipment and vehicles associated with the project could transport weed seed and reproductive vegetative plant parts to the project area. As native vegetation recovers from the proposed disturbance, treatment of noxious and invasive weed species may need to be conducted in order to achieve desired results.

Mitigation. The project leader is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site. The BLM fuels specialist or noxious weed coordinator will monitor the project area at least once annually during the growing season for five years following the treatments to detect the presence of any invading noxious weeds. Any Colorado-listed noxious weeds will be promptly treated and controlled according to the appropriate timing for each particular weed species. A pesticide use proposal must be completed and approved by BLM prior to the use of herbicides.

No Action Alternative. Under this alternative the disturbance associated with the proposed action would not take place. Noxious and invasive plant species would continue at current level.

FIRE/FUELS MANAGEMENT

AFFECTED ENVIRONMENT.

An “Assessment of Wildland Urban Interface Sites” was conducted in the fall and winter of 2002/2003 by fuels personnel within the Upper Colorado Interagency Fire Management Unit on urban interface sites within the Glenwood Springs Resource Area. The assessment was a subjective numerical rating of three categories: Hazard, Risk and Value. The highest score for each category is 20 points and the highest overall rating would be 60 points.

The following are the ratings for Lookout Mountain Communication Site: The hazard layer is rated on a combination of fuel components (fuel type/model, resistance to control, rate of spread, adjacent hazard (continuity, defensible space, position on slope). The rating for hazard was 19 out of 20 points.

The Risk Layer analysis is based on the potential for human sources of ignition and lightning. The rating for risk was 7 out of 20 points.

The Value Layer analysis is based on existing resources such as utilities, municipal watershed and viewsheds, and natural resource values (T&E, Cultural, high use recreation areas, etc). The rating for value was 7 out of 20 points.

The overall rating for Lookout Mountain Site was a total score of 33 out of 60 points. A complete copy of the assessment is in the file for Lookout Mountain Fuels Project, ED 11.

Present fuel conditions have the potential to produce fire behavior that would exceed the capabilities of fire suppression forces in areas that did not receive treatment in 2004. In areas that were not treated in 2004 current vegetation could produce flame lengths in excess of 12 feet and could produce rapid rates of fire spread. Due to current conditions, location on slope and access to the facilities, fires may not be safely and effectively suppressed.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The proposed action would reduce total fuel loading, horizontal and vertical continuity in and around the 25 acres adjacent to the communications facilities. The treatment would change the vegetation from a continuous fuel bed to more of a savanna type ecosystem that has breaks in fuel continuity. By reducing the available biomass, and breaking up the continuity of the brush canopy, the fire behavior within the treatment area would change from a high intensity crown fire to a moderate intensity surface fire. This will allow for safer and more effective protection of structures and property and the likely hood of the facilities needing no

action or minimal suppression actions for survivability of the facilities or minimize any damage that the facilities may experience due to impacts of fire.

No Action Alternative. With no maintenance performed on previous treatments in the Lookout Mountain Communications facility site, the prior treatment would begin to lose its effectiveness as the area becomes re-vegetated and defensible space for structure protection would begin to decrease or become ineffective. Additional initial treatments would not occur and the probability that communications facilities may be damaged and become inoperable as well as the risk to firefighters and public in the event of a fire would remain elevated.

PLANTS: VEGETATION

AFFECTED ENVIRONMENT.

Vegetation in the project area consists of a diverse mosaic of woody plant communities. Douglas-fir trees are found on the steep, north-facing slopes. Gambel oak (*Quercus gambelii*) with mesic mountain shrubs such as serviceberry (*Amelanchier alnifolia*) and chokecherry (*Prunus virginiana*) dominate on the gentler, more mesic slopes. Intermingled with the oakbrush are small parks of mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) mixed with shrubs such as common snowberry (*Symphoricarpos rotundifolius*) and mountain mahogany (*Cercocarpus montanus*) on more xeric sites.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The proposed action would reduce the height and density of previously untreated, mature Gambel oak and other mountain shrubs and reduce the density of shrubs that have resprouted following the 2004 treatment. The proposed action would result in a temporary decrease in shrub height and density, but most of the mountain shrubs would be expected to resprout fairly quickly following treatment. The cover of the herbaceous plant community is also expected to increase following thinning of the shrubby canopy.

No Action Alternative. Under this alternative, no vegetation would be cut. Shrubs that have resprouted following the 2004 treatment would continue to grow in height and density and there would likely be a corresponding decline in understory herbaceous vegetation cover.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR HEALTHY PLANT COMMUNITIES.

In 2010, a formal land health assessment was conducted in the Roaring Fork watershed which included the project area. A determination of findings from the assessment (BLM 2011) found that the area was considered to be meeting Standard 3 for healthy plant communities at the time of the assessment. The proposed action is not anticipated to result in a decline in the condition of vegetative communities and Standard 3 would continue to be met.

SOILS

AFFECTED ENVIRONMENT.

A review of the soil survey by the NRCS for the *Rifle Area, Colorado, Parts of Garfield and Mesa Counties* indicate 4 soil map units occur within the project area boundary (NRCS 1985). The NRCS soil map unit descriptions (NRCS 2015) are provided below:

- Almy Variant loam (1) – This deep, well-drained soil is found on mountainsides at elevations ranging from 6,500 to 8,000 feet and on slopes of 25 to 65 percent. Parent material for this soil is sandstone and shale residuum. Surface runoff for the Almy Variant loam is medium and the erosion hazard is moderate.
- Arle-Ansari-Rock outcrop complex (2) – This complex is found on mountainsides and alluvial fans at elevations ranging from 5,500 to 7,500 feet and on slopes of 12 to 65 percent. The soils are derived from red-bed shale and sandstone while the Rock outcrop is primarily red sandstone. Approximately 45 percent of the complex is composed of the Arle soil, 35 percent the Ansari soil, and 20 percent Rock outcrop. The Arle soil is moderately deep, well drained, and has medium surface runoff and severe erosion hazard. The Ansari soil is shallow, well drained, and has rapid surface runoff and severe erosion hazard.
- Jerry loam (39) – This deep, well-drained soil is found on mountainsides at elevations ranging from 7,000 to 9,500 feet and on slopes of 12 to 50 percent. Parent material for this soil is sandstone, shale, and basalt. Surface runoff for this soil is slow and the erosion hazard is moderate.
- Lamphier loam (42) – This deep, well-drained soil is found on fans and mountainsides at elevations ranging from 7,500 to 10,000 feet and on slopes of 15 to 50 percent. This soil is derived from sandstone and shale rocks. Surface runoff for this soil is slow and the erosion hazard is classified as slight.

Soil health was evaluated in 2010 during the Roaring Fork Land Health Assessment. BLM staff concluded that soils were meeting land health standards with slight to moderate departures from expected conditions (BLM 2011).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. As mechanical treatments are employed to reduce Gambel oak/mountain shrub vegetation, direct soil impacts include soil disturbance or loss, and surface compaction. Direct impacts are expected to be limited in scale and short-term in duration due to the small acreage for hydro-axe treatment and the minimally invasive hand cutting process. Rubber tired equipment would minimize soil compaction. Pile burning could have direct impacts to soils, if piles are numerous or burn too hot. However, the total acreage for treatment is relatively small and therefore slash piles are expected to be minimal. Overall, soils would be largely protected, post-treatment, as woody debris would intercept rain as well as existing grasses, forbs, and shrubs.

Mitigation. Minimize surface disturbance on slopes greater than >30% and fragile soils.

No Action Alternative. Under the no action alternative, no direct or indirect impacts to soils would be expected.

ANALYSIS OF LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

Based on the Roaring Fork Land Health Assessment, BLM staff concluded that soils are meeting Standard 1 (BLM 2011). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

VISUAL RESOURCES

AFFECTED ENVIRONMENT.

The proposed project area is located in an area classified as Visual Resource Management (VRM) Class II . The objective of VRM Class II is to retain the existing characteristic landscape. The level of change in any of the basic landscape elements (line, form, color, texture) due to management activities should be low and not evident.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The proposed action would make weak/minor contrasts to the existing landscapes form, line, color and texture. The proposed action involving the removal and thinning of vegetation to open the canopy and to reduce ladder fuels would create negligible differences in the overall landscapes form, line, color, and texture. The long term contrast rating process shows that with inclusion of design and mitigation measures to hand cut to thin and remove vegetation “with irregular and mosaic patterns to avoid creating straight lines and square corners” no new contrast would be introduced or long term impacts. Therefore the proposed action meets the objective of VRM Class II in maintaining the existing landscape character.

Mitigation. All vegetation treatment methods should be monitored to avoid the creation or enhancement of linear features within the landscape. Feathering or undulating edges should be incorporated into treatments. Islands or pockets of vegetation should be left intermittently and in irregular patterns throughout the project area. All vegetation treatments should repeat natural mosaic openings found within the adjacent landscape.

No Action Alternative. The existing natural landscape would be maintained and VRM Class II objectives would be meet. However, if a large wildfire occurred within the area, while it would be a natural process, the landscape could experience a high degree of modification and contrasts to the existing landscape.

TERRESTRIAL WILDLIFE: MIGRATORY BIRDS

AFFECTED ENVIRONMENT.

The Migratory Bird Treaty Act (MBTA) provides protections to native birds, with the exception of certain upland fowl managed by state wildlife agencies for hunting. Within the context of the MBTA, migratory birds include non-migratory resident species as well as true migrants. For most migrant and resident species, nesting habitat is critical for supporting reproduction in terms of both nest sites and food. Also, because birds are generally territorial during the nesting season, their ability to access and utilize sufficient food is limited by the quality of the occupied territory. During non-breeding seasons, birds are generally non-territorial and able to feed across a larger area and wider range of habitats.

The project area provides cover, forage, breeding, and/or nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. Migratory bird species that are federally listed and classified by the BLM as sensitive species are addressed in the Wildlife: Sensitive, Threatened, and Endangered Species section of this EA.

BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the BLM's responsibilities under the MBTA and the Executive Order 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality and to avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The MBTA prohibits the "take" of a protected species. Under the Act, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets "harm" and "kill" to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." The *Birds of Conservation Concern 2008* (USFWS 2008) is the most recent effort to carry out this mandate. The CRVFO is within the Southern Rockies/Colorado Plateau Bird Conservation Region 16.

The project area includes the following plant communities and potentially associated migratory bird species.

Pinyon-juniper Woodlands. Pinyon and juniper trees provide food, cover and nest sites for numerous migratory birds. Species on the Birds of Conservation Concern (BCC) list that occur in the CRVFO and are associated with pinyon-juniper woodlands include the pinyon jay (*Gymnorhinus cyanocephalus*), juniper titmouse (*Baeolophus ridgwayi*) and Ferruginous

Hawk (*Buteo regalis*). Other migratory species associated with this plant community within the CRVFO include the broad-tailed hummingbird (*Selasphorus platycercus*), black-chinned hummingbird (*Archilochus alexandri*), Say's phoebe (*Sayornis saya*), ash-throated flycatcher (*Myiarchus cinerascens*), gray flycatcher (*Empidonax wrightii*), Townsend's solitaire (*Myadestes townsendi*), American robin (*Turdus migratorius*), Western bluebird (*Sialia Mexicana*), mountain bluebird (*S. currucoides*), bushtit (*Psaltriparus minimus*), blue-gray gnatcatcher (*Polioptila caerulea*), plumbeous vireo (*Vireo plumbeus*), Western scrub-jay (*Aphelocoma californica*), Clarks's nutcracker (*Nucifraga columbiana*), black-throated gray warbler (*Dendroica nigrescens*), Virginia's warbler (*Oreothlypis virginiae*), chipping sparrow (*Spizella passerina*), lesser goldfinch (*Spinus psaltria*) and house finch (*Haemorhous mexicanus*). Winter visitors to pinyon-juniper habitats include the Cassin's finch (*Carpodacus cassinii*), a BCC species, which typically nests in montane and subalpine forests, though occasionally nests in pinyon-juniper woodlands.

Sagebrush shrublands. Sagebrush and the associated native perennial grasses and forbs provide food, cover and nest sites for migratory birds. Sagebrush obligates that potentially occur in the CRVFO include the sagebrush sparrow (*Artemisiospiza nevadensis*), sage thrasher (*Oreoscoptes montanus*) and Brewer's sparrow (*Spizella breweri*), a BCC species. Other migratory species associated with sagebrush shrublands within the CRVFO include the western kingbird (*Tyrannus verticalis*), western meadowlark (*Sturnella neglecta*), green-tailed towhee (*Pipilo chlorurus*), vesper sparrow (*Pooecetes gramineus*) and lark sparrow (*Chondestes grammacus*). Some species are associated with both pinyon-juniper woodlands and sagebrush shrublands, including the Say's phoebe and gray flycatcher.

Mixed Mountain Shrublands. The vegetation of mixed mountain shrublands varies substantially depending on elevation, slope, aspect, and soil. More mesic (moist) sites such as on north-facing slopes and along minor drainages are typically dominated by Gambel's oak and serviceberry, while more xeric (dry) sites such as south-facing slopes are typically dominated by mountain-mahogany, bitterbrush, snowberry, and sagebrush. The dense cover, tall height, and abundant acorns and berries of mesic oak-serviceberry stands provide cover, forage, and nesting habitat for numerous species including spotted towhees (*Pipilo maculatus*), Virginia's warblers (*Oreothlypis virginiae*), black-headed grosbeaks (*Pheucticus melanocephalus*), black-billed magpies (*Pica hudsonia*), broad-tailed hummingbirds (*Selasphorus platycercus*), green-tailed towhees (*Pipilo chlorurus*), mourning doves (*Zenaida macroura*), Western scrub-jays (*Aphelocoma californica*) and lazuli buntings (*Passerina amoena*).

Raptors. Many raptors forage over wide areas, so even if they aren't known to nest in a specific area, they may still fly over searching for food. Raptors on the BCC list that occur in portions of the CRVO include the golden eagle (*Aquila chrysaetos*), Bald Eagle (*Haliaeetus leucocephalus*), Ferruginous Hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), peregrine falcon (*F. peregrinus*) and flammulated owl (*Psiloscops flammeolus*). Prairie falcons nest on rocky ledges and cliffs and hunt in grasslands and semi-desert shrublands. Peregrine falcons hunt near nest sites and along rivers and lakes, but can be found in nearly any open vegetation community during migration and winter. Flammulated owls typically nest in ponderosa pine and aspen forests, but have been found nesting in mixed forests, and reportedly use old-growth pinyon-juniper woodlands.

A variety of raptors not on the BCC list are known to occur in the CRVO including the American kestrel (*Falco sparverius*), northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), red-tailed hawk (*Buteo jamaicensis*), long-eared owl (*Asio otus*), great horned owl (*Bubo virginianus*), northern pygmy owl (*Glaucidium gnoma*) and northern saw-whet owl (*Aegolius acadicus*). The northern goshawk (*Accipiter gentilis*), a BLM sensitive species, is an occasional winter visitor to pinyon-juniper woodlands from its nesting habitat in montane and subalpine forests.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Implementation of the proposed treatments would temporarily disturb individual migratory birds within and near the units. Activities associated with mechanical thinning, hand thinning, and pile burning would displace birds due to noise, human presence, equipment and fire. Because thinning work and pile burning would be implemented outside of the breeding season, nesting birds would not be impacted. Adult and fledged birds should be able to escape thinning work and pile burning. Although a temporary reduction in food availability and cover should be expected in treated areas until vegetation begins to recover, similar untreated vegetation would still be abundant beyond the treatment units.

The proposed action would increase vegetative conditions for migratory birds that select a mosaic of vegetation types and age classes, including early seral stages and an open tree-shrub canopy with a regenerated grass and forb understory. However, these conditions would likely be short-term (<10 years) as intense sprouting is expected, particularly in Gambel oak. Potential impacts to migratory birds are expected to be minor and short term. The proposed action would not impact migratory bird populations over the long term on a landscape level.

Mitigation. No surface disturbing activities will occur from May 15 through July 15 to minimize impacts to breeding migratory birds. This timeframe encompasses the core breeding period for the majority of migratory birds in the project area.

No Action Alternative. No mechanical thinning, hand thinning, or pile burning would occur, resulting in no impacts to migratory bird species. There would be no benefits to migratory birds that select a mosaic of vegetation types and age classes, including early seral stages and an open tree-shrub canopy.

ANALYSIS OF LAND HEALTH STANDARDS 3 AND 4 FOR MIGRATORY BIRDS.

Based on the Roaring Fork Land Health Assessment (BLM 2011), the Lookout Mountain Allotment was meeting Land Health Standards 3 and 4 for terrestrial wildlife, and no site specific issues were identified. The Proposed Action is not expected to affect the continued achievement of these standards.

TERRESTRIAL WILDLIFE: SENSITIVE, THREATENED & ENDANGERED

AFFECTED ENVIRONMENT.

Table 2-1 summarizes Federally listed, proposed and candidate terrestrial wildlife species potentially occurring in Garfield County (USFWS 2015) and species on the Colorado BLM State Director's Sensitive Species List (BLM 2015) that may occur in the project area.

Table 2-1. Special Status Terrestrial Wildlife.

Federally Listed, Proposed, or Candidate Terrestrial Wildlife Species		
Species and Status	Habitat/Range Summaries	Occurrence/ Potentially Impacted
Canada lynx (<i>Lynx Canadensis</i>) Threatened	In the western US, lynx are associated with mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation. The Forest Service has mapped suitable denning, winter, and other habitat for lynx within the White River and Routt National Forests. The mapped suitable habitat comprises areas known as Lynx Analysis Units (LAUs) that are the approximate size of a female's home range. Several LAUs include small parcels of BLM lands. There are no LAUs or mapped lynx linkage areas in the project area.	Absent/No
Mexican spotted owl (<i>Strix occidentalis lucida</i>) Threatened	This owl nests, roosts, and hunts in mature coniferous forests in canyons and foothills. The key habitat components are old-growth forests with uneven-age stands, high canopy closure, high tree density, fallen logs and snags. The only extant populations in Colorado are in the Pikes Peak and Wet Mountain areas of south-central Colorado and the Mesa Verde area of southwestern Colorado.	Absent/No
Greater Sage-grouse (<i>Centrocercus urophasianus</i>) Candidate	Sage-grouse are found only in areas where sagebrush is abundant, providing both food and cover. Sage-grouse prefer relatively open sagebrush flats or rolling sagebrush hills. Within the CRVFO, sage-grouse are present in the northeast part of the Field Office in the Northern Eagle/Southern Routt population. While small (<500 birds), this population probably has, or had, a relationship with the larger population in Moffat, Rio Blanco and western Routt counties, and probably with the Middle Park population to the east. There is no preliminary priority or preliminary general habitat mapped in the project area.	Absent/No
Yellow-billed cuckoo (<i>Coccyzus americanus</i>) Threatened	This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (<i>Populus fremontii</i>) and willows (<i>Salix</i> sp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction. There is no proposed critical habitat in the Colorado River Valley Field Office.	Absent/No
Colorado BLM Sensitive Terrestrial Wildlife Species Present or Potentially Present in the Project Area		
Species	Habitat/Range Summaries	Occurrence/ Potentially Impacted

<p>Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)</p> <p>Fringed myotis (<i>Myotis thysanodes</i>)</p> <p>Spotted bat (<i>Euderma maculatum</i>)</p>	<p>Townsend's big eared bats and fringed myotis occur as scattered populations at moderate elevations on the western slope of Colorado. Habitat associations are not well defined. Both bats will forage for aerial insects over pinyon-juniper, montane conifer and semi-desert shrubland communities. These species roosts in caves, rock crevices, mines, buildings and tree cavities. Both species are widely distributed and usually occur in small groups. Townsend's big-eared bats are not abundant anywhere in its range due to patchy distribution and limited availability of suitable roosting. Spotted bats have been detected in Colorado in ponderosa pine woodlands or montane forests, pinyon-juniper woodlands, and riparian vegetation; over sand and gravel bars; and in open semidesert shrublands. The species needs access to water and suitable cracks and crevices in rocky cliffs for roosting. Limited information is available for this species in the CRVFO. No roosts or hibernaculum for any of these species are documented in the project area.</p>	Possible/No
<p>Rocky mountain bighorn sheep (<i>Ovis canadensis</i>)</p>	<p>Rocky Mountain bighorn sheep typically inhabit steep, precipitous mountain and canyon terrain with good visibility and escape terrain. The Glenwood Canyon herd's home range is north of the Colorado River. Individual sheep have forayed into the Lookout Mountain Allotment, but this is rare, and it is unlikely sheep would travel through the dense brush in the project area.</p>	Absent/No
<p>Northern goshawk (<i>Accipiter gentilis</i>)</p>	<p>Montane and subalpine coniferous forests and aspen forests; may move to lower elevation pinyon-juniper woodlands in search of prey during winter. Preys on small-medium sized birds and mammals. Breeds in coniferous deciduous and mixed forests. Nests are typically located on a northerly aspect in a drainage or canyon and are often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging.</p>	Absent/No
<p>Ferruginous hawk (<i>Buteo regalis</i>)</p>	<p>Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/ winter resident, non-breeding.</p>	Absent/No
<p>Golden eagle (<i>Aquila chrysaetos</i>)</p>	<p>Nesting/Roosting: cliffs and trees. Forages widely over open habitats, including grasslands and sagebrush, particularly in areas with abundant rabbits. Suitable mixes of sagebrush and cliffs can support high concentrations. Primary forages include small rodents, hares, and rabbits, and carrion during winter.</p>	Possible/No
<p>Bald eagle (<i>Haliaeetus leucocephalus</i>)</p>	<p>Nesting/Roosting: mature cottonwood forests along rivers. Foraging: fish and waterfowl along rivers and lakes; may feed on carrion, rabbits and other foods in winter.</p>	Possible/No
<p>American Peregrine Falcon (<i>Falco peregrinus anatum</i>)</p>	<p>Rare spring and fall migrant in western valleys. Peregrine falcons inhabit open spaces associated with high cliffs and bluffs overlooking rivers. The falcon nests on high cliffs and forages over nearby woodlands.</p>	Possible/No
<p>Greater Sage-grouse (<i>Centrocercus urophasianus</i>)</p>	<p>See Federally Listed, Proposed or Candidate Terrestrial Wildlife Species portion of table.</p>	Absent/No
<p>Columbian sharp-tailed grouse (<i>Tympanuchus phasianellus columbian</i>)</p>	<p>Use a variety of habitats within sagebrush, mountain shrub, and riparian areas. From spring to fall a component of denser riparian or mountain shrub vegetation is important for escape cover. Winter habitat contains a dominant component of deciduous trees and shrubs. In Colorado, leks typically occur in sagebrush.</p>	Absent/No

Black swift (<i>Cypseloides niger</i>)	Nest in colonies on vertical rock faces, near waterfalls or in dripping caves. Birds arrive in Colorado in June and take all summer to raise a single nestling. Adults forage widely on aerial insects.	Absent/No
Brewer's sparrow (<i>Spizella berveri</i>)	Summers in western Colorado mountain parks and is a spring/fall migrant at lower elevations. Sagebrush obligate with an apparently secure conservation status in Colorado. Primary habitat is mature big sagebrush 1.6-3 ft. tall with low to moderate canopy cover, and habitat patches ≥ 15 acres. Mesic sites, particularly riparian areas within sagebrush habitats, are also an important primary habitat component.	Absent/No
White-faced ibis (<i>Plegadis chihi</i>)	Primarily inhabits freshwater wetlands, especially cattail (<i>Typha</i> spp.) and bulrush (<i>Scirpus</i> spp.) marshes. Rare, non-breeding, summer migrant to western Colorado valleys and mountain lakes. Feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. Breeds in isolated colonies in mainly shallow marshes with "islands" of emergent vegetation.	Absent/No
Midget faded rattlesnake (<i>Crotalus viridis concolor</i>)	Found in northwestern Colorado, including western Garfield County. Sagebrush communities with an abundance of south-facing rock outcroppings and exposed canyon walls. Rocky outcrops are essential for cover, variable thermal conditions and hibernation.	Absent/No
Utah milk snake (<i>Lampropeltis triangulum taylori</i>)	In Colorado, milk snakes occur in shortgrass prairie, sandhills, shrubby hillsides, canyons and open stands of ponderosa pine in the foothills, pinyon-juniper woodlands, and arid river valleys. <i>L. triangulum taylori</i> occurs in west-central Colorado below 6,000 feet elevation.	Absent/No

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Due to the absence of critical habitat, occupied habitat, or known occurrences of any Federally listed, proposed, or candidate terrestrial wildlife species in the project area, the Proposed Action would have no effect on listed wildlife populations.

Special Status Raptors. Bald eagles were removed from the federal threatened and endangered species list in 2007, but are still protected under the MBTA and Bald and Golden Eagle Protection Act and are currently listed as a BLM sensitive species. The western portion of the project area overlaps with mapped bald eagle winter range. Peregrine falcons have been documented nesting along the cliffs above the Roaring Fork River south of the project area, and potential nesting habitat is mapped in Glenwood Canyon. Although special status raptors may fly over the project area and forage in the project vicinity, nesting habitat is not available in the project area.

No Action Alternative. No thinning or pile burning would occur, so special status wildlife would not be displaced by activities associated with project implementation. There would be no changes in cover or food availability.

ANALYSIS OF LAND HEALTH STANDARD 4 FOR SPECIAL STATUS TERRESTRIAL WILDLIFE .

Based on the Roaring Fork Land Health Assessment (BLM 2011), the Lookout Mountain Allotment was meeting Standard 4 for special status terrestrial wildlife. The Proposed Action would not affect the continued achievement of this standard.

TERRESTRIAL WILDLIFE

AFFECTED ENVIRONMENT.

Diverse plant communities across the CRVFO support a variety of terrestrial wildlife that summer, winter, or migrate through the area. Wildlife need to move across the landscape for food, cover and in response to seasonal conditions. Human development and activities have fragmented habitat, and in some cases, created barriers to wildlife movement. Factors contributing to wildlife disturbance or degradation and fragmentation of habitat include power lines, pipelines, fences, public recreation use, residential and commercial development, vegetation treatments, livestock and wild ungulate grazing, oil and gas development, fire suppression, roads and trails.

Big Game. Mule deer (*Odocoileus hemionus*) and Rocky Mountain elk (*Cervus elaphus nelsonii*) are recreationally important species that occur in the project area. BLM managed lands provide a large portion of the undeveloped habitat for big game in Colorado. CPW maintains maps of habitat for big game and other wildlife species. The project area is mapped as elk and mule deer summer range, elk winter range, and a portion of the area is mapped as mule deer winter range.

Other Mammals. Numerous small mammals could reside within the planning area, including mice (*Peromyscus* spp.), woodrats (*Neotoma* spp.), ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), skunks (*Mephitis mephitis*), raccoons (*Procyon lotor*) and porcupines (*Erethizon dorsatum*). Many of these mammals are prey for raptors and larger carnivores. Larger carnivores expected to occur include bobcats (*Lynx rufus*) and coyotes (*Canis latrans*). CPW has mapped the entire project area as mountain lion (*Felis concolor*) and black bear (*Ursus americanus*) habitat. Mountain lions are most likely to be in the vicinity when mule deer are present. Bats documented in Northwest Colorado that could occur in the CRVFO that are not on the BLM special status species list include pallid bats (*Antrozous pallidus*), big brown bats (*Eptesicus fuscus*), spotted bats (*Euderma maculatum*), silver-haired bats (*Lasiorycteris noctivagans*), hoary bats (*Lasiurus cinereus*), California myotis (*Myotis californicus*), Western small-footed myotis (*M. ciliolabrum*), long-eared myotis (*M. evotis*), little brown myotis (*M. lucifugus*), long-legged myotis (*Myotis volans*), Yuma myotis (*M. yumanensis*), big free-tailed bats (*Nyctinomops macrotis*), canyon bats (*Parastrellus hesperus*), and Brazilian free-tailed bats (*Tadarida brasiliensis*).

Gallinaceous Birds. Game birds that could be found in the project vicinity include dusky grouse (*Dendragapus obscurus*) and wild turkey (*Meleagris gallopavo*). The project area is mapped as turkey overall range.

Waterfowl. There are no rivers, perennial streams, reservoirs, or ponds in the project area.

Reptiles. Reptile species most likely to occur in the project area include sagebrush lizards (*Sceloporus graciosus*), prairie and plateau lizards (*S. undulatus*), tree lizards (*Urosaurus ornatus*), gopher snakes or bullsnakes (*Pituophis catenifer*), and western terrestrial garter snakes

(*Thamnophis elegans*). Gopher snakes can be found throughout Colorado in most plant communities, including riparian areas, semidesert and mountain shrublands, pinyon-juniper woodlands, and ponderosa pine and other montane woodlands. Western terrestrial garter snakes occur throughout most of western Colorado, usually below 11,000 feet. Smooth green snakes (*Opheodrys vernalis*) can be present in riparian areas, but in western Colorado, may also be common in mountain shrublands far from water (Hammerson 1999).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Historically the vegetation on Lookout Mountain likely experienced periodic wildfires. The mechanical thinning, hand thinning, and pile burning would result in some effects that are similar to a wildfire. Most terrestrial wildlife could disperse outside the Project Area during project implementation to avoid the noise, human presence, equipment, and fire associated with the project. Cover and some foods would be less available following project implementation.

Big Game. Mechanical and hand thinning would improve mule deer and elk access into the area and increase the quality and quantity of available browse. These benefits would likely be short-term (<10 years), as Gambel oak and other shrubs are expected to regenerate quickly.

Other Mammals. Small mammals could temporarily become more vulnerable to predation due to reduced cover. Mammals that nest and/or forage in dense vegetation or in litter (e.g., microtine rodents, woodrats) could be negatively impacted, while mammals that forage in relatively open areas (e.g., ground squirrels, peromyscine rodents) could benefit from the proposed action. Species richness is not expected to change appreciably, but relative abundance of species could change within the project area. Larger mammals should be able to disperse from the treatments. Herbivores could benefit from a potential increase in herbaceous vegetation, and predators could potentially benefit from increased access to small prey. The duration of these impacts is expected to be relatively short due to the rapid revegetation of treated areas and rapid reproduction by small mammals (Riggs et al. 1996).

Gallinaceous Birds. Wild turkeys can benefit from a patchy distribution of Gambel oaks, and could potentially benefit from the proposed action.

Waterfowl. The project is not expected to impact waterfowl due to the distance from rivers, streams, reservoirs, ponds and associated riparian vegetation.

Reptiles. Reptiles could potentially avoid the direct effects of thinning and pile burning by either moving away from the disturbance, seeking shelter under rocks, or burrowing into the soil, but some mortalities could occur.

No Action Alternative. No mechanical thinning, hand thinning, or pile burning would occur, resulting in no impacts to terrestrial wildlife. Mule deer and elk would not benefit from improved access and increased forage quality and quantity of available browse. Wild turkeys would not benefit from a change in Gambel oak patch size.

ANALYSIS OF LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

Based on the Roaring Fork Land Health Assessment (BLM 2011), the Lookout Mountain Allotment was meeting Standard 3 for terrestrial wildlife. The Proposed Action would not affect the continued achievement of this standard.

WASTES: HAZARDOUS OR SOLID

AFFECTED ENVIRONMENT.

Implementation of the proposed activities would require the use of fuel and lubricants to operate chainsaws and hydro-axe equipment.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Fuel and lubricants would be stored in appropriate containers and proper handling should prevent spills or leaks. Due to the relatively small amount of fuel and lubricants involved to implement the project, environmental impacts would be negligible, if best management practices are implemented successfully.

No Action Alternative. Under the no action alternative there would be no fuel or lubricants present.

CUMULATIVE EFFECTS.

Soil and Water. Cumulative impacts to soil and water resources can occur from existing roads and trails throughout the project area. Roads and trails can contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking. Other impacts such as vegetation treatments, weed treatments, and livestock grazing may also change water infiltration or runoff rates and affect soil and water resources. Based on limited land management activities occurring across the project area, it is assumed that cumulative effects to soil and water are minor and unmeasurable if proper best management practices are implemented.

Wildlife, Including Special Status Species. The area covered by the Proposed Action only comprises a small portion of the watershed. Many other land use activities (e.g., recreation, housing, road maintenance, livestock grazing) occur within the watershed. All of these activities have altered the amount of suitable and potentially suitable habitats for terrestrial wildlife species. Cumulatively, many of the future actions planned on private and other lands may have some undetermined effect on wildlife including special status species habitat. The Proposed Action would create negligible landscape-level cumulative impacts to wildlife when viewed in comparison with those activities currently occurring and reasonably certain to occur on adjacent private/other lands.

CONSULTATION.

During the scoping process users of the lookout mountain communications site operators were contacted to be made aware of the projects. The operators supported the project.

LIST OF PREPARERS.

Members of the CRVFO Interdisciplinary Team who participated in the impact analysis of the Proposed Action and alternatives, development of appropriate mitigation measures, and preparation of this EA are listed below, along with their areas of responsibility.

Table 3-1. BLM Interdisciplinary Team Authors and Reviewers.

Name	Title	Areas of Participation
Rusty Stark	Fire Management Specialist	Fire/Fuels/NEPA Lead
Carla DeYoung	Ecologist	Areas of Critical Environmental Concern; T/E/S Plants; Vegetation; Wetlands and Riparian Zones
Greg Wolfgang	Outdoor Recreation Planner	VRM, Recreation, Travel Management
Kim Leitzinger	Outdoor Recreation Planner	Wild and Scenic Rivers, Wilderness
Erin Leifeld	Archaeologist	Cultural Resources and Native American Religious Concerns
Hilary Boyd	Wildlife Biologist	Aquatic Wildlife Including T/E/S, Migratory Birds, and Terrestrial Wildlife Including T/E/S
Pauline Adams	Hydrologist	Soil, Water, Air, Geology, HazMat
Kristi Wallner	Rangeland Management specialist	Plants: Invasive non-native species (Noxious Weeds)
Brian Hopkins	Assistant Field manager	NEPA Compliance

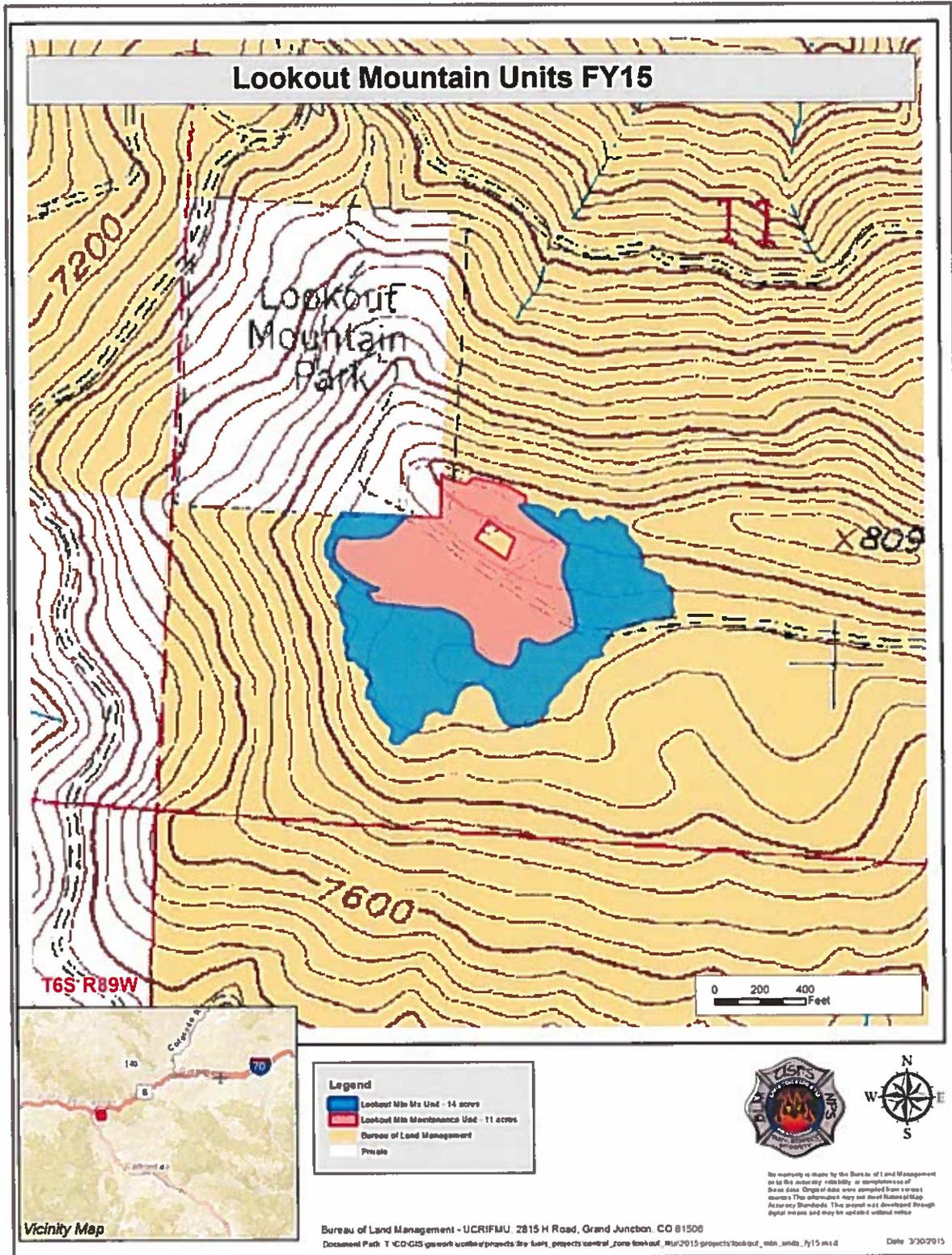
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Appendix A - Maps



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COLORADO RIVER VALLEY FIELD OFFICE
SILT, COLORADO

FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-CO-040-2015-0027 EA

I have reviewed the direct, indirect and cumulative effects of the selected alternative documented in the EA referenced above. The effects of the selected alternative are disclosed in the Alternatives and Environmental Consequences sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

(a) Context. This requirement means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the selected alternative. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant (40 CFR 1508.27):

(b) Intensity. This requirement refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following are considered in evaluating intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and/or adverse.

Impacts associated with these treatments are identified and discussed in the Affected Environment and Environmental Consequences sections of the EA. The selected alternative will not have any significant adverse impacts on the resources identified and described in the EA.

2. The degree to which the action affects health or safety.

The selected alternative will not significantly affect public health or safety. The purpose of the selected alternative is to allow for multiple uses while maintaining or removing vegetation for hazardous fuels reduction. Similar actions have not significantly affected public health or safety.

3. Unique characteristics of the geographic area such as prime and unique farmlands, caves, wild and scenic rivers, wilderness study areas, or ACECs.

Due to the timing and the methodology of treatment it is viewed that the treatment will have negligible effects on the Glenwood Debris Flow ACEC.

4. The degree to which the effects are likely to be highly controversial.

The possible effects of conducting small hazardous fuels reduction activities to protect communication facilities are not likely to be highly controversial.

5. The degree to which the effects are highly uncertain or involve unique or unknown risks.

The possible effects on the human environment are not highly uncertain nor do they involve unique or uncertain risks. The technical analyses conducted for the determination of the impacts to the resources are supportable with use of accepted techniques, reliable data, and professional judgment. Therefore, I conclude that there are no highly uncertain, unique, or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.

The EA is specific to area defined in the proposed action and alternatives. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of these identified areas.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The Proposed Action is similar to treatments that have occurred in the same area in the past. Similar treatments have not had recognizable or noticeable cumulatively significant impacts.

8. The degree to which the action may adversely affect scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places.

There are known cultural sites in the project area. These known sites are identified and avoided so that they are not impacted by treatment activities. There is potential for additional cultural resources to be documented within the treatment area. Additional cultural surveys will be conducted on new treatments to identify any cultural resources that may be impacted. When cultural sites are identified appropriate measures will be taken to avoid impacting them.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

There is no endangered or threatened species or its habitat included within the assessment area.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The selected alternative does not violate or threaten to violate any Federal, State, or local law or requirements imposed for the protection of the environment.

DECISION RECORD

DOI-BLM-CO-040-2015-0027 EA

The Environmental Assessment (EA) analyzing the environmental effects of the Proposed Action has been reviewed. The project design, project design features, mitigation measures and stipulations result in a Finding of No Significant Impact (FONSI) on the human environment. Therefore, an Environmental Impact Statement (EIS) is not necessary to further analyze the environmental effects of the Proposed Action.

DECISION.

I have decided to choose the Proposed Action as described with mitigation. The project is not expected to adversely impact resources long-term, and the benefits of the treatments outweigh any short-term impacts. The fuels reduction project in the Lookout Mountain communications site will benefit the community as it will reduce the risk of wildfire, wildfire severity and intensity if one were to occur in treatments areas as well as reduce the risk of damage to private property.

Mitigation.

Cultural Resource Stipulations. If subsurface cultural values are uncovered during operations, all work in the vicinity of the resource will cease and the authorized officer with the BLM notified immediately. The operator shall take any additional measures requested by the BLM to protect discoveries until they can be adequately evaluated by the permitted archaeologist. Within 48 hours of the discovery, the State Historic Preservation Officer (SHPO) and consulting parties will be notified of the discovery and consultation will begin to determine an appropriate mitigation measure. BLM in cooperation with the operator will ensure that the discovery is protected from further disturbance until mitigation is completed. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

Native American Human Remains. Pursuant to 43 CFR 10.4(g), the holder must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony on federal land. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery that could adversely affect the discovery. The holder shall make a reasonable effort to protect the human remains, funerary items, sacred objects, or objects of cultural patrimony for a period of thirty days after written notice is provided to the authorized officer, or until the authorized officer has issued a written notice to proceed, whichever occurs first.

Weeds. The project leader is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in

areas with noxious weeds, equipment should be cleaned prior to moving off site. The BLM fuels specialist or noxious weed coordinator will monitor the project area at least once annually during the growing season for five years following the treatments to detect the presence of any invading noxious weeds. Any Colorado-listed noxious weeds will be promptly treated and controlled according to the appropriate timing for each particular weed species. A pesticide use proposal must be completed and approved by BLM prior to the use of herbicides.

Soils. Minimize surface disturbance on slopes greater than >30% and fragile soils.

Visual. All vegetation treatment methods should be monitored to avoid the creation or enhancement of linear features within the landscape. Feathering or undulating edges should be incorporated into treatments. Islands or pockets of vegetation should be left intermittently and in irregular patterns throughout the project area. All vegetation treatments should repeat natural mosaic openings found within the adjacent landscape.

Wildlife. No surface disturbing activities will occur from May 15 through July 15 to minimize impacts to breeding migratory birds. This timeframe encompasses the core breeding period for the majority of migratory birds in the project area.

RATIONALE.

This decision is in conformance with the Colorado River Valley Field Office Record of Decision and Approved Resource Management Plan (June 2015). The decision to implement the proposed action with the attached mitigation measures was selected as it will best meet the purpose and need for action as well as providing adequate protection for natural and cultural resources. Overall, the project would remove a small amount of vegetation, reducing the threat of damage to critical infrastructure to Garfield County due to a wildland fire.

NAME OF PREPARER. Rusty Stark, Fire Management Specialist.

SIGNATURE OF AUTHORIZED OFFICIAL.



Brian Hopkins
Assistant Field Manager
Colorado River Valley Field Office

10-13-15

Date