

**U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641**

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2010-0233-EA

PROJECT NAME: Winter Valley Gulch Allotment Transfer

LEGAL DESCRIPTION:

WINTER VALLEY GULCH LEGAL DESCRIPTION		
Township	Range	Section, Lots or Portions thereof
5 North	98 West	27, 28, 33, 34
4 North	98 West	8, 9, 16, 17

APPLICANT: Tuttle Livestock (Rex Tuttle)

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: The Winter Valley Gulch (06329) grazing allotment (Figure 1) was previously leased by Brady Family Partnership for cattle grazing as outlined in the table below.

Table 1: Previous Grazing Permittees Cattle Authorization

Allotment		Livestock		Grazing Period				
Number	Name	Kind	Number	Begin	End	%PL	Type Use	AUM's
6329	Winter Valley Gulch	Cattle	47	5/16	6/15	100	Active	48

In the spring of 2009 while preparing for their grazing permit renewal, it was discovered Brady Family Partnership no longer owned the base property associated with the grazing allotment. Their permit was immediately cancelled and the new property owner was contacted about the grazing allotment. The new property owner expressed no interest in acquiring the grazing and failed to make application within 90 days of the purchase as outlined in 43 C.F.R. 4110.2-2(b).

On February 17, 2010, White River Field Office (WRFO) received an application from Tuttle Land and Livestock for grazing preference on the Winter Valley Gulch allotment. Tuttle Land and Livestock currently has the grazing permit for the Elk Springs (06306) grazing allotment which completely surrounds the Winter Valley Gulch allotment along with several other grazing

allotments in the area. Transfer of this allotment to Tuttle Land and Livestock requires an analysis changing livestock kind from cattle to sheep.

Proposed Action: Authorize Tuttle Land and Livestock to graze sheep on the Winter Valley Gulch allotment as outlined below. Under this proposal, Winter Valley Gulch would no longer be a stand-alone allotment and would become part of the winter valley pasture in the Elk Springs allotment (Figure 2). The first table shows the current grazing schedule in the winter valley pasture and the second table shows the proposed grazing schedule for the pasture. The proposed schedule would authorize Tuttle Land and Livestock to stay 6 days longer in the Winter Valley pasture for a total increase of 67 animal unit months (AUM's), 51 of which are BLM AUM's.

Table 2: Current authorization on the Winter Valley pasture of the Elk Springs allotment.

ALLOTMENT			LIVESTOCK		GRAZING PERIOD				
Name	Number	Pasture	Kind	Number	Begin	End	%PL	Type Use	AUM's
Elk springs	06306	Winter Valley	Sheep	1700	11/20	12/15	76	Active	221

Table 3: Proposed permit for the Winter Valley pasture of the Elk Springs allotment.

ALLOTMENT			LIVESTOCK		GRAZING PERIOD				
Name	Number	Pasture	Kind	Number	Begin	End	%PL	Type Use	AUM's
Elk springs	06306	Winter Valley	Sheep	1700	11/20	12/21	76	Active	272

No Action Alternative: The application for grazing preference of the Winter Valley Gulch allotment to Tuttle Land and Livestock for sheep grazing would not be authorized. The Winter Valley Gulch allotment would continue to be unleased.

PURPOSE & NEED FOR THE ACTION:

The purpose of the proposed action is to provide the qualified grazing applicant with a permit to graze livestock on the grazing allotment described above managed by the BLM. The need for the action is established by the BLM's responsibility under the Taylor Grazing Act (1967), as amended, to provide for the orderly use of vacant rangelands for livestock grazing, and to stop injury to public grazing lands by preventing overgrazing and soil deterioration that the livestock industry depends on.

Decision to be Made: The BLM will determine whether or not to grant the applicant with a grazing permit, and if so, under what terms and conditions.

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: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: 2-22 and 2-23

Decision Language: Maintain or enhance healthy rangeland vegetative composition and species diversity, capable of supplying forage at a sustained yield to meet the demand for livestock grazing. Provide for adequate forage plant growth and/or regrowth opportunity. With minor exceptions, livestock grazing will be managed as described in the 1981 Rangeland Program Summary (RPS).

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover 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. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

AIR QUALITY

Affected Environment: This Proposed Action is located in rural northwest Colorado in the White River Basin. Industrial facilities in the White River Basin include coal mines, soda ash mines, natural gas processing plants, and power plants. Due to these industrial uses, increased population, and oil and gas development in this region, emissions of air pollutants in the White River Basin due to exhaust emissions and dust (particulate matter) are likely to increase into the future. Despite increases in emissions, overall air quality conditions in the White River Basin are likely to continue to be good for some time to come due to effective atmospheric dispersion conditions and limited transport of air pollutants from outside the area. The White River Field Office (WRFO) resource area has been classified as either attainment or unclassified for all air pollutants, and most of the area has been designated for the prevention of significant deterioration (PSD) class II for Dinosaur National Monument located nearby.

Environmental Consequences of Alternative A: The environmental consequences to air quality from Alternative A would include the periodic and local production of dust due to sheep trailing. Dust levels may be noticeable locally and especially during drier times. However, since most of the use will be in the winter with snow cover and frozen soil, dust production is expected to be minimal. The Colorado Air Pollution Control Division (APCD) estimates the maximum PM₁₀ levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms

per cubic meter ($\mu\text{g}/\text{m}^3$). This alternative is not likely to exceed this western Colorado dust standard.

Environmental Consequences of Alternative B, No Leasing Alternative: Impacts from the no-action alternative would result in no dust production due to grazing activities.

Mitigation: None.

SOILS (includes a finding on Standard 1)

Affected Environment: The table below is a breakdown of soil units and associated ecological sites for the Winter Valley Gulch allotment. Soils analyzed in this document have been covered in the Rio Blanco County Soil Survey or the Moffat County Soil Survey. The soil surveys delineate individual soil unit polygons and associated ecological sites.

Table 4: Soil Unit Breakdown for the Winter Valley Gulch Allotment

Winter Valley Gulch Allotment - Soil Summary		
BLM Acres	Soil Unit	Ecological Site
47	Cowestglen sandy loam, 0-3% slope	Foothill Swale
3	Forelle-Evanot complex, 1-12% slope	Rolling Loam
16	Grieves loamy fine sand, 1-12% slope	Sandy Foothills
92	Kemmerer-Grapit complex, 15-65% slope	Foothills Juniper
78	Kemmerer-Yamo complex, 5-30% slope	Clayey slopes
60	Moyerson-Rentsac Complex, 15-45% slope	Clayey Slopes
702	Rentsac-Moyerson complex, 25-65% slope	Foothill Juniper
30	Schooner-Rock outcrop complex, 5-45% slope	Sandy Juniper
233	Torriorthents-Rockoutcrp, sandstone complex, 30-75% s*	---
238	Yamo loam, 3-15% slope	Clayey Foothills
1499		

Soils that are occupied with plant communities rated as a mid seral, late seral, or PNC (Potential Natural Community) have sufficient cover of desirable plant species to produce adequate litter and ground cover to minimize runoff and provide for soil protection (refer to the Vegetation section below). These soils are meeting the Colorado Public Land Health Standards for upland soils.

Soils that have sites rated as early seral plant communities do not have sufficient diversity and/or cover of native plant species to provide effective ground cover to prevent overland flow, runoff, and general soil degradation. These soils are experiencing a certain degree of pedestaling, minor expression of rills, and some areas have active gully erosion. The establishment of cheatgrass and other invasive annuals on these soils is the primary reason for soil degradation because these

species do not have root structures and above ground biomass capable of stabilizing/protecting soils. Early seral sites in this area generally have soils that are typically within drainage bottoms and toe slopes such as Cowestglen sandy loam, Forelle-Evanot complex, and Yamo loam.

Environmental Consequences of the Proposed Action: Implementation of the Proposed Actions would eliminate use in the spring during the critical growth period for vegetation and switch all grazing use to the winter when vegetation is dormant. This grazing schedule would benefit soils by allowing increased plant vigor, production, and seed head production during the spring especially on mid and late seral ecological sites. This increase production will increase litter accumulations, allow root-structures capable of holding soils in place to establish, and increase above-ground biomass to reduce rain-fall impact and prevent sheet erosion.

Acres classified as early seral as a result of cheatgrass invasion would not improve from this alternative because these areas have crossed a transitional threshold that can't be fixed by grazing management alone. These areas will require intense management actions such as burning, chemical treatment, and seeding to start natural successional processes.

Environmental Consequences of the No Action Alternative: This allotment is currently not permitted and implementation of the no action alternative would keep this allotment as an area not permitted for grazing use. Implementation of this alternative would result in the largest increase in vegetation with root structures and above-ground biomass capable of stabilizing soils. Mid and late seral ecological sites would receive the greatest benefit from this alternative. Early seral sites dominated by invasive annuals still would not improve from no grazing since they have crossed a transitional threshold.

Mitigation: None.

Finding on the Public Land Health Standard for upland soils: Generally soils within the allotment are classified as mid to late seral soils and have vegetative cover capable of stabilizing soils and preventing general soil degradation. Portions of soils located within the Kemmerer-Yamo complex and the Cowestglen sandy loam are currently not meeting land health standards as a result of annual plant domination. Approximately 10 acres within these soil units are not meeting standards and would require intense management actions along with grazing management to improve soil stability, and make progress towards meeting land health standards.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous wastes on the subject lands. No hazardous materials are known to have been used, stored, or disposed of and there are no known solid waste dump sites in the allotment.

Environmental Consequences of the Proposed Action (Proposed Action): No listed or extremely hazardous materials are proposed for use in this project. All applications of pesticides would be in compliance with BLM requirements.

Environmental Consequences of the No Grazing Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: Please contact the BLM – WRFO Hazardous Materials Coordinator at (970) 878-3800 and/or the Colorado Department of Public Health and Environment (CDPHE) through the 24-hour spill reporting line at 1(877)518-5608, if the permittee suspects the release of any chemical, oil, solid waste, petroleum product, or sewage within the allotment.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The Proposed Action will change this allotment from cattle use to winter sheep use and allow for public grazing where there is none currently authorized. This allotment is surrounded by other allotments that are currently managed for sheep use. There are some areas within the allotment with greater than 25% slopes and a small pocket of saline soils. The allotment is near the divide with the Yampa and White Rivers in the Twelve Mile Gulch area which drains into Wolf Creek which is tributary to the White River.

Wolf Creek has been identified as a fragile watershed in the 1997 (ROD/RMP). Wolf Creek is ephemeral and has been identified as contributing relatively high amounts of sediment to the White River during summer and late fall rain storms. Wolf Creek contributes to White River segment 13a that includes tributaries to the White River from Douglas Creek to Piceance Creek. These tributaries are protected for Warm Water 2, Non-Contact Recreation and Agriculture by CDPHE. The warm designation means the classification standards would be protective of aquatic life normally found in waters where the summer weekly average temperature frequently exceeds 20 °C. The Warm 2 designation means that it has been determined that these waters are not capable of sustaining a wide variety of warm water biota.

Environmental Consequences of the Proposed Action: In general, grazing removes vegetation that may help reduce rain splash erosion and lessen surface runoff. Hoof action from trailing creates preferential flow paths that can concentrate overland flow and intercept subsurface flows and may cause direct erosion on steep slopes and along the sides of gullies. The proposed use will be winter use when there is snow cover over most of the allotment. This means the water source for sheep will be the snow and there is not a need for developed water sources. Plants that are grazed by the sheep will be in the dormant stage in the winter and therefore grazing impacts are not likely to be damaging to the continued success of the plants needed for soil stability. No increases to surface runoff or increase sedimentation are expected from this action due to the proposed winter use of this allotment.

If direct erosion impacts occur, they will likely be localized and isolated to areas with poor soils, steep slopes, gullies and/or in areas with saline soils. With good grazing management these impacts are not expected to be beyond those typically experienced on public lands from livestock grazing. The BLM-WRFO manages grazing on public lands according to the 1997 RMP for the WRFO that outlines Standards and Guidelines for Public Land Health and Colorado Livestock Grazing Management Guidelines. These Standards include guidelines for upland soils, riparian systems, healthy desirable plant species, and water quality (both surface and ground). Standards

would be used to identify and correct areas of localized erosion or other problems in the Wolf Creek watershed, if they occur as a result of this action.

Environmental Consequences of the No Grazing Alternative: Nonuse of this area for grazing would generally improve water quality as compared to the Proposed Action.

Mitigation: None identified.

Finding on the Public Land Health Standard for water quality: This lease change would not cause the exceedance of the Colorado water quality standards.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: There are no riparian or wetlands found on BLM lands within the Winter Valley Gulch allotment.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: Not applicable.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The following table lists the plant community appearance for the ecological sites or woodland types on allotments associated with the Proposed Action, along with the predominant plant species comprising the composition of each community. While forb species are important to the diversity of a community and may make up to 25 to 30% of the composition of several of the plant communities listed, they are not presented in the following table because they generally are not contributors to the appearance or dominance of the community.

Table 5: Ecological Site Breakdown for the Winter Valley Gulch Allotment

Ecological Site /Woodland Type	Plant Community Appearance	Predominant Plant Species in the Plant Community	Acres
Clayey Foothills	Grass/Open Shrub Shrubland	Western wheatgrass, mutton grass, Indian rice grass, squirreltail, June grass, Wyoming big sagebrush, black sagebrush	238
Clayey Slopes	Grassland	Salina wildrye, mutton grass, western wheatgrass, June grass, squirreltail, shadscale	138
Foothill Juniper	Pinyon/Juniper Woodland	Pinyon Pine, Utah Juniper, bluebunch wheatgrass, Wyoming big sagebrush, antelope bitterbrush, Indian ricegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass, western wheatgrass	793

Foothill Swale	Grass/Open Shrub Shrubland	Basin wildrye, western wheatgrass, slender wheatgrass, streambank wheatgrass, Indian rice grass, Nevada bluegrass, basin big sagebrush, fourwing saltbush, rubber rabbitbrush	47
Rolling Loam	Sagebrush/grass Shrubland	Wyoming big sagebrush, winterfat, low rabbitbrush, horsebrush, bitterbrush, western wheat grass, Indian rice grass, squirreltail, June grass, Nevada and Sandberg bluegrass	3
Sandy Foothills	Grass/Open Shrub Shrubland	Wyoming big sagebrush, needleandthread, Indian ricegrass, antelope bitterbrush	16
Sandy Juniper	Pinyon/Juniper Woodland	two-needle pinyon, Utah Juniper, Indian ricegrass, bluebunch wheatgrass, antelope bitterbrush, big sagebrush, bottlebrush squirreltail, needleandthread	30

A large portion of this allotment burned in 2000 during the winter valley fire. The fire burned most of the eastern half of the allotment that is made up of mainly pinyon-juniper vegetation types. These areas are generally at an early to mid-seral stage currently, but are meeting land health standards.

Portions of the clayey foothills and clayey slopes ecological sites were also impacted by the fire. These areas were re-seeded following the fire using native seed mix. In general, monitoring done in 2005 and 2006 showed good establishment of native grasses and forbs within these burned areas, and they are currently meeting land health standards. It is estimated that 8 acres within the foothill swale and 2 acres in the clayey foothills ecological sites are dominated by cheatgrass and have crossed a transitional threshold that cannot be corrected by grazing management alone. Foothills swales and sandy foothills are currently meeting land health standards for vegetation and are generally in a mid to late seral ecological state.

Environmental Consequences of the Proposed Action: Impacts from the Proposed Action are expected to benefit vegetation within the allotment. Previous grazing occurred starting on May 16 during the critical growing season. Critical growing season use has the potential to increase stress on vegetation, limit above ground biomass, reduce plant vigor, and reduce reproduction/seed head production. Under the Proposed Action, all grazing would be done in the winter while vegetation is dormant, therefore limiting stress on individuals.

The change in livestock class from cattle to sheep will result in an increased amount of use on shrubs within the allotment since sheep are more of browsers than cattle which generally graze primarily on grass. However, if livestock is managed properly, it will not have a significant impact on shrub growth, vigor, and reproduction.

Environmental Consequences of the No Action Alternative: Vegetation response under the no action alternative would be beneficial. Currently the Winter Valley Gulch allotment is not permitted to anyone and is not being grazed by livestock. Under the no action alternative, the allotment would continue to be unpermitted. It would be expected that there would be an increase in vegetation vigor, cover, litter accumulation and biomass especially within the early and mid-seral ecological sites if the no action alternative is implemented.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Currently 1,255 of the BLM acres within the Winter Valley Gulch allotment are meeting land health standards for vegetation. A large portion of the allotment burned during the winter valley fire, and they are currently at an early to mid-seral stage. Approximately 10 acres within the clayey foothills and clayey slopes ecological sites are not currently meeting land health standards due to monocultures of cheatgrass and other early seral annuals. These areas have generally crossed a transitional threshold that cannot be corrected through grazing management alone. The remaining 233 acres within the allotment are not classified because they are generally rock-outcroppings, gullied lands, or badlands.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Within the Winter Valley Gulch allotment the invasive alien cheatgrass (*Bromus tectorum*) is found scattered throughout portions of the allotment. In general its occurrence and distribution is a consequence of historical livestock grazing practices and un-revegetated soil disturbance associated with roads and mechanical equipment. Cheatgrass has the greatest influence within the lower elevations of the allotment.

Other weeds known to occur within the area of the Proposed Action are musk thistle (*Carduus nutans*), bull thistle (*Cirsium vulgare*), Russian knapweed (*Acroptilon repens*), and Perennial pepperweed (*Lepidium latifolium*).

On an adjacent allotment to the east of Winter Valley Gulch and Elk Springs, a small patch of less than 0.1 acres of Russian knapweed occurs within the disturbance of BLM road 1506 (T3N, R99W, Sec. 18, SE). This small infestation was discovered in 2005 and was treated.

Perennial pepperweed occurs around and below Peterson Draw Reservoir #1 (#0821) (T4N, R100W NWSE Sec 23), down the draw to its confluence with Wolf Creek, and down the Wolf Creek drainage. The estimated acreage of infestation is 10 acres. Also, perennial pepperweed occurs on the Massadona allotment at Divide Creek Detention Dam (#1151) (T3N, R100W SESW Sec 13) along with bull thistle and musk thistle. These infestations have been treated for the past for several years and are currently at a manageable level.

Environmental Consequences of the Proposed Action: The Proposed Action's adjusted season of use will provide a greater opportunity for the replenishment of root reserves, biomass accumulation, and plant propagation of native species; thereby aiding in the rangeland's ability to naturally compete with invasive, non-native species. This affect would be slight in nature due to the threshold that has been crossed by cheatgrass on 10 acres within the allotment and a lack of known noxious weeds. Grazing permittees are important to the discovery and control of noxious weeds due the permittees on the ground affiliation and knowledge on assigned allotments. Livestock will continue to act as a vector for seeds, and provide an opportunity for seeds to be transported onto the allotment from other areas. On early seral ecological sites, the majority of areas are not expected to change in perennial cover because they have crossed a threshold of annual plant domination.

Environmental Consequences of the No Action Alternative: A short term increase in both perennial cover and soil surface litter accumulation would occur under the no action alternative; thereby aiding in the rangeland's ability to naturally compete with invasive, non-native species. This affect would be slight in nature due to the threshold that has been crossed by cheatgrass on 10 acres within the allotment and a lack of other known noxious weeds. There would be no authorized grazing permittee to monitor the rangelands for noxious weed outbreaks, but potential for weed seeds to be transported onto the allotment as a result of livestock would be eliminated.

On early seral ecological sites, such as the mono-culture of cheatgrass, the majority of areas are not expected to change in perennial cover because they have crossed a threshold of annual plant domination which would require intensive management actions such as herbicide treatments and seeding to re-start successional processes.

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: There are no plant species listed, proposed, or candidate to the Endangered Species Act, or plants considered sensitive by the BLM, that are known to inhabit areas influenced by the Proposed Action.

Environmental Consequences of the Proposed Action: The proposed action is not expected to affect special status plant species or associated habitats.

Environmental Consequences of the No Action Alternative: The no action alternative is not expected to affect special status plant species or associated habitats.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives are not expected to affect populations or habitats of plants associated with the Endangered Species Act or BLM sensitive species and, as such, should have no influence on the status of applicable Land Health Standards.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animal species listed, proposed, or candidate to the Endangered Species Act, or those considered sensitive by the BLM, that are known to inhabit or derive important use from the project area.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable influence on special status animal species or associated habitats.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence special status animal species or associated habitats.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives would have no influence on populations or habitats of animals associated with the Endangered Species Act or BLM sensitive species and, as such, would have no influence on the status of applicable land health standards.

MIGRATORY BIRDS

Affected Environment: The Winter Valley pasture ranges in elevation from 5600 to 6700 feet. Roughly 800 acres are steep, rugged slopes dominated heavily by juniper woodlands. Valley bottoms (~376 acres) are comprised of open shrub (Wyoming big and black sagebrush) and grassland (June grass, Indian ricegrass, squirreltail etc.) communities. Much of the eastern half of the allotment burned in 2000 and is currently in an early to mid seral state.

The vegetation communities that comprise this pasture provide nesting habitat for a variety of migratory bird species during the breeding season (mid-May through mid-July). Grassland associates commonly found throughout this pasture include western meadowlark, horned lark, sage thrasher, and sage sparrow. Piñon-juniper associates include Bewick's wren and black-throated gray warbler. Species designated by US Fish and Wildlife Service (USFWS) as Birds of Conservation Concern (USFWS 2008) include: Brewer's sparrow (sagebrush communities), pinyon jay and juniper titmouse (piñon-juniper woodlands). Brewer's sparrow is common in virtually all sagebrush and mixed shrub communities in northwest Colorado. Juniper titmouse and pinyon jay are likely widely distributed at appropriate densities throughout the pasture's woodland habitats.

Environmental Consequences of the Proposed Action: It is expected that the change in livestock kind (cattle to sheep) and the season of use (5/16 – 6/15 vs. 11/20 – 12/15) will benefit migratory birds. Use by livestock during the nesting season typically reduces the amount of herbaceous understory available for forage and cover resources. Trampling of nestlings can also occur when livestock use takes place during the nesting season. This would be most evident in ground nesting or low shrub nesting species. In contrast, use by livestock during the dormant season has no potential to directly impact nesting success. There is a concern that the amount of residual remaining prior to the following breeding season may be reduced to some degree. However, removal of livestock by mid December will likely allow sufficient enough time for regrowth prior to the arrival of birds the following spring.

In summary, the proposed grazing period would not coincide with and would have no potential to directly influence migratory bird nesting activities in the Winter Gulch pasture. Although dormant season use may reduce the amount of residual component remaining for the early portions of the following breeding season in general, livestock removal by late December allows for essentially unaffected development of herbaceous growth prior to and during the nesting

season. The grazing regimen for this pasture would not have an influence on live ground cover expression nor would it be expected to have substantive influence on nest site selection or the density of nesting pairs.

Environmental Consequences of the No Action Alternative: The no action alternative (no grazing) would be expected to have little effect on breeding bird abundance or reproductive/recruitment success in the permit area's ~800 acres of woodland types. Low forage availability and more rugged terrain limit livestock use of these habitats. Benefits associated with livestock removal would be most expected in those areas that currently experience concentrated livestock use (bottoms and areas in close proximity to a water source) and in those early-seral to mid-seral communities. It should be noted that dormant season use of this pasture would not differ markedly from no cattle grazing as use is generally asynchronous with the migratory bird nesting season and growing season. Continuation of this alternative may allow for a greater amount of residual cover and increase in plant vigor, but the benefits to migratory birds (i.e., nesting success, density) would likely be nominal.

Mitigation: None.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There are no aquatic habitats that are known to occur on the Winter Gulch allotment.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable influence on aquatic wildlife or associated habitats.

Environmental Consequences of the No Action Alternative: There would be no direct or indirect impacts to aquatic resources under the no action alternative.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The allotment does not support any known aquatic resources, thus the land health standards would not apply.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The low to mid elevation juniper dominated woodlands and open shrub grasslands that encompass the permit area are categorized by the Colorado Division of Wildlife (CDOW) as mule deer general winter range and elk winter concentration and or severe winter range. These ranges typically experience heaviest use from December through April.

Breeding raptor use of the project area is represented largely by woodland accipitrine species. Mature components of the allotment's 800 acres of predominately juniper woodlands likely support a small number of breeding sharp-shinned and Coopers hawk, red-tailed hawk, long-

eared, great-horned, saw-whet and pygmy owl. Rock outcrops scattered throughout the pasture may provide potential nest substrate for golden eagle and red-tailed hawk.

Small mammal populations are poorly documented; however, the 20 or so species that are likely to occur in this area are widely distributed and display broad ecological tolerance throughout the Great Basin or Rocky Mountain regions. Based on small mammal sampling conducted during the summer of 2010, it is likely that the small mammal community associated with the project area is represented by relatively few generalized species, such as deer mouse and least chipmunk. No narrowly distributed or highly specialized species or subspecific populations are known to occur in the project area.

Environmental Consequences of the Proposed Action: Proposed livestock use of the Winter Valley pasture generally occurs prior to heavy big game occupation, but may be concurrent with big game use in some years (depending on snow conditions). Although minimal, there most likely will be some degree of competition between species. It is suspected that the timing and intensity of livestock use in conjunction with ongoing big game use would have no adverse influence on the composition, vigor, or regeneration of herbaceous vegetation. Collective use by livestock and big game likely reduces residual cover to some degree however; it is suspect that sufficient residual and basal cover should remain widely available on BLM-administered lands during the winter and into the spring to provide adequate ground cover and/or forage for non-hibernating small mammals and early nesting attempts by ground-nesting birds. Livestock use of heavy bunchgrass residual in the late fall/early winter likely operates to increase accessibility of fall regrowth or emergent spring growth for big game.

Currently, there are no indications of widespread use by big game or livestock of woody forages that influence or interrupt the abundance or continued development of deciduous shrubs as woody forage or cover. However, it should be noted that sheep (which will now be using the allotment instead of cattle) generally make greater use of woody species than do cattle. This may reduce forage availability to some degree however it is not expected to negatively influence big game populations.

Environmental Consequences of the No Action Alternative: Continuation of non-use would reduce the amount of livestock-big game competition of forage resources during the critical big game use period (typically December – April). Although improvements in perennial composition and vigor would be anticipated, this is not expected to have any effective influence on the continued support of big game. Game Management Unit 11, which encompasses the project area, has in the past and continues to support a strong elk population.

Additionally, livestock removal would allow for improved plant vigor, density and diversity (particularly in those early to mid seral communities) which would benefit wildlife species in general. The most noticeable response would be for non-game mammals and bird populations, who would benefit with increasing vegetative cover, forage and litter cover.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): With the exception of the 10 acres (< 1%) of cheatgrass dominated sites, the allotment generally meets the Land Health Standard for terrestrial wildlife at the landscape level. Neither the no action alternative, nor the proposed grazing schedule would be expected to impede continued maintenance of these standards.

CULTURAL RESOURCES

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo separate standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (#10-233) was completed for allotment 06329 on 10/25/2010 following the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing And Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, CO-2001-026, and CO-2002-029. The results of the assessment are summarized in the chart below and copies of the assessments are in the WRFO archaeology and range files

Table 6: Cultural Resource Literature Review Results

Allotment Number	Percentage of Allotment now Inventoried	Number of Sites Present	Additional Inventory Required (yes/no)	Number of Historic Properties to be Visited	High Potential of Historic Properties (yes/no)
06329	10%	1	No	0	No

Approximately 25.5 acres were identified by Matt Dupire, WRFO Range Specialist as the areas of livestock concentration in this allotment. A Class III (100% pedestrian) survey was conducted by WRFO Archaeological Technicians on these 25.5 acres on 10/5/2010, with no cultural resources being located (Rowley and Machado 2010). Sites in the vicinity of the Winter Valley Gulch allotment are low in number and consist mostly of open lithic sites and sheep herder camps, all located on ridge tops. All the potential concentration areas in this allotment are in valley bottoms where no cultural resources were located, leaving little potential for damage to sites by livestock.

As potential impacts to undiscovered, potentially eligible sites on federally managed surfaces are low in number, and as livestock are not known to have contributed substantially to any degradation of the recorded sites within the allotment, the grazing permit is recommended for renewal.

If historic properties are located during any subsequent field inventories in this allotment, and the BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer (SHPO).

Environmental Consequences of the Proposed Action: The direct impacts that may occur where livestock concentrate include trampling, chiseling and churning of site soils, cultural features and artifacts, artifact breakage and impacts from standing, leaning and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullyng, and increased potential for unlawful collection and vandalism. Continued grazing has the potential to cause substantial ground disturbance and cumulative, long term, irreversible adverse effects to historic properties, should any exist on uninventoried portions of the allotment. The allotments proposed use of sheep in the winter for a short time period should have the effect of decreasing any potential damage to existing cultural resources by decreasing the time frame for impacts on any given site.

Environmental Consequences of the No Action Alternative: There would be no negative impacts to cultural resources.

Mitigation: The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing archaeological sites, or for collecting artifacts on public lands. If artifacts are discovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer. The operator and the authorized officer will consult and determine the best option for avoiding or mitigating archaeological site damage.

PALEONTOLOGY

Affected Environment: Allotment 06329 encompasses areas generally mapped as the following fossil-bearing formations (Tweto 1979): primarily Iles Formation (PFYC 5), and also Landslide Deposits (PFYC 3), and Sego Sandstone, Buck Tongue of Mancos Shale, and Castlegate Sandstone (PFYC 3). These geological units which the BLM Colorado State Office (COSO) has classified as PFYC 3 have a moderate or unknown potential for containing significant fossils, and those classified as PFYC 5 have a very high occurrence of containing scientifically significant fossils.

Environmental Consequences of the Proposed Action: In general, paleontological materials (fossils) are not considered to be endangered by normal grazing activities. Some damage to fossil materials may occur in areas of livestock concentration (identified during cultural resource investigation—see above). Since in situ fossils are seldom encountered in alluvial areas where livestock tend to concentrate, the potential for damage to undisturbed fossil remains is low.

Direct impacts that may occur where livestock concentrate include trampling, chiseling and churning of site soils. There may be impacts from standing, leaning and rubbing against above ground features. Indirect impacts may include soil erosion, gullyng and increased potential for unlawful collection and vandalism. The allotments proposed use of sheep in the winter for a short time period should have the effect of decreasing any potential damage to existing fossil resources by decreasing the time frame for impacts on any given site.

Environmental Consequences of the No Action Alternative: There would be no negative impacts to paleontological resources.

Mitigation: The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing paleontological localities or for collecting vertebrate fossils on public lands. If paleontological materials (fossils) are discovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer. The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological locality damage.

ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains or prime and unique farmlands exist within the area affected by the Proposed Action. No Native American Religious Concerns are known in the area, and none have been noted by Ute tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken. There are no environmental justice concerns associated with the Proposed Action.

OTHER ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Other Element	NA or Not Present	Applicable or Present, Not Brought Forward for Analysis	Applicable & Present and Brought Forward for Analysis
Visual Resources		X	
Fire Management		X	
Forest Management	X		
Hydrology/Water Rights		X	
Rangeland Management			X
Realty Authorizations		X	
Wild Horses	X		
Recreation			X
Access and Transportation		X	
Geology and Minerals	X		
Areas of Critical Environmental Concern	X		
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics		X	
Law Enforcement		X	

RANGELAND MANAGEMENT

Affected Environment: Tuttle Land and Livestock (0501458) is the BLM authorized grazing permit holder on the Elk Springs (06326) and Miller Creek (06373) allotments and has applied for the grazing permit on the Winter Valley Gulch allotment. The following table shows an estimated carrying capacity (AUMs) of livestock for the Winter Valley Gulch allotment. The tables are broken down by acres within an ecological site and acres per AUM, which determines AUMs for those acres when divided.

Also, these tables below are based upon a moderate stocking level that is generally less than the stocking rates recommended by the Natural Resources Conservation Service (NRCS) for the specific ecological sites. The reason for this is in consideration of a moderate stocking level that meets public land health standards in relation to the rangeland's carrying capacity and current rangeland conditions.

Table 7: AUM Breakdown for Winter Valley Gulch

Winter Valley Gulch Allotment Livestock Grazing Capacity			
Ecological Site	BLM Acres	Acres / AUM	BLM AUMs
Clayey Foothills	238	12	20
Clayey Slopes	138	16	9
Foothill Juniper	701	25	28
Foothill Swale	47	5	9
Foothill Juniper	92	25	4
Rolling Loam	3	12	0
Sandy Foothills	16	10	2
Sandy Juniper	30	16	2
Totals:	1265		73

Environmental Consequences of the Proposed Action: Refer to the vegetation section for impacts to rangeland vegetation. As described in the vegetation section, livestock use in the Proposed Action is expected to improve rangeland conditions on the Winter Valley Gulch allotment as a result of the elimination of use during the critical growing season. The previous permit for this allotment authorized cattle use during the critical growth period every year.

Authorized AUMs for the Proposed Action would be under the estimated carrying capacity displayed in table 7. The proposed grazing schedule would authorize an additional 67 AUMs, 51 of which would be BLM AUMs.

The change in livestock kind from cattle to sheep is expected to increase use on shrubs within the allotment since sheep are browsers; however use is not expected to be high based on forage allocation estimates. The change in livestock kind to sheep is also expected to improve distribution within the allotment. In general this allotment has very steep topography that is not

as well suited for cattle as it is for sheep. The use of herders along with the fact that the allotment will be used in the winter when snow is on the ground will limit the amount of trailing necessary to get to water and should create more uniform grazing use on the allotment.

Environmental Consequences of the No Action Alternative: Since the Winter Valley Gulch allotment is currently not permitted, implementation of the no action alternative would keep the allotment as an unpermitted allotment, and no livestock use would occur. This alternative would improve rangeland vegetation on the allotment (see vegetation section). However, since Tuttle Land and Livestock is a qualified applicant that has applied for grazing preference on the Winter Valley Gulch allotment, and the 1997 White River Field Office ROD/RMP outlines grazing as one of the acceptable multiple uses within this area, the no action alternative would not comply with the 1997 WRFO ROD/RMP.

Mitigation: None.

RECREATION

Affected Environment: The Proposed Action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing, and off-highway vehicle use. These groups tend to seek out physical and social recreation settings that are typically characterized by a natural appearing environment providing some isolation from the sights and sounds of humans, where there is low interaction between users but evidence of other users may be present and the area generally provides an environment that offers challenge and risk. The primary recreationist that takes advantage of this setting in this area is the upland big game hunter. The Proposed Action is located within the Colorado Division of Wildlife (CDOW) Game Management Unit (GMU) 11. GMU 11 is a popular big game hunting area where the hunter has good opportunities to pursue both mule deer and elk.

Environmental Consequences of the Proposed Action: The dates of the Proposed Action would occur during the GMU 11's late rifle season of big game hunting. This season is for the hunting of antlerless elk from December 1 through 31 of each year. Sheep grazing operation during this time may cause the elk to seek different areas to bed and feed but overall will not have an impact on hunting. The presence of livestock protection dogs during the grazing operation will impact the public's hunting/recreational experience. Not all of the livestock protection dogs have threatened public recreationists, but the potential exists.

Environmental Consequences of the No Action Alternative: Under this alternative there would be no introduction of sheep or protection dogs into this particular area.

Mitigation: Post signs notifying the public of the presence of livestock protection dogs with recommended action to take in the event of contact with the dogs.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from the Proposed Action and the no action alternative would not exceed those discussed in the White River ROD/RMP and/or White River Area Grazing Management Environmental Impact Statement.

REFERENCES CITED:

Rowley, Brent and Meghan Machado
 2010 Class III Cultural Resources Inventory for the Winter Valley Gulch Grazing Permit in Moffat County, Colorado. BLM White River Field Office, Meeker, Colorado (10-10-27).

Tweto, Ogden
 1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: A Public Notice of the NEPA action is posted on the White River Field Office Internet website at the Colorado BLM Home Page asking for public input on Grazing Permits and the assessment of Public Land Health Standards within the White River Field Office area. Meetings were held with the applicant to discuss and develop the Proposed Action.

INTERDISCIPLINARY REVIEW: The Proposed Action was presented to, and reviewed by the White River Field Office interdisciplinary team on December 2, 2010.

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality, Wastes (Hazardous or Solids), Water Quality (Surface and Ground), and Hydrology and Water Rights.	10/14/2010
Jill Schulte	Botanist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species	9/16/2010
Kristin Bowen	Archaeologist	Cultural Resources, Paleontological Resources	10/25/2010
Matthew Dupire	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation, Rangeland Management, Riparian, and Soils	11/08/2010
Lisa Belmonte	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife, Wetlands and Riparian Zones	11.15.10
Jim Michels	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation,	10/5/2010
Jim Michels	Forester /Fire / Fuels Technician	Fire Management, Forest Management	10/5/2010
Paul Daggett	Mining Engineer	Geology and Minerals	10/14/2010
Linda Jones	Realty Specialist	Realty Authorizations	12/1/2010
Jim Michels	Natural Resource Specialist / Outdoor	Visual Resources	10/5/2010

Name	Title	Area of Responsibility	Date Signed
	Recreation Planner		
Melissa J. Kindall	Range Technician	Wild Horses	10/26/2010

Finding of No Significant Impact/Decision Record (FONSI/DR)

DOI-BLM-CO-110-2010-0233-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analysis of the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in 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.

DECISION/RATIONALE: It is my decision to implement the proposed action described in this document and issue a grazing permit to the applicant for the Winter Valley Gulch grazing allotment. Implementation of this proposed action will include combining the Winter Valley Gulch allotment with the Winter Valley Pasture of the Elk Springs (06326) allotment. Implementation of the proposed actions will include the mitigation measure listed below.

MITIGATION MEASURES:

1. Please contact the BLM – WRFO Hazardous Materials Coordinator at (970) 878-3800 and/or the Colorado Department of Public Health and Environment (CDPHE) through the 24-hour spill reporting line at 1(877)518-5608, if the permittee suspects the release of any chemical, oil, solid waste, petroleum product, or sewage within the allotment.
2. The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing archaeological sites, or for collecting artifacts on public lands. If artifacts are discovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer. The operator and the authorized officer will consult and determine the best option for avoiding or mitigating archaeological site damage.
3. The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing paleontological localities or for collecting vertebrate fossils on public lands. If paleontological materials (fossils) are discovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer. The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological locality damage.
4. Post signs notifying the public of the presence of livestock protection dogs with recommended action to take in the event of contact with the dogs.

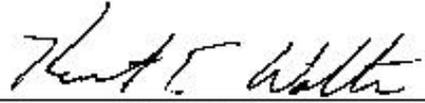
COMPLIANCE/MONITORING: Long-term trend monitoring and utilization measurements will be conducted by the BLM to monitor impacts of livestock grazing on vegetation and soils within the allotment. Compliance checks will also be completed by the BLM rangeland

management specialist to make sure terms and conditions of the issued grazing permit are being met.

NAME OF PREPARER: Matthew L. Dupire

NAME OF ENVIRONMENTAL COORDINATOR: Heather Sauls

SIGNATURE OF AUTHORIZED OFFICIAL:



Field Manager

DATE SIGNED:

12/27/2010

ATTACHMENTS:

Figure 1: Winter Valley Gulch and Elk Springs Allotment Boundaries Map

Figure 2: Pastures within the Winter Valley Gulch and Elk Springs Allotments Map

Figure 1

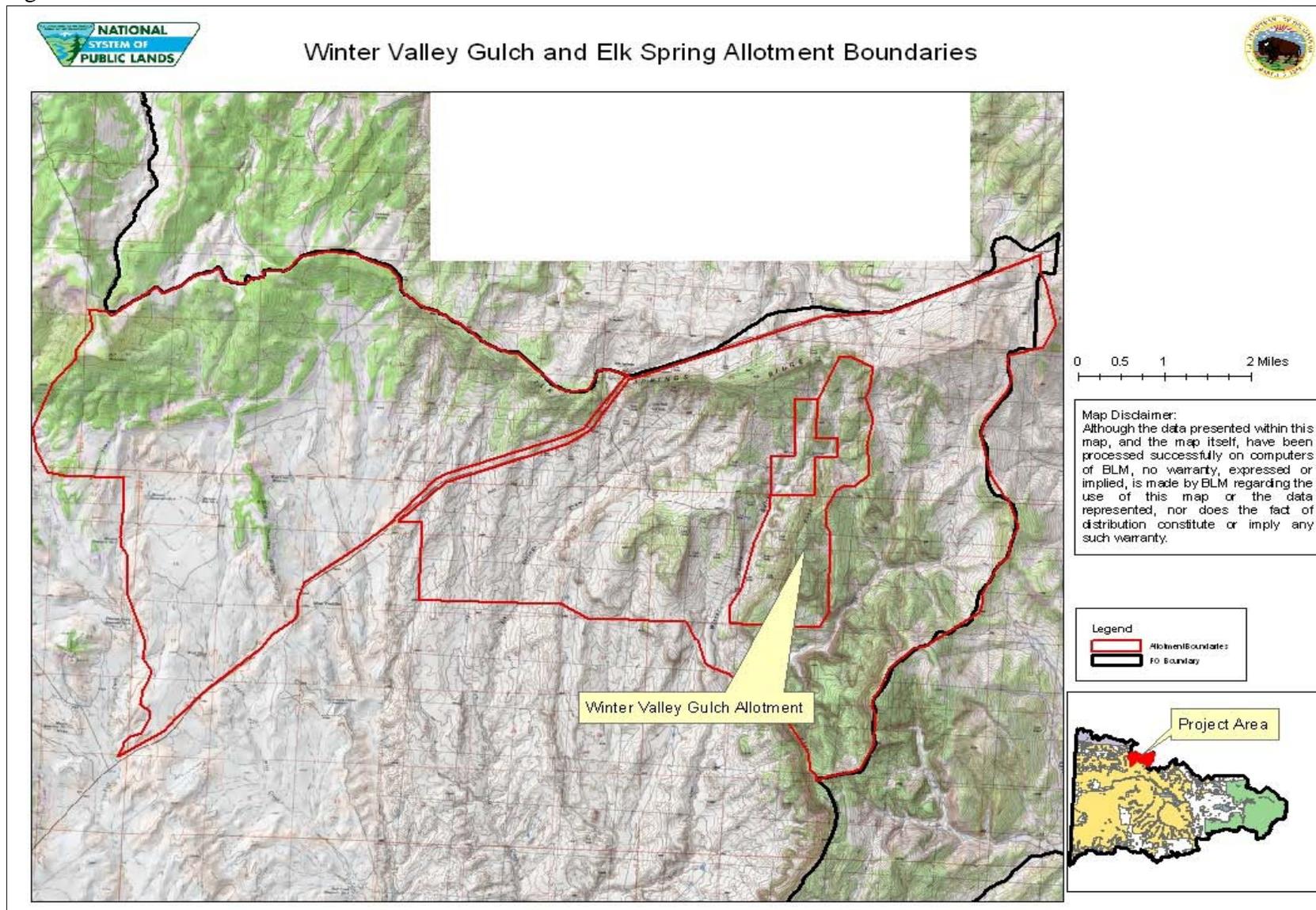


Figure 2

