U.S. Department of the Interior
Bureau of Land Management
Gunnison Field Office
DOI-BLM-COS060-2009-OO15-EA

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-COS060-2009-OO15-EA

CASEFILE/PROJECT NUMBER:
Cabin Creek Common Allotment #16301 and Alder Creek Common Allotment #16302

PROJECT NAME:
Cabin Creek Common Allotment #16301 and Alder Creek Common Allotment #16302 Livestock Grazing Management

PLANNING UNIT: Gunnison Resource Area Resource Management Plan (RMP) Management Unit(s) 12 and 15

LEGAL DESCRIPTION:
Cabin Creek Allotment #16301 NMPM, T. 49-50 N., R. 1-2 E.,
Alder Creek Allotment #16302 NMPM, T. 49-50 N., R. 2-3 E.

APPLICANT:
Cabin Creek Common Allotment #16301 and Alder Creek Common Allotment #16302 Permittees

I. BACKGROUND/INTRODUCTION

The Cabin Creek and Alder Creek Allotments are located approximately 5 to 15 miles east of Gunnison. The allotments are adjacent to each other on the north side of Highway 50, and are bordered by National Forest on the north side. Elevations range from approximately 8,000 feet in the south to 9,200-9,400 feet in the north. The Cabin Creek Allotment includes approximately 14,784 acres and the Alder Creek Allotment, 11,517 acres, for a total area of 26,301 acres.

Upland vegetation is primarily sagebrush-grass, with scattered pockets of aspen and serviceberry. Riparian vegetation is a mix of graminoid dominated types and of willow dominated types. Riparian areas are primarily along the major drainages, including Cabin Creek, East Cabin Creek, Dry Gulch, Sewell Gulch, Alder Creek, Big Gulch, and Spring Gulch.

Three permittees hold term grazing permits for the Cabin Creek Allotment, and five permittees hold term grazing permits for the Alder Creek Allotment. The current term permits are as follows:

Table #1: Cabin Creek Common Allotment #16301 Currently Permitted Use

Authorization Number	Livestock Number	Kind	Season of Use		Active AUMs*
			Spring	Fall	
0503357	26	Cattle	5/15 – 6/15	10/31 – 11/4	31
0503326	372	Cattle	5/15 – 6/15	10/31 – 11/4	453
0503310	293	Cattle	5/15 – 6/15	10/31 – 11/4	356
Total	**691**	**Cattle**	**5/15 – 6/15**	**10/31 – 11/4**	**840**

*An AUM is an Animal Unit Month, or the amount of forage required to support one cow and her calf for one month.

The Cabin Creek Allotment has had reductions in the permitted AUMs over the last 20 years as follows:

1985-1988	1615 AUMs
1989-1992	1155 AUMs
1993-1999	1007 AUMs
2000-present	840 AUMs

Table #2: Alder Creek Common Allotment #16302 Currently Permitted Use

Authorization Number	Livestock Number	Kind	Season of Use		Active AUMs
			Spring	Fall	
0500254	209	Cattle	5/15 – 6/15	10/31 – 11/4	255
0503331	301	Cattle	5/15 – 6/15	10/31 – 11/4	367
0503293	84	Cattle	5/15 – 6/15	10/1 – 10/31	170
0503364	293	Cattle	5/15 – 6/15	10/31 – 11/4	356
0503370	279	Cattle	5/15 – 6/15	10/31 – 11/4	340
Total	**1166**	**Cattle**	**5/15 – 6/15**	**10/31 – 11/4**	**1,488**

There has been no change in the permitted AUMs on the Alder Creek Allotment in the last 24 years.

The Cabin Creek and Alder Creek Allotments have traditionally been managed as two separate allotments. However, in 8 of the last 24 years Alder Creek permittees have been authorized to use the Cabin Creek Allotment. This was done in order to improve management in both allotments by allowing deferment of forage use and/or facilitating reduced use or complete rest on portions of the Alder Creek Allotment. In 3 of those 8 years, most of the permittees were using both allotments in a two-pasture rotation, for approximately 14 days per allotment. In the other 5 years, some of the livestock use was shifted from the Alder Creek Allotment to the Cabin Creek Allotment. In the past 10 years, a significant amount of nonuse has been taken by various permittees, both for recovery from the drought years (2000 – 2004) and for personal reasons.

In the 24 years between 1985 and 2005, the two allotments were rarely stocked above 70% of currently permitted numbers. The Cabin Creek Allotment was grazed at levels above 70% of currently permitted numbers (588 AUMS) in 8 of those 24 years, and not above 70% since 1996. The Alder Creek Allotment was grazed at levels above 70% (1041 AUMs) in 4 of those 24 years, and not above 70% since 1998.

PURPOSE AND NEED and DECISION TO BE MADE:
The purpose of the proposed action is to renew the permits that authorize livestock grazing on the Cabin Creek Common Allotment #16301 and Alder Creek Common Allotment #16302 such that livestock grazing, 1) is in compliance with the Gunnison Resource Area Resource Management Plan (RMP) objectives, 2) achieves or makes significant progress towards achieving the Standards for Public Land Health in Colorado and complies with the Guidelines for Livestock Grazing Management in Colorado, in conformance with the Fundamentals of Rangeland Health (43 CFR 4180.1) and Standards and Guidelines (43 CFR 4180.2), 3) meets the habitat objectives of the Gunnison Sage Grouse Rangewide Conservation Plan, and 4) meets the habitat objectives of Canada lynx Conservation Assessment and Strategy. This action is needed now because the previous term permits expired February 28, 2007 and livestock grazing on the two allotments is currently being authorized under the authority of the 2004 Appropriations Act (Public Law 108-108).

The decision to be made is what specific livestock grazing management actions will be implemented to continue to authorize livestock grazing in compliance with the RMP and the Standards for Public Land Health in Colorado.

SCOPING AND ISSUES:
Two core issues have been identified:

How can livestock grazing be managed on the Cabin Creek and Alder Creek Allotments to best meet the needs of the permittees for livestock forage as they move from private lands to USFS permits?

How can livestock grazing be managed on the Cabin Creek and Alder Creek Allotments to achieve the objectives of the RMP and the Standards for Public Land Health in Colorado (particularly the needs of deer and elk for winter range, fish for habitat in Alder Creek, and Gunnison sage-grouse for winter, nesting, and brood rearing habitat)?

Several individuals and groups have asked to be interested publics and wish to be involved with the permit renewal process on the two allotments. The BLM has met extensively with the permittees on the two allotments during development of the Proposed Action; these meetings also resulted in development of Alternative #2.

II. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

The following Goals, Objectives, Utilization Standards, and Management Practices are common to the Proposed Action and Alternative #2, and they would be implemented as terms and conditions of all livestock grazing permits on the Cabin-Alder Creek Allotment:

Colorado Standards for Public Land Health:

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.

Standard 2: Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.

Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.

Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.

Allotment Goal

The Cabin Alder Creek Allotment will be managed to provide for a maximum achievable diversity and production of biological resources to improve and sustain habitat for wildlife, to help sustain the economic stability of the permittees, and to allow for quality opportunities for public land users while achieving or making significant progress toward achieving BLM's Standards for Public Land Health in Colorado and conformance to BLM's Guidelines for Livestock Management in Colorado. The Cabin Alder Creek Allotment is an “I” category allotment, with the goal of improving ecological conditions.

Allotment Objectives and Utilization Standards

The allotment objectives are consistent with the goals and objectives of the Gunnison Sage Grouse Rangewide Conservation Plan (RCP) and the Gunnison Resource Area Approved Resource Management Plan (RMP). The RCP provides updated information on Gunnison grouse life history, habitat needs, and seasonal habitat guidelines. For purposes of analysis in this EA, it is assumed that the unfenced private lands would be managed to the same standards as public land within the allotment. The utilization standards described for each objective are short term management standards that are applied to help attain long term ecological objectives. However, in meeting the following desired conditions in the following objectives, the BLM recognizes and will take into account and adjust for the uncertainty and changing conditions of natural resources over time. These changes include natural occurrences and disturbances such as drought, excessive winter, fire, flood, disease, permittee needs/requests, and planned management actions. In situations where residual vegetation is not meeting the use objectives during/following livestock grazing, the potential of the area to achieve the resource and livestock use objectives

will be determined prior to taking any permanent adverse actions against the livestock grazing permits.

Gunnison Sage Grouse Habitat Objectives

The 1993 Gunnison Field Office (GFO) Resource Management Plan (RMP) addresses sage grouse habitat. Under the RMP's Standard Management, direction for management of identified sage grouse brood-rearing, nesting, and winter habitat is provided (pg.2-5 and Appendix A), as well as direction to maintain and protect sage grouse (and other special status species) habitat (pg.2-4). In addition, two specific management units were designated for emphasizing management of sage grouse habitat. The RMP designates 57,525 acres in Management Unit 11 as sage grouse high-production areas (pg.2-32). "This unit is located within sagebrush-dominated uplands. This management unit will be managed to improve and maintain sagebrush vegetative communities in order to optimize sage grouse populations. Sagebrush treatments and management to improve sage grouse habitat will be considered in all activity plans, such as AMPs or CRMAPs, and their design, implementation, and management will incorporate as a minimum the sage grouse habitat management guidelines in Appendix A" (pg.2-32). The RMP also designates 2,667 acres in Management Unit 14 as important sage grouse brood-rearing habitat (pg.2-36). This unit is located along 25 miles of public land riparian corridors. "This unit will be managed to protect, restore, and enhance these riparian areas on public lands in order to optimize sage grouse populations." (pg.2-36).

Subsequent to the 1993 RMP, the Gunnison sage grouse (Centrocercus minimus) was recognized as a separate species. In 1994, in response to concerns about declining sage grouse populations in the Gunnison Basin, the Gunnison Basin Gunnison Sage Grouse Working Group was formed. This group consisted of representatives from a variety of federal, state, and county agencies and entities, stockgrowers, environmental groups, academia, and members of the public. In June 1997 the Working Group completed the Gunnison Sage Grouse Conservation Plan (hereafter, the Local Plan). In March of 1998 representatives of the groups involved in development of the plan signed a Memorandum of Agreement to implement the conservation actions outlined in the Plan to restore Gunnison sage grouse distribution and numbers.

Concurrently, public land health standards were being developed for all public lands in Colorado. The BLM State Office, in partnership with the Resource Advisory Councils, prepared an EA for the Standards for Public Land Health and Guidelines for Livestock Grazing Management in Colorado, dated June 28, 1996. In January 1997, these Standards and Guidelines (S&G) were incorporated into all of Colorado's RMPs through a statewide RMP amendment.

In 1998 the GFO staff began incorporating Gunnison sage grouse (GUSG) habitat guidelines from the Local Plan into grazing permit renewal Environmental Assessments (EAs). This was consistent with the Local Plan Memorandum of Agreement and the Public Land Health Standards RMP Amendment. The RMP provides minimum sage grouse habitat guidelines and implies that additional guidelines may be applied in the future as knowledge is gained about the bird's habitat requirements. Although the Local Plan was not a decision document, incorporating the Local Plan's habitat guidelines into EA's provided a means to facilitate meeting Colorado Standards for Public Land Health. Specifically, incorporating the Local Plan habitat guidelines into grazing permit renewal EA's was a means to provide best management

practices to facilitate meeting Standard 4 which addresses threatened, endangered, and special status species, and Standard 3 which addresses plant and animals.

In 2000, the Gunnison sage grouse was designated as a separate species. It was also designated as a BLM sensitive species and as a Federal candidate for listing species.

In April 2005, an interagency Steering Committee comprised of biologists from the BLM, Colorado Division of Wildlife (CDOW), Forest Service, National Park Service (NPS), Natural Resources Conservation Service (NRCS), Utah Division of Wildlife, and U. S. Fish and Wildlife Service (FWS) completed the Gunnison Sage Grouse Rangewide Conservation Plan (RCP). The RCP is widely accepted as providing the latest scientific information on the GUSG throughout its range. The final document includes individual Conservation Agreements developed and signed by State or Regional Directors of the CDOW, BLM, NPS, and Forest Service. Each Agreement contains different wording, but each agency stated their intent and commitment to implement the Rangewide Plan. On July 12, 2005, the BLM issued IM-No.CO-2005-038 which directs Field Offices to implement the RCP through the NEPA process. Specifically, the IM states that "BLM Colorado will utilize the RCP as the basis for managing the multiple uses of public lands in identified GUSG habitat. Effective immediately, RCP guidance and strategies will be applied through site-specific analysis, consistent with the National Environmental Policy Act (NEPA), to all proposed projects or actions in identified GUSG habitat."

Consistent with the guidance in the IM and new information contained in the RCP, the GUSG habitat objectives incorporated into Gunnison Field Office NEPA documents were revised in 2006 using habitat guidelines from the RCP and RMP. Upland habitat objectives for breeding and summer-fall habitats follow the guidelines in the RCP and the RMP. The RCP does not provide specific habitat guidelines for riparian or wet meadow habitat used by GUSG during the summer brood-rearing period, rather it states that "BLM and USFS currently have riparian and/or wet meadow management guidance which is consistent with the needs of the GUSG". Under the GFO RMP, guidelines for riparian habitat only apply to Management Unit 14 which consists of 25 miles of brood-rearing habitat. To be consistent with other habitat guidelines in the RCP, these guidelines are expanded to cover all riparian areas within 4 miles of a lek. For example, the RMP only applied sage grouse upland habitat objectives to Unit 11, however the RCP upland objectives apply to all sagebrush habitat within 4 miles of a lek. As was the case with the Local Plan's habitat guidelines, incorporating the RCP guidelines into EAs provides a means to facilitate meeting Colorado Standards for Public Land Health.

In their determination of whether or not to list a species, the FWS evaluates five listing factors. One of these is the Inadequacy of Existing Regulatory Mechanisms. Under this factor in the Federal Register notice finding the GUSG not warranted for listing (April 18, 2006), the FWS cites that the BLM is implementing the RCP under direction of IM-No.CO-2005-038. This was provided as support that the BLM had adequate regulatory mechanisms in place; i.e., implementation of the RCP contributed to the not warranted listing determination made by the FWS. With the decision to not list, the GUSG is no longer designated as a Federal candidate for listing species, but is again designated as a BLM sensitive species.

The FWS has stated that if the GUSG is listed, the RCP would be the basis for a Recovery Plan. Therefore, implementing the RCP now makes GFO management of GUSG habitats consistent with a future Recovery Plan if the species is listed. The FWS Candidate Conservation Agreements with Assurances that the CDOW is using to protect GUSG habitat on private lands are based upon habitat objectives from the RCP. The Gunnison County Gunnison Sage Grouse Strategic Committee has advocated applying similar objectives to adjacent public lands.

1. Native Uplands

The management objective for native upland vegetation on the Cabin Alder Creek Allotment is to maintain or improve the vigor, production and diversity of desirable plants to support a variety of resource uses, including, but not limited to livestock grazing, wildlife habitat, and recreation. Native upland sites will be managed to achieve and maintain basal cover values which are equal to or greater than those listed for the slightly/moderately accelerated erosion threshold as described in the Montrose District Soil Erosion Monitoring Guidelines for each ecological site*.

Rationale: High levels of plant production are important to meet the needs of wildlife and livestock production as well as providing watershed cover. The later stages of ecological succession are generally more productive than the early seral stages. Diversity of plant species increases the quality of forage for wildlife and livestock by providing seasonal selection for these herbivores, and a diversity of habitats for wildlife. An abundance of plant species provide stability for the site to maintain vegetative production during variations in weather, ie. different plant species respond differently to seasonal precipitation. Livestock and wildlife utilization, particularly during the active growing season, impacts the ability of vegetation to establish from seed, to provide cover and forage for wildlife habitat, to make and store energy as root reserves, and to produce seed for future recruitment of new plants. As such, the short term utilization standards will be:

-Uplands will not exceed a utilization level of 40-60% of the current years' growth for key forage during the grazing period of use.

-Between March 15 and September 28, the grass droop height in the upland areas of a pasture will be 4-6 inches or greater (current year's growth). This applies to big sagebrush communities within 4 miles of a lek with understories dominated by herbaceous vegetation that has the potential to grow to 6 inches or greater.

*See Appendix I of the RMP for a summary of the Montrose District Soil Erosion Monitoring Guidelines for basal cover by ecological site.

2. Riparian Areas

Riparian zones are those areas that are adjacent to intermittent and perennial streams, rivers, springs, bogs, ponds, lakes, reservoirs and other bodies of water. These areas have visible vegetation or physical characteristics reflective of permanent ground or surface water influence. The management objective for riparian areas of the allotment is to improve their condition to prevent accelerated stream bank, stream channel and flood plain erosion, and to improve the

diversity and cover of riparian plant species to maintain these areas in a proper functioning condition to meet the demand for wildlife habitat, with emphasis on sage grouse habitat, livestock forage and recreational values.

Riparian areas will be managed to maintain or achieve a mid-seral or later stage of ecological succession and to provide adequate herbaceous plant residue on stream banks and flood plains during seasons when high flows are likely (spring runoff and the thunderstorm season of July and August). Physical damage to stream banks by people, livestock and wildlife will not exceed 10% of the length of stream banks for any riparian area within a pasture. Physical damage is where stream banks are collapsed or soil is left bare by man or animal trampling. Management prescriptions in this proposed action are designed to maintain adequate vegetation cover over the entire riparian area(s) as stated in the Record of Decision for the Gunnison Resource Management Plan, and Rangeland Program Summary (page 3-4, #5 and #6; Feb. 1993). The intent of the management prescriptions is to maintain adequate vegetation cover over the entire riparian area(s).

Rationale: Riparian areas have the potential to produce more wildlife and livestock forage per acre than any vegetation type on the allotment. The riparian areas also provide important habitat for many wildlife species. These areas rely on over bank flows and sustained stream flow to recharge the riparian aquifers and produce riparian vegetation. This occurs most efficiently when these systems are in a proper functioning condition. Adequate vegetation on riparian areas and along stream banks is an important factor that influences the ability of a riparian system to function in terms dissipating stream energy to reduce erosion and improve water quality; filter sediment; aid floodplain development; improve water retention and ground water recharge (, Chaney et. al. 1990). Riparian Areas are important for sage grouse brood rearing. It is expected that not only will sage grouse benefit, but in the mid to long term, riparian areas would expand in size. The need for management that has an objective to maintain herbaceous residue or stubble in riparian areas and along stream banks is well documented (Clary and Webster 1989, Chaney et. al. 1993, Kinch 1989, Myers 1989). The recommendations to use minimum stubble heights as an objective or utilization target are supported by range and riparian managers (Hall and Bryant, 1995, Holecheck et. al. 1989, Clary and Webster 1989, Clary and Webster 1990, Elmore 1988, Jasmer and Holecheck 1984, Kinch 1989, Myers 1989, Savory 1988, USDA SCS 1985).

Therefore, minimum stubble heights have been developed to maintain herbaceous residue or stubble in riparian areas and along stream banks. The following standards are applicable to riparian areas in the Cabin Alder Creek Allotment:

-For all riparian areas, utilization of key species will not exceed 40-60% of the current years' production throughout the period of use.

- The riparian corridor along Alder Creek will maintain a 4" stubble height will be maintained during the grazing period of use. For riparian areas within 4 miles of a sage grouse lek, between June 15 and August 30, the stubble height of herbaceous vegetation in all riparian areas will be a minimum of 4-inches over 80% of each riparian area within a pasture. At all other times a minimum 2.5-inch stubble height will be maintained over 80% of the riparian area within each pasture throughout the period of use. The key herbaceous riparian forage species managed to

maintain either a 4" or a 2 1/2" minimum stubble height objective would be grasses such as, but not limited to, Kentucky bluegrass, Bromegrass, Redtop, Wheatgrass, Timothy, Tufted hairgrass, sedges, and rushes.

-For riparian areas where a 4" stubble height for key species would clearly not be achieved, utilization of key species would not exceed 20-40% of the current year's production, with a 2 ½ inch minimum stubble height maintained throughout the period of use. The intent is to allow degraded conditions, including plant vigor, to improve and also allow time to generate sufficient forage production for livestock needs and residue needed to maintain the 4 inch minimum stubble height.

-For riparian areas beyond 4 miles of a sage grouse lek: A minimum 2.5-inch stubble height of herbaceous vegetation will be maintained over 80% of the riparian area within each pasture throughout the period of use.

-Riparian vegetation around stock ponds and troughs that are outside of naturally occurring riparian areas would not be required to meet the above stubble heights.

-Grazing use that exceeds stubble height standards on riparian vegetation around stock ponds and troughs that have been constructed within naturally occurring riparian communities along riparian corridors would be accounted for in the 20% of the corridor that is not required to meet the use standards.

- In some riparian areas other management such as rest, deferment, or other grazing strategies may occur to help improve vigor of riparian vegetation. These areas will be identified during field season monitoring and changes in management will be discussed before the following grazing season.

3. Gunnison Sage Grouse

The Gunnison sage grouse is currently a USFWS Candidate Species. The management objective or grouse is to improve the quality of the various seasonal habitats used throughout the year. Both the Gunnison Sage-Grouse Rangewide Conservation Plan (RCP) and the Gunnison Field Office Resource Management Plan address critical Gunnison sage grouse needs, and habitat guidelines from these plans will be implemented as follows:

-Between March 15 and September 28, the grass droop height in the upland areas of a pasture will be 4-6 inches or greater (current year's growth). This applies to big sagebrush communities within 4 miles of a lek with understories dominated by herbaceous vegetation that has the potential to grow to 6 inches or greater.

- For riparian areas within 4 miles of a sage grouse lek, between June 15 and August 30, the stubble height of herbaceous vegetation in all riparian areas will be a minimum of 4-inches over 80% of each riparian area within a pasture. At all other times a minimum 2.5-inch stubble height will be maintained over 80% of the riparian area within each pasture throughout the period of use.

Management Practices

1. Any objects or sites of cultural or paleontological value, such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged or disturbed. If any such resources are encountered, the permittee shall notify BLM immediately.

2. Salt and/or mineral supplements will not be placed within any riparian area, wet meadow, temporary or permanent watering facility within a riparian area, or within ¼ mile of any known archaeological site. Excess salt and/or mineral sources will be removed from the allotment following grazing use each year.

3. Temporary water hauling site locations shall be coordinated with the BLM. Troughs associated with these sites must have a wildlife escape ramp. To prevent wildlife deaths, these troughs must be removed or turned over each year when they are no longer needed for livestock grazing use.

4. All range improvements for which the permittee has maintenance responsibility, including fences, troughs, and reservoirs, must be properly maintained prior to livestock turnout. The permittee must notify the BLM prior to beginning any maintenance activities that require the use of heavy equipment, such as tractors, backhoes, or graders. Allotment boundary fences for which the permittee has maintenance responsibility must be maintained every year, even if the allotment is being rested.

5. Upon prior notification and coordination by the BLM, the permittees shall provide the Bureau of Land Management with reasonable administrative access across private and leased lands for the orderly management and protection of the public lands.

6. When poisonous plants are identified as a threat to livestock, management actions to avoid grazing the area during the problem period would be developed. Infestations of noxious weeds would be incorporated into the Field Office noxious weed control program as they are identified.

A. PROPOSED ACTION:

Combine the Cabin Creek Allotment #16301 and the Alder Creek Allotment #16302 into one allotment to be called the Cabin-Alder Creek Allotment #16301 (CAC). Within this combined allotment, there are 15 use areas within the two main pastures in which livestock movements could be largely controlled with topography, herding, salting, and water management.

Issue grazing permits to the current livestock operators in the Cabin-Alder Creek Allotment #16301, for a total use on the allotment as follows (the AUMs in the Active AUMs column of Table #1 represent a 15% reduction from currently permitted AUMs):

Table #3 Cabin Alder Creek Allotment #16301 Proposed Permitted Use

Livestock Number	Kind	Season of Use		Active AUMs*	Suspended AUMs*
		Spring	Fall		
1564	Cattle	5/15 – 6/15	10/31 – 11/4	1,972	356

* An AUM is an Animal Unit Month, or the amount of forage required to support one cow and her calf for one month.

Any livestock AUMs that become available in the Cabin Alder Creek Allotment, through permit loss or relinquishment, or through increases in forage available for livestock grazing, would be distributed to the remaining active operators in the Cabin Alder Creek Allotment proportionate to their currently permitted AUMs.

Commencing prior to the first full grazing season following this decision, the permittees of the combined CAC Allotment would enter into a three year Permittee Monitoring Partnership Program (PMPP) with the U.S. Bureau of Land Management. The PMPP would address all issues that will affect development of future Environmental Assessments (EA's) including appropriate regulations, Resource Management Plan (RMP) guidelines, methods and locations for resource monitoring, communication between parties, carrying capacity studies (including soil survey information), and responsibilities of each party.

The Cabin Alder Creek permittees would submit an Annual Grazing Plan (AGP) based on PMPP data and incorporating current conditions prior to turn-out. The AGP would include, but not be limited to, favorable or unfavorable grazing conditions; variations in grazing rotation through the 15 Use Areas; timing, location, and stock water availability; salting and cattle dispersal; and conditions and implementation of permittee\BLM projects.

Used as guidelines for management, the emphasis in the annual grazing rotation systems would include limiting the majority of livestock use in each of the 15 Use Areas to no more than 14 days in May/June annually, incorporating periodic spring rest in the Use Areas, and moving livestock out of Use Areas prior to meeting upland or riparian utilization objectives. Understanding that the 15 areas are management controlled Use Areas, rather than fence controlled Pastures, there may be some additional, incidental livestock use from adjacent Use Areas. The presence of livestock in Use Areas outside of their scheduled use dates would not be considered out of compliance, so long as utilization objectives continue to be achieved.

During the three year duration of the PMPP, data from both permittees and BLM would be used to assess if utilization requirement are being met. A meeting between permittees and BLM shall take place in January of each year to review the combined data and provide input into individual AGP's for the coming grazing season.

To protect plant health and vigor, and to facilitate meeting habitat guidelines for sage grouse during the nesting period, the earliest turn-out date would be May 15.

On unusual years, when the Forest Service determines that turnout on the Taylor Park Allotment must be delayed due to plant phenology (range readiness), the permitted off-date for the Cabin-Alder Creek Allotment could be delayed by up to 2 weeks. This delayed off date would not result in use of more than the total AUMs allocated for livestock on the Cabin-Alder Creek Allotment, and livestock on the allotment would continue be managed to ensure adequate distribution during the delay. A request for extension will be submitted to the BLM Gunnison

Field Office (verbally or in writing) prior to the end of the permitted grazing period and BLM approval will be documented in the allotment management file.

During the 10/31 – 11/4 fall trailing period, cattle would be allowed to drift from the National Forest, down through the Cabin Alder Creek Allotment. Any cattle that come off the Forest after November 4th would be herded through the Allotment in one day.

The permittees and the BLM would consult on placement of salt blocks in the allotment to ensure that no salt blocks are placed in cultural resource sites or sensitive species habitats.

B. ALTERNATIVE #2:
The Cabin Creek #16301and Alder Creek #16302 Allotments would be combined and administered as one allotment to be called the Cabin\Alder Creek (CAC) Allotment #16301. Within this combined allotment, there are 15 use areas within the two main pastures in which livestock movements could be largely controlled with topography, herding, salting, and water management. The key difference between this alternative and the proposed action is that under this alternative, there would be no change from currently permitted use, as follows:

Table #4 Cabin Alder Creek Allotment #16301 Alternative #2 Permitted Use

Authorization Number	Livestock Number	Kind	Season of Use		Active AUMs*
			Spring	Fall	
0503357	26	Cattle	5/15 – 6/15	10/31 – 11/4	31
0503326	372	Cattle	5/15 – 6/15	10/31 – 11/4	453
0503310	293	Cattle	5/15 – 6/15	10/31 – 11/4	356
0500254	209	Cattle	5/15 – 6/15	10/31 – 11/4	255
0503331	301	Cattle	5/15 – 6/15	10/31 – 11/4	367
0503293	84	Cattle	5/15 – 6/15	10/1 – 10/31	170
0503364	293	Cattle	5/15 – 6/15	10/31 – 11/4	356
0503370	279	Cattle	5/15 – 6/15	10/31 – 11/4	340
Total	**1857**	**Cattle**	**5/15 – 6/15**	**10/31 – 11/4**	**2328**

* An AUM is an Animal Unit Month, or the amount of forage required to support one cow and her calf for one month.

Any AUMs that become available in the Cabin Alder Creek Allotment would be distributed to the remaining operators in the Cabin Alder Creek Allotment proportionate to their currently permitted AUMs.

Commencing prior to the first full grazing season following this decision, the permittees of the combined CAC Allotment would enter into a three year Permittee Monitoring Partnership Program (PMPP) with the U.S. Bureau of Land Management. The PMPP would address all issues that will affect development of future Environmental Assessments (EA's) including appropriate regulations, Resource Management Plan (RMP) guidelines, methods and locations for resource monitoring, communication between parties, carrying capacity studies (including soil survey information), and responsibilities of each party.

The Cabin Alder Creek permittees would submit an Annual Grazing Plan (AGP) based on PMPP data and incorporating current conditions prior to turn-out. The AGP would include, but not be limited to, favorable or unfavorable grazing conditions; variations in grazing rotation through the 15 Use Areas; timing, location, and stock water availability; salting and cattle dispersal; and conditions and implementation of permittee\BLM projects.

Used as guidelines for management, the emphasis in the annual grazing rotation systems would include limiting the majority of livestock use in each of the 15 Use Areas to no more than 14 days in the spring annually, incorporating periodic spring rest in the Use Areas, and moving livestock out of Use Areas prior to meeting upland or riparian utilization objectives. Understanding that the 15 areas are management controlled Use Areas, rather than fence controlled Pastures, there may be some additional, incidental livestock use from adjacent Use Areas. The presence of small numbers of livestock in Use Areas outside of their scheduled use dates would not be considered out of compliance, so long as utilization objectives continue to be achieved.

During the three year duration of the PMPP data from both permittees and BLM would be used to assess if utilization requirement are being met. A meeting between permittees and BLM shall take place in January of each year to review the combined data and provide input into individual AGP's for the coming grazing season.

To protect plant health and vigor, and to facilitate meeting habitat guidelines for sage grouse during the nesting period, the earliest turn-out date would be May 15.

On unusual years when the BLM and Forest Service determine that turnout on the Cabin-Alder Creek Allotment or on the Taylor Park Allotment must be delayed due to plant phenology (range readiness), the permitted on date and corresponding off date for the Cabin-Alder Creek Allotment could be delayed by up to 2 weeks. This delayed on/off schedule would be based on the needs of the vegetation, and would not result in any change in impacts on the resources in the allotment.

During the 10/31 – 11/4 fall trailing period, cattle would be allowed to drift from the National Forest, down through the Cabin Alder Creek Allotment. Any cattle that come off the Forest after November 4th would be herded through the Allotment in one day.

The permittees and the BLM would consult on placement of salt blocks in the allotment to ensure that no salt blocks are placed in cultural resource sites or sensitive species habitats.

C. OTHER ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL:

1. No Grazing Alternative

During the scoping process, input from the public included the addition of a No Grazing Alternative. Under this alternative, no livestock grazing would be authorized for the Cabin Creek and Alder Creek Common Allotments.

The No Grazing Alternative was considered but not carried forward for detailed analysis because it would not conform to the Approved Gunnison Resource Area Resource Management Plan/Record of Decision (RMP/ROD). The RMP/ROD identified livestock grazing as an appropriate and suitable use on the Cabin Creek Common and Alder Creek Common Allotments. In addition, a No Grazing Alternative would not meet the Purpose and Need for Action.

2. No Action Alternative (Continue Current Permits)
Under this alternative the grazing permits on the Cabin Creek and Alder Creek Allotments would be issued with the same livestock numbers, seasons of use, and terms and conditions that are currently permitted.

This alternative is not carried forward for detailed analysis because it would not conform to the Approved Gunnison Resource Area Resource Management Plan/Record of Decision (RMP/ROD) (see the discussion under Gunnison Sage Grouse Habitat Objectives beginning on Page 5).

D. PLAN CONFORMANCE REVIEW:
The Proposed Action and Alternative #2 are subject to, have been reviewed for, and been found to be in conformance with, the following plan (43 CFR 1610.5, BLM 1617.3). The plan conformance review included consideration of Standard Management (pgs. 2-1 to 2-19), Management Unit Prescriptions (pgs. 2-19 to 2-39), and Colorado Standards for Public Land Health (pgs. 4-7).

Name of Plan: Gunnison Resource Area Resource Management Plan (including Adoption of Standards for Public Land Health and Guidelines for Livestock Grazing Management in Colorado)

Date Approved: February 1993 (amended February 1997)

Management Unit(s): 12: This unit consists of low to mid elevation lands around the Gunnison Basin that are crucial elk and deer winter range. Management emphasis is on providing winter habitat for elk and deer.

15: This unit consists of the riparian corridor along Alder Creek, an important fisheries stream. Management emphasis is on restoring and enhancing the condition of this stream.

Decision Number/Page:
Standard Management Direction, pg. 2-1 to 2-12;

Management Unit 12 Direction, pg. 2-33 to 2-34;

Decision Language: This unit will be managed to improve habitat conditions and increase the production and diversity of shrub species in upland and riparian vegetative types to support wintering populations of deer and elk, and to help meet CDOW long-range herd goals.

Management Unit 15 Direction, pg. 2-37 to 2-38;

Decision Language: This unit will be managed to restore and enhance the condition of fishery streams.

III. AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES

A. CULTURAL RESOURCES/NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment

Range permit renewals are federal undertakings (as defined in 36 CFR 800.16(y)) that fall under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (*e.g.*, fences, spring improvements, construction of permanent water structures, etc.) are subject to compliance requirements under Section 106 and will undergo standard cultural resource inventory and evaluation procedures. During Section 106 review, a cultural resource assessment was completed for the allotment (CR Reports #06GN008 and 06GN009) following the procedures and guidance outlined in the following: The 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, Instructional Memorandum (IM)-WO-99-039, IM-CO-99-007, IM-CO-99-019 and IM-CO-2001-026. BLM Manuals and Colorado Protocol between the BLM and State Historic Preservation Office (SHPO 1998) provide guidance in meeting BLM's responsibilities under the National Historic Preservation Act. The results of these assessments are summarized below. Copies of the cultural resource assessment are located in the archaeological files at the Gunnison Field Office. Cultural resources are fragile, non-renewable and significant sites and are protected by law, and various regulations.

The cultural resources in the Gunnison Field Office span approximately 12,000 years and are represented by Paleoindian, Archaic, Formative, Ute and Euro-American cultures. Sites include lithic scatters, quarries, temporary camps, extended camps, village, rock shelters, rock art, wickiups, scarred trees, hunting sites, kill/butchering sites, processing areas, tree platforms, eagle traps, vision quest sites, caves, trails, roads, water resource sites, homesteads, ranches, cabins, mills, railroads, transmission lines, mines, trash dumps, aspen art, isolated artifacts, graves, etc. Many of these sites have the potential to be directly affected and impacted by livestock grazing. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to significant cultural properties.

A significant number of cultural resource sites have been identified within the Cabin Creek and Alder Creek Allotments, primarily within a short distance to water and with southern exposures. Some of these resources are located within areas of cattle concentration, as determined from previous inventories. To date, 996 acres (3.8%) of the combined allotments have been inventoried at the Class III level. Known sites eligible for listing on the National Register of Historic Places (NRHP) within the allotment were revisited and no impacts from existing grazing activities were noted, with two exceptions. Based on the available data, a high potential for historic properties occurs within the Cabin Creek and Alder Creek allotments.

There are currently no known areas of Native American Religious Concern located within these allotments.

Environmental Consequences and Mitigation:
Cattle concentration areas have a high potential to directly damage surface and subsurface cultural resources in the following ways: trampling and churning of site soils, features and artifacts; breakage of artifacts; and impacts from standing or rubbing against structures, surface features or rock art. Indirect impacts can include increased soil erosion and substantial ground disturbance, which can lead to irreversible damage over time. Significant historic properties that may be identified within cattle concentration areas will need to be monitored for future grazing impacts.

Proposed Action
The Proposed Action would result in a decrease in the permitted AUMs on the two allotments. While use has only reached the levels of the Proposed Action on two of the last 25 years (1985 and 1996), the Proposed Action would reduce the likelihood that grazing at full permitted levels would have an impact on cultural resources. This alternative would have no environmental consequences requiring mitigation for this current proposal. The known cultural resources eligible for listing on the National Register of Historic Places (NRHP) within the allotments were revisited and no impacts from existing grazing activities were noted, with two exceptions. Site damage from salt licks placed within the site boundaries at two sites determined to be eligible for listing on the NRHP was observed. The Proposed Action requires that salt blocks be moved away from NRHP eligible sites, which would lessen the concentration of cattle and site impacts. The eligible sites would need to be revisited again before the next permit renewal to reassess site conditions; this would be accomplished based on available funding. If future revisits to sites determined as eligible for listing on the NRHP show impacts from grazing activities, mitigation of the site(s) would be required, and may include, but are not limited to, avoiding cattle concentration by reducing AUMs, herding and dispersing cattle, installing fences around the affected site(s), moving salt blocks, and/or moving watering troughs.

If future cultural resource inventories identify significant sites, the sites would need to be monitored to determine if adverse effects are occurring to the sites. If adverse effects are found, mitigation measures would need to be implemented. These could include, but are not exclusively limited to, decrease in the AUMs, construction of fenced exclosures around the sites, excavation of the sites or installation of erosion control devices.

Alternative #2
Because this alternative allows for higher AUMs than the Proposed Action, there is an increased potential for site impacts from grazing activities to occur in the event that the permits are stocked to permitted levels. Initially, Alternative 2 would have the same environmental consequences and mitigations as Alternative 1 (see above). However, it is more likely that cattle would impact cultural resources and NRHP eligible sites at full permitted numbers under Alternative #2 than under Alternative #1. As a result, it is likely that more intensive mitigation would be required under full implementation of Alternative #2.

B. INVASIVE, NON-NATIVE SPECIES

Affected Environment

Most concerns with noxious weeds within the Cabin Creek and Alder Creek Allotments are associated with roads and road maintenance. In the Cabin Creek Allotment, *Bromus tectorum* (cheatgrass) is common along roadsides and has been observed on some hillsides along Highway 50. Cheatgrass was also noted in or near many roads and in the general area of some land health plots in the Alder Creek allotment/pasture. The invasion of this species into degraded sites on these allotments is a concern. Weed control is performed annually along roadways within both allotments. Within the Alder Creek allotment Canada thistle (*Cirsium arvense*) occurs in small scattered stands along Sewell Rim Road, North Parlin Flats Road, and the road to Hippy Basin. The Big Gulch riparian area also has stands of Canada thistle (*Cirsium arvense*) and hoary cress. Cheatgrass (*Bromus tectorum*) occurs throughout the Alder Creek Allotment and is normally associated with road disturbances. Cabin Creek Allotment also has known infestations of Canada (*Cirsium arvense*) and other thistle species along with cheatgrass (*Bromus tectorum),* most associated with roads. Both species also occur along the U.S. Highway 50 right-of-way.

Established roadways within the Alder Creek and Cabin Creek Common allotments have been spot treated chemically each year since 1994 as part of the Gunnison Field Office Noxious Weed Control Program. U.S. Highway 50 has been treated by Gunnison County since 1994. Fall cheatgrass treatments were initiated in the fall of 2004 and repeated in 2005 along roadways. These weed control efforts are part of a basin wide cooperative weed management program and would continue independent of the proposed action. A Western Power Administration (WAPA) power line crosses the southern portion of both allotments, east to west. WAPA is also a partner in the basin wide cooperative weed management effort coordinated by Gunnison County.

Gunnison Field Office also has a requirement for the use of certified weed free hay on these and all allotments within the Gunnison Field Office. Cheatgrass is discussed in greater detail in the Soil Section.

Environmental Consequences/Mitigation

Proposed Action

Full implementation of the proposed action would help to ensure that grazing use does not increase the spread of invasive, non-native species. While there would continue to be small areas that receive heavier grazing use, the opportunity for recovery and periodic growing season rest of areas should ensure that these small areas do not become an avenue for increased noxious weeds.

Noxious weed control activities (chemical spot treatments, hand grubbing, weed free forage requirement etc.) would continue independent of the proposed action. The Proposed Action combined with ongoing noxious weed control efforts would result in a net positive gain toward the control and overall management of noxious weeds.

Alternative #2
Full implementation of this alternative would likely result in larger areas of heavier grazing around water sources, along trails, and along riparian corridors due to the stocking levels. The increased stocking levels associated with Alternative #2 would not allow the necessary flexibility to allow these areas to rest and recover from this heavier use. As a result, these areas would likely receive heavy use annually and would develop bare soil patches which would provide favorable conditions for establishing and/or increasing invasive species infestations.

Noxious weed control activities (chemical spot treatments, hand grubbing, weed free forage requirement etc.) would continue independent of this alternative. However, despite ongoing weed control activities, grazing use as prescribed in this alternative may increase the rate of spread of noxious weeds. The additional impacts would be limited to the areas of heavier grazing, located away from the usual treatment areas, at least until such new populations were identified and treatments begun.

C. MIGRATORY BIRDS

Affected Environment
The Migratory Bird Treaty Act (MBTA) of 1918 was passed to regulate the taking of native birds. In 2001, President Clinton signed Executive Order 13186 (66 FR 3853), which directs federal agencies to further implement the MBTA by considering the effects of projects and actions on migratory birds. Pursuant to this Executive Order, the US Fish and Wildlife Service, BLM and Forest Service are working on a Memorandum of Understanding which requires agencies to review the US Fish and Wildlife Service *Birds of Conservation Concern (BCC)* for species that may inhabit a project area. When reviewing the effects of projects/actions on migratory birds, species on the BCC list are emphasized. Bird species on the list for the Southern Rockies/Colorado Plateau region which could breed within this proposed project area include the flammulated owl (*Otus flammeolus*), Williamson's sapsucker (*Sphyrapicus thyroideus)*, Lewis woodpecker *(Melanerpes lewis)*, and sage sparrow (*Amphispiza belli)*. Williamson's sapsuckers, flammulated owls, and Lewis woodpeckers are all cavity nesters that may nest within the scattered aspen stands or riparian areas. Sage sparrows nest within sizable (>30 acres), low-elevation (<8400 ft) stands of big sagebrush (Lambeth 1998) which are common throughout these allotments.

Sage sparrows typically arrive in Colorado by April, initiate nesting in May, and fledge young during June and July. They prefer to nest in semi-open to dense stands of 0.5 to 2 m (1.5 to 6.5 ft) tall sagebrush (Colorado Partners in Flight website at http //www.rmbo.org/pif/bcp/phy62/ sage/sasp.htm). They construct cup nests, usually at mid-bush level with sufficient foliage above to conceal the nest (Lambeth 1998).

Environmental Consequences/Mitigation

Proposed Action
Livestock grazing would not directly affect tree nesting species including flammulated owls, Williamson's sapsuckers, or Lewis woodpeckers. No take of these species or their nests would occur as a result of grazing under this alternative.

Although the sage sparrow nesting period coincides with the livestock grazing period in the Cabin Creek and Alder Creek allotments, placement of their nests well within a sagebrush plant is expected to protect them from being trampled by livestock. As a result, it is unlikely that livestock grazing would result in the take of sage sparrows or their nests. Ground-nesting migratory birds would be at risk of take as a result of trampling or annual reduction of herbaceous cover, making them more susceptible to predation. There is greater potential for this disturbance to occur as stocking densities increase within an allotment.

Alternative #2

Livestock grazing would not directly affect tree nesting species including flammulated owls, Williamson's sapsuckers, or Lewis woodpeckers. No take of these species or their nests would occur as a result of grazing under this alternative.

As discussed under the Proposed Action, it is unlikely that livestock grazing would result in the take of sage sparrows or their nests. Ground-nesting migratory birds would be at risk of take as a result of trampling or annual reduction of herbaceous cover, making them more susceptible to predation. There is greater potential for disturbance to occur under this Alternative than under the Proposed Action due to greater stocking densities.

D. THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.)

Affected Environment

Of the plant and animal species occupying the Gunnison Field Office area that are federal or state-listed threatened, endangered, or candidate species, or BLM sensitive species, Canada lynx (*Lynx canadensis*), bald eagle (*Haliaeetus leucocephalus)*, Gunnison sage-grouse (*Centrocercus minimus*), and Gunnison milkvetch (*Astragalus anisus*) warrant discussion under this Proposed Action. Canada lynx is listed as endangered by Colorado and threatened under the federal Endangered Species Act. Bald eagle is state-listed as threatened and is a BLM sensitive species. Gunnison sage-grouse is a Colorado species of special concern and a BLM sensitive species, while Gunnison milkvetch is a BLM sensitive species.

The Cabin Creek and Alder Creek allotments overlap with approximately 2% of the Almont Lynx Analysis Unit (LAU). This LAU is comprised of 59,330 acres of which 84% is on Forest Service lands. Approximately 1000 acres of the Cabin Creek and Alder Creek allotments lie within this LAU, with 283 acres mapped as 'other' lynx habitat (176 acres in Cabin Creek and 107 acres in Alder Creek allotment). 'Other' habitat is defined as seasonal habitat that provides enough vegetative cover for some snowshoe hare populations. It typically consists of drier coniferous forests, aspen with coniferous regeneration in the understory, and some shrublands adjacent to lynx habitat. In Cabin Creek allotment this habitat consists of aspen/mesic mountain shrubs with scattered Douglas fir. In Alder Creek allotment this habitat consists of aspen, mixed conifer, and sagebrush/grassland mix. In both allotments lynx habitat is in the higher elevations

(typically >8,400 ft) where greater moisture supports relatively vigorous, diverse understory vegetation. Based upon inspection of the allotments in 2005 and 2006, lynx habitat within the grazing allotments generally appears healthy with good structural complexity including grass, forb, shrub and tree components. Species diversity is generally high with native species being dominant. Riparian and wetland systems are generally in good condition with high water quality and a good amount and diversity of vegetative cover and composition. These observations are consistent with land health assessments conducted in 2004 in which BLM Colorado Standards for Public Land Health addressing upland soils, and plants and animals were 'achieved' or 'moving towards achieving' in and near the mapped lynx habitat within these allotments. Based upon several years of livestock utilization monitoring, livestock use of lynx habitat in both allotments has been slight (0-20%) to light (21-40%).

Bald eagle winter concentration corridors exist along Tomichi Creek and Quartz Creeks. Approximately 80 acres of Alder Creek allotment overlaps with these mapped corridors. However, most of these acres consist of sagebrush/grasslands rather than mature cottonwoods which are indicative of bald eagle winter concentration areas, providing good hunting perches and protection from extreme weather.

The Gunnison milkvetch is endemic to the Gunnison Basin and is known to occur in both allotments. Within its range, it is widely scattered and fairly abundant, most commonly growing on south to southwestern-facing slopes of 2 to 20 degrees. It is typically found on dry, gravelly flats and hillsides at elevations ranging from 7,500 to 9,400 ft. Associated vegetation includes black sagebrush, big sagebrush, rabbitbrush, phlox, and grasses.

Both Cabin Creek and Alder Creek allotments are within occupied Gunnison sage grouse habitat as defined by the Gunnison Sage-grouse Rangewide Steering Committee (2005). The area includes four active leks, all within the Alder Creek allotment. Nine other active leks exist within four miles of the allotments. Alder Creek allotment contains sage-grouse lek habitat, while both allotments contain important nesting and brood-rearing habitat. Approximately 17% of the combined allotments consist of Gunnison sage-grouse critical winter range. The upland vegetation types within the allotments that are used by sage-grouse include Wyoming and mountain big sagebrush, black sagebrush, bitterbrush, Utah serviceberry, mountain mahogany, and aspen. Riparian areas consisting of a variety of shrubs, forbs, and grasses with alder, willow, and cottonwood overstories are especially important for sage grouse during the brood-rearing period.

Land health assessments for both allotments were conducted in 2004 to assess whether Colorado Standards for Public Land Health were being achieved, were moving towards being achieved, or were not achieved. Standard 4 addresses special status, threatened, and endangered species. Gunnison sage-grouse habitat objectives from the Gunnison Basin Gunnison Sage-Grouse Conservation Plan were used to evaluate this Standard. Of 39 transects evaluated for Gunnison sage-grouse habitat objectives (Standard 4) in the Cabin Creek Allotment, 22% of the transects achieved the standard, 24% were moving towards achieving the standard, and 54% did not achieve the standard. In general, the lower elevation transects in the southwestern part of the allotment did not meet sage-grouse objectives, while most of the mid- to higher elevation transects in the northeastern part of the allotment were moving towards achieving or were

achieving objectives. Transects were conducted in each of eight different ecological types within the allotment as described below in the *Vegetation* section. The lower elevation transects that generally did not meet Standard 4 were primarily in the Wyoming big sagebrush/muttongrass ecological type (n=8) or a Utah serviceberry ecological type (n=6). The upper elevation transects that were moving towards achieving or were achieving Standard 4 were primarily in the big sagebrush/muttongrass ecological type (n=11) or bitterbrush-sagebrush/needlegrass ecological type (n=10).

Of the 25 land health assessment transects evaluated for Gunnison sage-grouse habitat objectives (Standard 4) in the Alder Creek allotment, 8% of the transects achieved the standard, 24% were moving towards achieving the standard, and 68% did not achieve the standard. As in the Cabin Creek allotment, it was the lower elevation transects that generally did not achieve Standard 4. These lower elevation transects were in Wyoming big sagebrush/muttongrass (n=5) or Utah serviceberry (n=6) ecological types. Five of the 11 transects in the bitterbrush-sagebrush/needlegrass ecological types also did not meet Standard 4; these transects were located in low to mid-elevations.

In the Wyoming big sagebrush/muttongrass ecological type, where all 13 transects in the combined allotments failed to achieve Standard 4, productivity was below the potential for this type. This ecological type lacked cover and diversity of grasses and forbs, which are critical components of sage-grouse nesting/early brood-rearing habitat. All 11 transects in the Utah serviceberry ecological types also did not achieve Standard 4. Productivity within these ecological types was below potential. This type lacked grass diversity, however, cover was high. In contrast, forb cover was low, however, diversity was high.

In both allotments, the failure to meet Standard 4 was typically due to vegetative cover, structure, and productivity being lower than the potential for the ecological type in which the transect was located. This likely resulted from a combination of factors including recent extreme/severe droughts, historic high levels of livestock grazing, big game over-browsing on shrub species, and in some cases, big game use of herbaceous vegetation prior to use by livestock. During the land health assessments, dead and/or decadent shrubs were frequently noted as well as some mortality of herbaceous plants. In both allotments, hedging and overbrowsing of aspen and shrubs including serviceberry, mountain mahogany, bitterbrush, and sagebrush by deer and elk was often noted as being severe (see Terrestrial Wildlife section for more details). These shrub and aspen communities also showed little or no recruitment of young plants.

Environmental Consequences/Mitigation

Proposed Action

Under this alternative there would be no effect on the bald eagle or its primary habitat, either directly, indirectly or cumulatively. The grazing allotments overlap with less than 1% of the bald eagle winter concentration area in the Gunnison Basin. Also, the bald eagle winter period of use does not overlap with the proposed grazing season. There are no known grazing-related activities that would impact wintering bald eagles or their habitat.

Based on analysis of mapping data and field checks of lynx habitat within Cabin and Alder Creek allotments, it was determined that implementation of this alternative would have no effect on the continued existence of the Canada lynx or result in destruction or adverse modification of habitat. Less than 2% of the combined Cabin and Alder Creek allotments overlap with the Almont LAU, and only 1% is within lynx habitat (Table 1). Cabin Creek allotment contains approximately 176 acres of mapped lynx habitat and Alder Creek allotment has 107 acres. These acres are all mapped as 'other' habitat which is generally low quality, summer forage habitat. This habitat is transitional between the more mesic and contiguous coniferous forest types on the adjacent Forest Service lands, and the dry sagebrush-dominated communities of the Gunnison Basin. This 'other' habitat in Cabin Creek consists of aspen/mesic mountain shrubs with scattered, sparse Douglas fir. In Alder Creek allotment this "other" habitat consists of aspen, mixed conifer, and sagebrush/grassland mix. Lynx habitat within these allotments is currently 'achieving' or 'moving towards achieving' Colorado Standards for Public Land Health. Under this Alternative, slight to light livestock utilization is expected to continue within lynx habitat, and therefore land health conditions should be maintained or improved. As such, vegetation objectives for grazing management outlined in the Canada Lynx Conservation Assessment and Strategy (Ruediger, et al. 2000) would be met.

Although Gunnison milkvetch is present and flowering during the period that livestock grazing would occur in the allotments, there is no evidence that Gunnison milkvetch is a livestock forage species. However there is potential for livestock to trample and cause physical damage to plants. The potential for trampling would increase as stocking densities within the use areas increases. It's unknown whether higher density of livestock or longer duration of grazing has the greater potential to increase trampling of these plants. Because these plants have co-existed with livestock grazing for decades and are widespread throughout the Gunnison basin, implementation of this alternative is not expected to adversely affect the continued existence of this species.

Under this alternative, livestock would be managed to provide the greatest potential to meet the upland and riparian allotment objectives which would protect Gunnison sage-grouse nesting/early brood-rearing and brood-rearing habitat. This alternative provides flexibility in that, depending upon the stocking rate, the allotment would be managed as several use areas. The use areas would facilitate deferment of grazing and could be used when the stocking rate was at a level that allowed allotment objectives to be met, based upon livestock utilization monitoring. This grazing regime has been successfully implemented in recent years when a significant amount of nonuse was taken by various permittees. Based upon livestock utilization data collected from these allotments over the past 20 years, the stocking rate proposed under this alternative is expected to result in proper utilization to meet the upland and riparian objectives.

Finding on the Public Land Health Standard for Threatened & Endangered species: This alternative has the greatest opportunity to meet allotment objectives because the stocking rate is based upon past livestock utilization data and there is flexibility to graze the use areas in the allotment simultaneously or in rotation. It is expected that this grazing regime, combined with continued good stewardship by the permittees, would facilitate achieving or moving towards achieving this Standard. However, other factors for which the BLM has little or no control,

such as drought and big game use of the area, will also influence whether or not this Standard is achieved.

Alternative #2

Under this alternative there would be no effect on the bald eagle or its primary habitat, either directly, indirectly or cumulatively. The grazing allotments overlap with less than 1% of the bald eagle winter concentration area in the Gunnison Basin. Also, the bald eagle winter period of use does not overlap with the proposed grazing season. There are no known grazing-related activities that would impact wintering bald eagles or their habitat.

Based on analysis of mapping data and field checks of lynx habitat within Cabin and Alder Creek allotments, it was determined that implementation of this alternative would have no effect on the continued existence of the Canada lynx or result in destruction or adverse modification of lynx habitat. Less than 2% of the combined Cabin and Alder Creek allotments overlap with the Almont LAU, and only 1% is within lynx habitat (Table 1). Cabin Creek allotment contains approximately 176 acres of mapped lynx habitat and Alder Creek allotment has 107 acres. These acres are all mapped as 'other' habitat which is generally low quality, summer forage habitat. This habitat is transitional between the more mesic and contiguous coniferous forest types on the adjacent Forest Service lands, and the dry sagebrush-dominated communities of the Gunnison Basin. The 'other' habitat in Cabin Creek consists of aspen/mesic mountain shrubs with scattered, sparse Douglas fir. In Alder Creek allotment this "other" habitat consists of aspen, mixed conifer, and sagebrush/grassland mix. Lynx habitat within these allotments is currently 'achieving' or 'moving towards achieving' Colorado Standards for Public Land Health. This habitat is in the higher elevations where vegetation receives more moisture and is more resilient to grazing. Vegetation objectives for grazing management outlined in the Canada Lynx Conservation Assessment and Strategy (Ruediger, et al. 2000) are expected to be met.

Table #5 Almont Lynx Analysis Unit Baseline Lynx Habitat Data

Almont LAU	**Existing Conditions in LAU (% of Total LAU Acres)**	**Portion of Cabin Creek and Alder Creek Allotments Within LAU**
Total Acres	59,331	1,000 (2%)
Total Acres of Lynx Habitat	26,023 (44%)	283 (1%)
Denning Habitat: Acres and Percent of Total Lynx Habitat	2583 (10%)	0
Winter Habitat: Acres and Percent of Total Lynx Habitat	2311 (9%)	0
Other Habitat (Low Quality and Summer Forage): Acres and Percent of Total Lynx Habitat	21,129 (81%)	283 (100%)

Although Gunnison milkvetch is present and flowering during the period that livestock grazing would occur in the allotments, there is no evidence that Gunnison milkvetch is a livestock forage species. However, there is potential for livestock to trample and cause physical damage to plants.

This potential is greater under this Alternative than under the Proposed Action due to greater stocking densities. However, because these plants have co-existed with livestock grazing for decades and are widespread throughout the Gunnison basin, implementation of this alternative is not expected to adversely affect the continued existence of this species.

Under this alternative, up to 1,857 head of livestock would be grazed in defined use areas (possibly more if yearlings are run) during a period that coincides with the Gunnison sage-grouse nesting/early brood-rearing season. Running a herd of this size in this allotment is expected to significantly reduce herbaceous cover important for hiding hens and chicks from predators during the nesting/early brood-rearing season and for providing habitat for a diversity of insects important in the diet of chicks. Research conducted by the Colorado Division of Wildlife in the Gunnison Basin reveals that sage grouse chick mortality is typically highest during the first few weeks after hatching due to their vulnerability to predators. A reduction in herbaceous cover would increase this vulnerability. Livestock not only remove the current years nesting cover, but could impact the following year's cover since regrowth of grazed plants is dependent on good summer and fall growing conditions, especially moisture. In many years, growing conditions may not be adequate to replenish the nesting cover that is removed by livestock in May and June. Based upon livestock monitoring data collected in these allotments over the past 20 years, it is unlikely that the *Upland Objectives* for these allotments would be met under this grazing regime. This data shows that, when livestock stocking rates approach the levels prescribed under this alternative, large areas of the allotment do not meet the utilization objectives.

Within the allotment, riparian areas associated with springs, meadows, Alder Creek, Big Gulch, Sewell Gulch, Cabin Creek, East Cabin Creek, and Dry Creek are important sage grouse brood-rearing habitat. These riparian habitats support forbs and a diversity of insects important in the diet of sage grouse chicks. The diversity of vegetation, including grasses, forbs, shrubs, and trees also provides horizontal and vertical structure which protects the hen and chicks from predators. Based upon livestock utilization monitoring conducted by the BLM during the past 20 years, it's unlikely that the riparian objective for sage grouse brood-rearing habitat of a minimum 4-inch herbaceous stubble height over 80% of each riparian area between June 15 and August 30 would be met under this alternative. This is especially true for the later grazed areas since there would be less time for regrowth of the herbaceous vegetation after cattle are removed.

Finding on the Public Land Health Standard for Threatened & Endangered species: Based upon land health assessments conducted in 2004, the herbaceous cover in much of the sage grouse upland nesting habitat was below its potential and this standard was not met in 60% of the transects. Based upon years of livestock utilization monitoring, it's unlikely that the Upland and Riparian Objectives for these allotments would be met under this alternative. Therefore, those transects that were not meeting Standard 4 in 2004 would not be expected to improve, and those that were achieving or moving towards achieving would likely be degraded.

E. WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5- The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado (1999). Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.)

Affected Environment

There are no waters in the allotments that are on the State's 330(d) list for impaired water quality or the Colorado Monitoring and Evaluation List for suspected impairment. The areas around water sources and along streams often receive excessive utilization of forage plants by livestock.

Concentrated livestock use around water sources such as springs, ponds, and small streams could result in short term increases in the concentration of bacteria, nitrogen compounds or other substances that result in temporary exceedances of the Colorado Water Quality Numeric Standards (Biological and Inorganic). However, in determining existing water quality the state requires representative data collected throughout the year and over multiple years. Additionally, activities that result in temporary or short term changes in water quality are considered not to result in significant degradation. Thus, grazing impacts that result in elevated levels of inorganic compounds or bacteria over a 2-4 week period annually would not normally be considered significant degradation, and would meet Colorado Public Land Health Standard #5 (water quality), if the three conditions listed below are avoided.

In addition to the State's water quality designations, classifications and numeric standards, all surface waters of the state are subject to the Basic Standards (Colorado Water Quality Control Commission, 1999), which in part read state surface waters shall be free from substances attributable to human-caused point or non-point source discharge in amounts, concentrations or combinations that

1. can settle to form bottom deposits detrimental to the beneficial uses (e.g. silt and mud),
2. are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life, or
3. produce a predominance of undesirable aquatic life.

Environmental Consequences/Mitigation and Finding on the Public Land Health Standard for Water Quality

Proposed Action
The grazing outlined in the proposed action is of sufficiently short duration that significant degradation to water quality is not expected.

Finding on the Public Land Health Standard for water quality:
This Standard is expected to be met under this alternative.

Alternative #2
The grazing outlined in the proposed action is of sufficiently short duration that significant degradation to water quality is not expected.

Finding on the Public Land Health Standard for water quality:
This Standard is expected to be met under this alternative.

F. WETLANDS & RIPARIAN ZONES (includes a finding on Standard 2: Riparian systems associated with both running and standing water, function properly and have the ability to recover from major disturbance such as

fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and biodiversity. Water quality is improved or maintained. Stable soils store and release water slowly.)

Affected Environment

Stream riparian areas occur with the intermittent streams and the one perennial stream in the allotments. These include Cabin Creek, Dry Creek, East Cabin Creek, Sewell Gulch, Alder Creek, Big Gulch, Spring Gulch, Flick Gulches, and numerous smaller unnamed intermittent drainages. Alder Creek is the only perennial stream in the allotments. There are numerous riparian/wetland areas associated with springs and seeps in both allotments.

The riparian areas include a variety of plant communities where willows, cottonwood, alder, riverbirch or aspen make up the overstory. A small stand of balsam poplar occurs in Sewell Gulch. Willows that occur in the allotment include yellow willow, Geyer willow, Pacific willow, Bebb willow, serviceberry willow and coyote willow. Common shrubs found in riparian areas include Wood's rose, shrubby cinquefoil or potentilla, rubber rabbitbrush, gooseberry, currant, hawthorn, chokecherry, serviceberry, snowberry, juniper and basin big sagebrush; common grasses forbs include Kentucky bluegrass, swamp bluegrass, bentgrass, smooth brome, western wheatgrass, bluejoint reedgrass, tufted hairgrass, fowl managrass, common timothy, creeping quackgrass, little barley, foxtail barley, water sedge, beaked sedge, Nebraska sedge, Baltic rush, western yarrow, iris, geranium, aster, fleabane, common dandelion, holly leaf clover, white Dutch clover, American vetch and stinging nettle.

Portions of some intermittent stream channels have downcut which has reduced the riparian plant communities due to a dewatering that commonly occurs in incised stream channels. This can be seen in the lower reaches of Dry Creek and in many of the smaller intermittent stream. Some of these smaller stream channels may not have a potential to support a riparian plant community but likely did support wetter plant communities than the surrounding big sagebrush plant communities. Channel incision was common throughout the western United States during the 1880's thru the 1930's. It is thought this was due to the cumulative effects of large numbers of livestock, severe drought and improperly placed roads along drainages.
The stream riparian areas in both allotments experienced heavy livestock utilization until recent years. This use reduced willows and changed the herbaceous plant communities to those commonly found where there is repeated close grazing, i.e., communities dominated by Kentucky bluegrass, dandelion and white dutch clover. Iris is another indicator species that increases with excessive livestock grazing.

Alder Creek riparian area has improved greatly in the last 15 years due solely to improved livestock management. Sewell Gulch has also improved in condition as a result of improved livestock management but still experiences occasional heavy livestock use. The riparian areas in the Cabin Creek Allotment have improved noticeably from the multiple years of rest and reduced livestock use.

Alder Creek, Sewell Gulch, Cabin Creek, East Cabin Creek and the upper reaches of Dry Gulch are meeting this standard. The lower reaches of Dry Gulch, Big Gulch, Spring Gulch, and Flick Gulch are not meeting this standard due to channel incision and ongoing heavy livestock use that generally results in a downward trend in condition.

Most of the riparian areas associated with springs and seeps within these allotments are meeting this standard but many have been impacted by being developed for livestock water and repeated close grazing. The extent of area that could support riparian or wetland plant communities has been reduced and the species composition has been altered by development of livestock water sources and by excessive grazing but generally most of the ecological parts remain and ecological functions are still mostly intact. The values of these spring and seep type sites could be greatly improved by reduced livestock utilization of riparian forage species or fences that exclude livestock.

Environmental Consequences/Mitigation

Proposed Action
Even though the Proposed Action provides for a stocking rate that is greater than what long term monitoring indicates is appropriate, the 15% reduction in permitted AUMs combined with the livestock management that is currently being implemented by the grazing permittees as described in the Proposed Action could meet the riparian utilization objectives.

> ***Finding on the Public Land Health Standard for riparian systems:*** Current management (70% of permitted stocking coupled with consistent livestock herding and maintenance of good distribution) on the allotments has resulted in progress being made towards meeting the Riparian Standard for the majority of the riparian areas within the allotments. Implementation of this Alternative combined with the continued good stewardship by the permittees is expected to meet this standard.

Alternative #2
A review and analysis of utilization and actual use monitoring data and field observations over the last 25 years indicates the stocking rate in this alternative is in excess of what would be appropriate to meet the stated riparian utilization objectives.

Finding on the Public Land Health Standard for riparian systems: Due to the level of stocking prescribed under this alternative (full permitted numbers vs. the current use level of approximately 70% of permitted numbers), it is anticipated that implementation of this alternative would halt progress towards meeting the Riparian Standard.

G. SOILS (includes a finding on Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.)

Affected Environment

The major soil mapping units within the upland areas in the allotments are Duffson-Corpening Loams, Duffson-Spring Creek stony loams, Kezar-Cathedral gravelly sandy loams, Lucky-Cheadle gravelly sandy loams, Parlin-Hopkins channery loams, Parlin-Mergel gravelly loams, Stony rock land, Uinta and Tolvar soils, Vulcan gravely sandy loams and Youga loam. The erosion hazard for these soils is Moderate to High. Adequate plant cover is needed to prevent

accelerated erosion and to promote infiltration. Perennial plant cover largely determines if the Upland Soil public land health standard is being met.

The cold, arid climate of the area results in short unpredictable growing seasons. Annual precipitation ranges from about 10 inches at the lower elevations to about 14 inches at the highest elevation areas in the northern edge of these allotments. Severe droughts occurred in 1988 through 1993 and 2000 through 2004. During these droughts there was dieback of big sagebrush, bitterbrush, serviceberry and aspen. Mortality of grasses was observed in the lower elevations of both Cabin Creek and Alder Creek allotments in 2003.

Growth of grasses is initiated in mid to late April, with the most of the forage production occurring from mid May through mid June. In many years there is a soil moisture deficit in mid to late June which slows or stops growth of herbaceous plants until the summer monsoons provide moisture for plant growth. Lower elevations are more affected by this early summer droughty condition. Cold temperatures and snow affects grass growth early in the spring, and in some years forage production is delayed due to cold temperatures. Soil moisture available for spring growth varies in amount year to year and is largely determined by the accumulation of fall, winter and early spring precipitation which is mainly snow. The redistribution of snow by wind plays an important role in determining the location and productivity of plant communities. Precipitation from a monsoonal flow regime occurs from late June through early September with July and August being the wettest months. The precipitation is generally in the form of convection storms, often intense and variable in area and amounts of effective precipitation.

Grasslands are found on windswept, westerly facing slopes, and forested areas are found on northerly mid and upper elevation slopes. Aspen occurs within the conifer forests and in small stands within big sagebrush dominated areas. Utah serviceberry plant communities are found within the mid to upper elevation big sagebrush communities on flatter areas at higher elevations and on leeward slopes throughout the area where snow deposition creates moist productive areas. Tall serviceberry acts similar to a snow fence to catch snow often creating more diverse and productive plant communities. Black sagebrush dominated plant communities are found on shallow soils typically in low and mid elevation areas. However, big sagebrush dominated plant communities are the dominant cover types. Soil depth and moisture largely determines the type of big sagebrush potential plant community that occurs on any site. Soil depth and moisture is a product of elevation, aspect and micro-topography.

Cheatgrass is increasing in the allotments, as is the case throughout the Gunnison Basin. In 1985, cheatgrass occurred on dozens of acres within the basin, but in 2009 it now occupies thousands of acres. On these allotments cheatgrass is found along many of the roads and is increasingly being found in patches far from roads. Cheatgrass is spread by wildlife, livestock, human activities, and wind. In similar plant communities in southern Idaho, northern Nevada and throughout Utah cheatgrass has invaded big sagebrush sites and has increased the fire frequency. In many areas where this invasion and increased fire has occurred, cheatgrass forms a monoculture where almost no native plants survive. Cheatgrass establishes first along roadsides, in areas where the soil surface is disturbed and in areas that are burned. Excessive livestock grazing can weaken native plant communities' defense against non-native plant invasion facilitating the establishment of cheatgrass. In addition to greatly increased soil erosion, resource

values such as wildlife habitat and livestock forage are lost. Unfortunately, there are few effective chemical or mechanical control methods for cheatgrass, and the one herbicide that does appear to be effective in controlling cheatgrass (imazapic), has only recently become available for use in large acreages on public lands. In the Cabin Creek and Alder Creek Allotments, cheatgrass occurs along many of the roads, in Cabin Creek, on south facing hillsides along Highway 50, in Sewell Gulch, on alluvial fans that drain into Alder Creek, and in the uplands away from roads in the East Fork of Cabin Creek and in the Spring Gulch/Flick Gulch area.

Rangeland health evaluations conducted in 2004 indicate that 14 of the 25 evaluation points in the Alder Creek allotment are not meeting this standard and 15 of the 39 evaluation points in the Cabin Creek Allotment are not meeting this standard. The sites not meeting this standard have plant cover and structure that is less than what is expected compared to the potential of the sites. Other indicators are excessive bare ground, insufficient litter, reduced microphytic soil crusts, visual indicators of excessive soil movement and dead/decadent plants.

The causative factors are the cumulative effect of historic excessive livestock grazing, recent extreme droughts, deer and elk utilization of the herbaceous forage plants in addition to annual livestock utilization, repeated excessive browsing of shrubs by deer and elk, recent livestock grazing during extreme drought, big game populations in excess of the carrying capacity of the habitat during extreme droughts and in some areas fire suppression. Grazing during the early growing season each year with infrequent rest or deferment has reduced the palatable, early cool season grasses in some areas. There are sites where the cover of big sagebrush has increased and herbaceous plant components are greatly depleted due to long term intensive, selective grazing of grasses. These sites would not likely change in response to improved livestock grazing management, and restoration efforts in the form of mechanical, chemical, or prescribed fire would be necessary. Recently implemented mechanical treatments with seeding in other nearby areas show promise for restoration of these types of sites. A continuing concern is the large deer and elk herds that are having a cumulative impact to the native upland plant communities in these allotments and no remedial action is provided for in this document.

Environmental Consequences/Mitigation

Proposed Action

This alternative provides a stocking rate that when combined with the described intensive grazing management would facilitate proper utilization of forage species. The proposed stocking rate in this alternative would enhance the likelihood for periodic rest of some of the Use Areas. Even though grazing would take place in the early growing season each year, with the reduction in duration of grazing in a Use Area, successful implementation of the utilization objectives and the increased likelihood of periodic full growing season rest it is expected that sufficient green leaf material would remain on forage species after grazing to allow regrowth and recovery to provide the plant cover, plant litter and enhanced root growth that maintains soil stability and increases soil organic matter for sustaining plant community diversity and production.

A continuing concern is the large deer and elk herds that are having a cumulative impact to the native plant communities in these allotments; no remedial action is provided for in this document.

Finding on the Public Land Health Standard for upland soils: Although in this alternative the season of grazing would always be between mid May and mid June, with the proposed stocking rate the potential for some seasonal deferment and growing season-long rest of Use Areas and the continuation of the good stewardship provided by the existing grazing permittees, it is anticipated that this standard would continue to be met on areas that are currently meeting this standard and many areas that are not currently meeting this standard would improve to move toward meeting this standard.

Alternative #2

The implementation of this alternative with the stated stocking rate would most likely make resting a Use Area difficult and still meet utilization objectives in the other upland Use Areas. The season of use would continue to be early in the growing season each year and frequency of use under this alternative would likely be every year. The duration of use may be reduced from the historic four weeks to no more than 2 weeks in a Use Area which could improve the probability of regrowth and recovery of grasses after defoliation as long as sufficient green leaf remains when the cattle are moved out of a Use Area. The stocking rate in this alternative would make proper utilization difficult even with the reduced duration of grazing due to the greater density of livestock in a Use Area. Grazing during the early part of the growing season each year results in livestock selectively grazing early growing grass plants during a period when they are often still relying on stored carbohydrate reserves in the roots to initiate growth. The length of time a plant has to grow prior to defoliation and the amount of green leaf material remaining after defoliation largely determines a grass plant's ability to regrow without tapping into stored carbohydrates for a second time. The concern with this alternative is the repeated early spring grazing every year and a stocking rate that would make rest and significant deferment very difficult to implement. The stated stocking rate is also in excess of what long term monitoring indicates is appropriate for proper utilization of key forage grasses. Extended droughts have had a profound impact on the upland plant communities over the last 25 years. Dieback and decline of aspen, bitterbrush, serviceberry and even grasses in some areas has occurred. Changes in livestock grazing management to respond to drought have typically been slow to implement which has added to the effects of drought on the native plant communities.

Healthy, vigorous herbaceous plants in the uplands are important to resisting invasion from noxious weed species such as cheatgrass and knapweed. The grazing regime described in this alternative does not facilitate improved vigor, cover and reproduction of the herbaceous component of the upland plant communities especially those sites that are not currently meeting Standards for Public Land Health. Soil stability, health and productivity rely on perennial plant communities that maintain plant diversity and productivity.

Finding on the Public Land Health Standard for upland soils: Implementation of this alternative is not expected to result in meeting this Standard due to the stocking rate which would make proper utilization of uplands difficult and growing season-long rest unfeasible.

H. UPLAND VEGETATION (includes a partial finding on Standard 3, see also Wildlife, Aquatic and Wildlife, Terrestrial: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.)

Affected Environment

The Cabin Creek and Alder Creek Allotments support a variety of vegetation communities including big sagebrush, Wyoming big sagebrush, mountain big sagebrush, black sagebrush, bitterbrush-big sagebrush, Utah serviceberry-big sagebrush, Utah serviceberry-mountain mahogany, and aspen ecological types, among others.

However, the majority of the allotments are dominated by big sagebrush communities. Wyoming big sagebrush occurs in the lower elevations on drier, shallow soils. Mountain big sagebrush occupies the upper elevations on sites that receive greater precipitation and have deeper soils. Wyoming big sagebrush sites are naturally less productive in terms of cover and forage production than mountain big sagebrush types. Mountain big sagebrush types generally have greater diversity of forbs and other shrubs as well as greater forage production for livestock. Transitional between these types of big sagebrush is a hybrid sagebrush community that is intermediate in plant cover and production. Antelope bitterbrush is a common shrub that occurs with the hybrid and mountain big sagebrush but rarely with Wyoming big sagebrush.

Deer and elk have significantly affected the composition, cover and productivity of the mixed mountain shrub plant communities in the allotments. Very large deer herds occurred from just after World War II to the mid 1970's. Deer populations declined after the 1970's but have increased in recent years. Elk began increasing about the 1960's and today are at or near the largest population size in over 100 years. While the area is primarily used by deer and elk in the winter, deer use on early spring grasses in the uplands in late April and early May has been observed. Elk often move onto National Forest in early spring but they have been observed in the allotments in April and early May.

Utilization of shrubs such as serviceberry, bitterbrush, mountain mahogany, big sagebrush, rabbitbrush and juniper has been excessive during many of the winters since the 1950's. This has resulted in decreased production, a hedged form class, and has been a factor in the dieback/mortality of important big game forage shrubs. Browsing of shrubs by big game has reduced the cover, productivity and vertical structure of shrubs over large areas of the allotments. Aspen has also been barked by elk to the degree that insects and disease have caused decline of mature trees. The numerous sprouts that result when mature trees die are severely browsed to such a degree that the stands are not successfully regenerating and so are dying. In many areas used by big game in the winter, serviceberry has been greatly reduced except those stands that are protected by deep snow on leeward slopes. It's common to see serviceberry, a shrub that typically is 5 to 8 feet tall browsed to the height of big sagebrush. This results in less snow captured and a drying of the plant communities. Johnston (2001) and Roath and others (1999) describe the degraded conditions of deer and elk habitat in the Gunnison Basin. Use on grasses by deer and elk in the uplands varies across the allotments year to year but appears to be

increasing and is having a cumulative effect to reduce the vigor, production and cover of herbaceous vegetation. Spring road closures have been put in place to prevent damage to muddy roads and have been extended in recent years to prevent disturbance to sage grouse during the mating season. These road closures are having the effect of keeping deer and elk on these allotments longer in the spring since there is much less disturbance from motorized recreation that tend to move the deer and elk up to higher elevation areas on National Forest lands. The result of this appears to be increased utilization on grasses by deer and elk prior to livestock grazing in mid May. Utilization monitoring shows a general pattern that utilization of upland forage species increases with an increase in livestock AUM's. It appears that grass vigor and production has declined in several areas within the allotments even with light to moderate livestock utilization. This is due to two recent droughts, livestock grazing during extreme drought and the stress to forage plants from the additive grazing by deer and elk before livestock grazing and during extreme drought. While livestock grazing permittees have reduced livestock numbers in some of the recent drought years, deer and elk populations remained high.

Drought Impacts. Land health assessments were conducted in 2004 and consistently showed in both allotments that dead and/or decadent plants are present. Review of utilization, actual use, and climate data suggests that causal factors are a combination of repeated historic and recent overuse combined with two droughts in recent years. Field observations indicate extensive dieback of bitterbrush and a dieback of big sagebrush during the two most recent drought events (1988-1994 and 2000-2004). Like many areas of the Upper Gunnison River Basin, there was also some mortality of herbaceous plants in the shrub dieback areas within the allotments.

Land Health Assessment. Of the 64 Land Health transects that were read in 2004, 13% were achieving, 31% were moving toward meeting, and 56% were not achieving standard 3 due to changes in the potential plant communities.

Utilization Monitoring. Forage use and/or livestock distribution has been monitored by BLM on the allotments nearly every year since 1985. The monitoring data combined with corresponding actual use (livestock numbers and seasons of use) data provides a good indication of the annual grazing impacts on forage species at different stocking levels over the usual mid-May to mid-June season of use on each allotment.

In the Cabin Creek Allotment, stocking over the last 20 years has varied from 221 AUMs to 1,109 AUMs. Livestock use is typically higher in Roundup Basin, upper East Cabin Creek, lower Cabin Creek, and upper Dry Gulch. In many years, the RMP and Sage Grouse Plan utilization and stubble height standards were exceeded in at least portions of those higher forage use areas. Generally, when the allotment was stocked at levels approaching 750 AUMs or less, the utilization standards were met on most areas, and the areas not meeting stubble height standards were fairly small. Stocking rates on the Cabin Creek Allotment have been higher than 750 AUMs in three of the last 20 grazing years. In the Alder Creek Allotment, stocking over the last 20 years has varied from 250 AUMs to 1,151 AUMs. Livestock use is typically higher in upper Sewell Gulch, Alder Creek, Big Gulch, Spring Gulch, the unnamed draw east of Spring Gulch, and Flick Gulch. In many years, the RMP and Sage Grouse Plan utilization and stubble height standards were exceeded at those higher forage use areas. Generally, when the allotment was stocked at levels approaching 950 AUMs or less, the utilization standards were met on most

areas, and the areas not meeting stubble height standards were fairly small. Stocking rates on the Alder Creek Allotment have been higher than 950 AUMs in nine of the last 20 grazing years.

At combined stocking rates of less than 1,700 AUMs for the two allotments, minor management changes, such as herding cattle out of small problem areas during the grazing season and better distribution of salt to upland sites, would likely have prevented areas of excessive use on average precipitation years. At combined stocking rates of more than 1,700 AUMs, there were more and larger areas not meeting the utilization standards. That excessive forage use could likely not have been prevented without fundamental management changes, such as reducing livestock numbers and/or season of use.

Over the last 20 years, several productive water sources have been developed on the uplands of the two allotments. This improved supply and distribution of water combined with the conscientious livestock management that is currently occurring on the allotments, would likely allow for somewhat higher stocking rates than are currently being used without increasing the number and size of the areas that are not meeting utilization and stubble height standards.

Range Readiness: Range readiness (plant phenological development) has been monitored on both allotments on a number of years since at least 1985. Generally by the mid-May on date, Poa (bluegrasses) plants are occasionally in the early boot stage (floral inflorescences growing), but the other forage grasses and carices are generally still in the vegetative state (no floral development). Upland plants are typically farther along in their development than riparian plants, but they are generally still in the vegetative state. The allotments usually do not meet the RMP range readiness criteria by the mid-May on date because the forage plants have not reached the appropriate phonological stage by mid-May on many years.

Environmental Consequences/Mitigation

Proposed Action

Upon full implementation of the proposed action, up to 1,621 cattle would utilize the 15 use areas on the combined allotment between mid-May and mid-June. This is more animals than have traditionally grazed these areas of the allotment for the last 20 years; however, grazing in each use area would be reduced to approximately two weeks or less during this period of time.

Overall, the upland vegetation on the combined allotment would continue to improve in vigor, density, and diversity under the Proposed Action. A small amount of the upland areas adjacent to livestock water sources, livestock trails, and riparian corridors would likely not meet the utilization and stubble height standards during the grazing period, under the proposed stocking rate. However, the number and size of the areas where use standards are not met would be less than under Alternative #2 and, on years with above average spring moisture, these areas would generally regrow and meet the use objectives prior to the end of the spring growing season. On normal to below normal spring moisture years, it is likely these areas would not regrow sufficiently following spring grazing to meet the utilization and stubble height requirements prior to the end of the growing season. However, the stocking levels of the Proposed Action would allow operators more flexibility than they would have under Alternative #2 to move cattle out of overused areas and to reduce use or rest any overused areas the following grazing season.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic, and Wildlife, Terrestrial): The timing, duration, and intensity of livestock grazing would facilitate meeting this standard. Based on past forage utilization monitoring, it is likely that the upland and riparian utilization objectives would be met on the majority of the allotment, and small areas of overuse would be mitigated by periods of rest/recovery. Diversity and cover of grasses and forbs and overall productivity would likely continue to improve. Therefore, those areas that are not meeting this standard could be expected to improve, and those that are achieving or moving towards achieving could also be expected to improve. However, other factors for which the BLM has little or no control, such as drought and big game use of the area, would also influence whether or not progress towards meeting this standard continues.

Alternative #2:

Once herd sizes return to full permitted numbers, up to 1,857 cattle would utilize the 15 use areas on the combined allotment between mid-May and mid-June. This is more animals than have traditionally grazed these areas of the allotment. However, grazing in each use area would be reduced to approximately two weeks or less during this period of time.

Overall, the upland vegetation on the combined allotment would maintain or continue to improve in vigor, density, and diversity under Alternative #2. However, if this proposal is fully implemented at the higher stocking rate, livestock grazing use would probably not meet the utilization and stubble height standards during the grazing period on a number of upland areas adjacent to livestock water sources, livestock trails, and riparian corridors. Based on utilization and actual use monitoring over the last 24 years, the areas that do not meet standards would be larger and more numerous than those under the Proposed Action. On years with above average spring moisture, it is likely that these areas would regrow and meet the use objectives prior to the end of the spring growing season. On normal to below normal spring moisture years, it is likely these areas would not regrow sufficiently following spring grazing to meet the utilization and stubble height requirements prior to the end of the growing season. More importantly, the increased stocking levels would limit the flexibility of the operators to move cattle out of overused areas or to reduce use/rest the overused areas the following grazing season without exceeding utilization and stubble height objectives in other use areas.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic, and Wildlife, Terrestrial): The timing and duration of livestock grazing would facilitate meeting this standard. However, it is uncertain if the intensity (or stocking level) would also facilitate meeting the standard. Based on land health assessments, diversity and cover of grasses and forbs is below potential and this standard is not met on 57% of the transects. Based on past forage utilization monitoring, it is unlikely that the upland and riparian utilization objectives would be met on portions of the allotment for extended periods of time Therefore, those areas that were not meeting this standard would not be expected to improve, and portions of those that were achieving or moving towards achieving could be degraded.

I. WILDLIFE, AQUATIC (includes a partial finding on Standard 3, see also Vegetation and Wildlife, Terrestrial. Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.)

Affected Environment

Alder Creek is a perennial fishery stream that supports mainly brown trout, some brook trout and suckers. The instream habitat is good for this small stream. The riparian condition is very good; there is adequate woody and herbaceous vegetation to support a beaver population. Beaver dams are important for maintaining late summer and fall flows especially in dry years and in providing fish habitat. Alder Creek is in the 1993 Resource Management Plan's Unit 15 which addresses riparian areas containing important fishery streams. A 4 inch stubble height on key herbaceous forage species is prescribed when grazing occurs.

Tiger salamanders are found in many of the stock ponds and sometimes get into livestock troughs. Their populations are affected by drought with their numbers varying between wet years and drought years.

Environmental Consequences/Mitigation and Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial):

Proposed Action
Successful implementation of the 4 inch herbaceous stubble height in the Alder Creek riparian area would meet riparian area health standards and would protect the fishery/stream habitat. The stocking rate in this alternative would facilitate meeting the utilization objective for the Alder Creek riparian area.
Tiger salamanders would likely continue to thrive in the stock ponds.

Finding on the Public Land Health Standard for Aquatic Wildlife:
The stocking rate in this alternative would facilitate meeting the prescribed utilization limit that would allow this standard to continue to be met.

Permittees Proposal
At full implementation, the stocking rate in this alternative would make it more difficult to meet the prescribed utilization objective along the Alder Creek riparian area and other riparian areas in the allotment.

Tiger salamanders would likely continue to thrive in the stock ponds.

Finding on the Public Land Health Standard for Aquatic Wildlife:
The stocking rate in this alternative is in excess of what would be needed for this standard to be met.

J. WILDLIFE, TERRESTRIAL (includes a partial finding on Standard 3, see also Vegetation and Wildlife, Aquatic. Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.)

Affected Environment

Wildlife that inhabit the allotments include deer, elk, bighorn sheep, coyotes, red fox, mountain lions, rabbits, Gunnison prairie dogs, sage-grouse, raptors, and various small mammals, songbirds, and invertebrates. Other than deer, elk, and special status species, there is little data available on abundance and distribution of wildlife in the area.

Both Cabin and Alder Creek Allotments are within mule deer and elk critical winter range. Both allotments are also within Game Management Unit 55. The Colorado Division of Wildlife's (CDOW) 2006 post-hunt population estimate for deer in Unit 55, which is done in conjunction with the adjacent Unit 551, was 8,100. Deer populations within these units have been exhibiting a decreasing trend with post-hunt populations in 2003, 2004, and 2005 estimated at 10,066, 9,850, and 8,700, respectively. Although there is a decreasing population trend, the 2006 estimated population of 8,100 is still higher than the 6500 – 7500 deer that the DAU Plan Amendment of 2006 established as an objective for this DAU. Because Cabin and Alder Creek allotments comprise approximately 37% of the critical deer winter range habitat within GMU 55, they experience high winter deer densities. During aerial surveys conducted by the CDOW in the winters of 2004, 2005, and 2006 there were 1572, 1295, and 1562 deer counted, respectively, within the Cabin/Alder Creek allotments. These three winters could be considered average to severe with relatively high snowfall and cold temperature.

As with deer, the elk population in Units 55 and 551 has been experiencing a decreasing trend with populations in 2003, 2004, 2005, and 2006 estimated to be 4000, 3700, 3700, and 3300, respectively. The 2006 population estimate is within the DAU objective of 3000 – 3500 elk for these units, however, problems exist due to poor distribution of elk resulting in excessive browsing of mountain shrub communities in some areas. During aerial surveys conducted by the CDOW in the winters of 2004, 2005, and 2006 there were 647, 339 and 658 elk counted, respectively, within the Cabin/Alder Creek allotments.

The poor condition of the mountain shrub communities within these allotments is evidence of the current and past years' high winter big game populations and poor distributions. Extensive browsing by big game can be seen on a variety of shrub species including black sagebrush, Wyoming and mountain big sagebrush, Utah serviceberry, mountain mahogany, antelope bitterbrush, and dwarf rabbitbrush. In response to concerns about the poor condition of the shrub communities throughout Gunnison Basin's big game winter range, in 2001 the BLM established a monitoring program to evaluate the extent of browsing and the condition of the shrub communities. Monitoring transects were established throughout the basin, including several in Cabin and Alder Creek allotments. In the spring of 2006 the transects were re-read, and the data was compared with data from 2001. The three shrub species targeted for this monitoring were Utah serviceberry, antelope bitterbrush, and mountain mahogany. Between 2001 and 2006 the percent decrease in healthy Utah serviceberry, antelope bitterbrush, and mountain mahogany

plants (defined as having less than 20% dead) within the combined Alder/Cabin Creek Allotments was 41%, 50%, and 51%, respectively. The decrease in healthy plants was greater in Cabin Creek Allotment for bitterbrush and mountain mahogany, while the decrease in healthy serviceberry was greater in Alder Creek allotment. These decreases are alarming given that plants were already stressed when the monitoring began in 2001. The loss of healthy plants can be attributed primarily to the recent severe/extreme droughts and to big game over-browsing. The browsing component was evaluated in the 2001 and 2006 monitoring studies by assessing the degree of hedging on the target shrub species. Between 2001 and 2006 the percent increase in the number of severely hedged Utah serviceberry, antelope bitterbrush, and mountain mahogany plants within the combined Alder/Cabin Creek Allotments was 412%, 86%, and 11%, respectively. The relatively low percent increase in the mountain mahogany plants is because they were already severely hedged when assessed in 2001. The percent increase in severely hedged serviceberry and bitterbrush was higher in the Cabin Creek than in the Alder Creek allotment (555% and 117% versus 250% and 66%, respectively). Overall, winter range forage in both allotments is below potential and likely would not be able to sustain current big game populations.

Elk use on grasses and forbs in the allotments is zero to slight and is mainly on last year's residue since most elk are off the allotment by early May. However, in recent years some elk use on early spring grasses has been recorded by staff conducting livestock utilization monitoring. Deer remain in the allotment longer and have been observed using early spring grasses in the uplands.

Land health assessments for both allotments were conducted in 2004 to assess whether Colorado Standards for Public Land Health were achieved, were moving towards being achieved, or were not achieved. Standard 3 addresses healthy, productive plant and animal communities. Of the 25 land health assessment transects conducted in the Alder Creek allotment, three achieved this standard, four were moving towards achieving this standard, and 18 did not achieve it. Of the 39 transects conducted in the Cabin Creek Allotment, four achieved this standard, 17 were moving towards achieving this standard, and 18 did not achieve it. In general, transects in the lower elevations did not achieve this standard while those at the mid-to higher elevations tended to be moving towards achieving or achieving Standard 3. This Standard was not achieved in any of the 12 transects assessed in the Utah serviceberry ecological type, or in any of the 13 transects assessed in the Wyoming sagebrush/Indian ricegrass community type. These vegetation types were heavily impacted by recent droughts (1988 – 1993 and 2000 – 2003) and big game use. Productivity in these ecological types is below potential, with mortality on shrubs (including sagebrush) and grasses, and with low cover, vertical structure, and diversity of grasses and forbs. Overall, these allotments cannot support or sustain healthy, productive animal communities due to the lack of healthy, productive plant communities.

Environmental Consequences/Mitigation

Proposed Action

Under this alternative, livestock would be managed to provide the greatest potential to meet allotment objectives and therefore to benefit wildlife. Even though the Proposed Action provides for a stocking rate that is greater than what long term utilization and actual use monitoring indicates is appropriate, the 15% reduction in AUMs combined with the livestock management

that is currently being implemented by the grazing permittees as described in the Proposed Action could meet the riparian and upland utilization objectives, and therefore, the habitat objectives for wildlife.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The flexibility built into this alternative would allow livestock to be managed to provide the greatest opportunity to meet allotment objectives. This alternative would facilitate continued recovery of plant communities that are currently below their potential in terms of productivity, structure, and diversity; this in turn would improve the health and productivity of the associated animal communities. Under this grazing regime it's anticipated that this standard would continue to be achieved in areas where it was achieving as it was in the Land Health Assessment in 2004. Areas that were moving towards achieving or were not achieving this standard are expected to continue to improve. However, other factors for which the BLM has little or no control, such as drought and big game use of the area, would also influence whether or not this Standard is achieved.

Alternative #2

Under this alternative, up to 1,857 head of livestock would be grazed in the allotment (possibly more if yearlings are run) for a period between mid-May and mid-June. Based upon 20 years of livestock utilization monitoring conducted in these allotments, proper utilization of the upland forage species likely would not be attained under this stocking rate. It's even more unlikely that the 4-inch riparian stubble height objectives would be met with this stocking rate, especially in the later use areas grazed, since there would be little or no time for regrowth of the herbaceous vegetation after cattle were removed.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic: During land health assessments conducted in 2004, this standard was not achieved in 36 of the 64 transects (56%). Based upon records from livestock utilization monitoring conducted in these allotments, it's unlikely that the utilization levels and objectives for these allotments would be met under this alternative in which stocking densities are higher than in the past when objectives were not met. Most plant communities that did not meet this standard in 2004 lack the biological integrity to recover when faced with continued stress. Therefore, plant communities would continue to be below their potential in terms of productivity, structure, and diversity which would impact the health and productivity of the associated animal communities. Those transects that were not meeting Standard 3 in 2004 would not be expected to improve, and those that were achieving or moving towards achieving would potentially be degraded.

K. RANGE MANAGEMENT

Affected Environment

The Cabin Creek Common Allotment #16301 is a category "I" (Improve) allotment ranked #16 in the Rangeland Program Summary (RPS) of the Approved Gunnison Resource Area RMP due to it's importance for big game winter habitat. It consists of 14,784 acres and is a single pasture allotment. This allotment is on the southwest base of the Taylor Park Range. The area consists of

rough mesas divided by Cabin Creek and Dry Gulch, and is dominated by sagebrush at lower elevations and aspen-sagebrush in the higher elevations. Elevations vary from 7,800 to 9,500 feet.

The Alder Creek Common Allotment #16302 is a category "I" (Improve) allotment ranked #17 in the Rangeland Program Summary (RPS) of the Approved Gunnison Resource Area RMP due to it's importance for big game winter habitat. It consists of 11,517 acres and is a single pasture allotment. This allotment is on the southwest base of the Taylor Park Range. The area consists of rough mesas divided by Alder Creek, Sewell Gulch and Big Gulch. Vegetation consists of sagebrush at lower elevations and aspen-sagebrush at higher elevations. Elevations vary from 7,800 to 9,500 feet.

Three permittees hold term grazing permits for the Cabin Creek Allotment and five permittees hold term grazing permits for the Alder Creek Allotment. All, but one, of the current permittees of both allotments also graze the adjacent USFS Taylor Park Allotment as the Taylor Park Pool Grazing Association.

Turnout on the allotments occurs in several places each year. These turnout areas are located adjacent to the home ranches of the permittees in the allotments. Cattle are herded through the allotments in 3-4 groups that use different areas depending upon where they are turned out. Cattle are moved out of used areas into unused areas based on utilization (generally every 5- 12 days). The permittees use frequent herding, salting, and livestock water developments to maintain distribution and minimize livestock concentration areas.

Table #6 Cabin Creek Allotment and Alder Creek Allotment Actual Use 1985 through 2010

Year	Allotment	AUMs Permitted	AUMs Used	Year	Allotment	AUMs Permitted	AUMs Used
1985	Cabin Creek	1615	1109	1986	Cabin Creek	1615	221
	Alder Creek	1487	1005		Alder Creek	1487	1151
	Both	**3102**	**2114**		**Both**	**3102**	**1372**
1987	Cabin Creek	1615	258	1988	Cabin Creek	1616	718
	Alder Creek	1487	1130		Alder Creek	1487	846
	Both	**3102**	**1388**		**Both**	**3103**	**1564**
1989	Cabin Creek	1155	620	1990	Cabin Creek	1155	582
	Alder Creek	1487	904		Alder Creek	1487	805
	Both	**2642**	**1524**		**Both**	**2642**	**1387**
1991	Cabin Creek	1155	522	1992	Cabin Creek	1152	909
	Alder Creek	1488	878		Alder Creek	1488	812
	Both	**2643**	**1400**		**Both**	**2640**	**1721**
1993	Cabin Creek	1007	671	1994	Cabin Creek	1007	728
	Alder Creek	1488	1040		Alder Creek	1488	1039
	Both	**2495**	**1711**		**Both**	**2495**	**1767**
1995	Cabin Creek	1007	737	1996	Cabin Creek	1007	875
	Alder Creek	1488	950		Alder Creek	1488	1137
	Both	**2495**	**1687**		**Both**	**2495**	**2012**
1997	Cabin Creek	1007	504	1998	Cabin Creek	1007	507
	Alder Creek	1488	1038		Alder Creek	1488	1151
	Both	**2495**	**1542**		**Both**	**2495**	**1658**
1999	Cabin Creek	1007	484	2000	Cabin Creek	840	453
	Alder Creek	1488	912		Alder Creek	1488	992
	Both	**2495**	**1396**		**Both**	**2328**	**1445**
2001	Cabin Creek	840	405	2002	Cabin Creek	840	273
	Alder Creek	1488	924		Alder Creek	1488	340
	Both	**2328**	**1329**		**Both**	**2328**	**613**
2003	Cabin Creek	840	362	2004	Cabin Creek	840	277
	Alder Creek	1488	250		Alder Creek	1488	431
	Both	**2328**	**612**		**Both**	**2328**	**708**
2005	Cabin Creek	840	257	2006	Cabin Creek	840	70
	Alder Creek	1488	367		Alder Creek	1488	613
	Both	**2328**	**624**		**Both**	**2328**	**683**
2007	Cabin Creek	840	366	2008	Cabin Creek	840	364
	Alder Creek	1488	818		Alder Creek	1488	889
	Both	**2328**	**1184**		**Both**	**2328**	**1253**
2009	Cabin Creek	840	282	2010	Cabin Creek	840	298
	Alder Creek	1488	890		Alder Creek	1488	795
	Both	**2328**	**1172**		**Both**	**2328**	**1093**

Environmental Consequences/Mitigation

Proposed Action
Total permitted AUMs for both allotments would be reduced to 85% of currently permitted AUMs. However, current livestock use is approximately 70% of permitted AUMs, and it is unlikely the permittees would be able to stock up to these numbers for several years (due primarily to past herd reductions in response to drought and the time required to build the herd numbers back up). In the 24 years between 1985 and 2005, the two allotments were rarely stocked above 70% of currently permitted numbers. The Cabin Creek Allotment was grazed at levels above 70% of currently permitted numbers (588 AUMS) in 8 of those 24 years, and not above 70% since 1996. The Alder Creek Allotment was grazed at levels above 70% (1041 AUMs) in 4 of those 24 years, and not above 70% since 1998.

Once herd sizes increase to the levels in the Proposed Action, the permittees would need to expend additional time, money, and effort in herding to regularly herd cattle to maintain distribution and avoid livestock concentrations, so that upland and riparian objectives could be met. It is possible that the permittees would need to haul water more often and to more locations than has been done in the past. However, the time, money, and effort for herding and water hauling that would be required to implement the Proposed Action would be less than Alternative #2.

Alternative #2
Total authorized AUMs for both allotments would not change from currently permitted numbers. However, current livestock use is approximately 70% of permitted AUMs, and it is unlikely the permittees would be able to stock back up to full permitted numbers for several years, as discussed under the Proposed Action.

Once herd sizes return to full permitted numbers, the permittees would need to expend additional time, money, and effort to effectively implement this action. It is likely that the permittees would need to haul water more often and to more locations than has been done in the past. Current water sources in the allotments often don't provide adequate water for the livestock numbers that have been grazed when they are near permitted numbers, especially in dry years. With the increased livestock numbers in this alternative, additional water would likely need to be provided on a daily basis. Additional time would also be required to regularly herd cattle to maintain distribution and avoid livestock concentrations, so that upland and riparian objectives could be met.

L. CUMULATIVE IMPACTS SUMMARY

The cumulative effects of drought, excessive big game use, and historic livestock grazing use are concerns in the Cabin Creek and Alder Creek Allotments as well as adjacent allotments. This combination of uses has resulted in many upland and riparian communities shifting away from historic plant communities towards less productive and less resilient communities. In addition, headcutting from roads and trails in drainages has resulted in water tables on some historically productive riparian communities dropping, resulting in a reduced amount of riparian habitat.

This allotment and many of the BLM allotments throughout the Gunnison Basin are being grazed annually during the Gunnison sage-grouse nesting and early brood-rearing periods, and during the critical growing period for cool-season perennial grasses and forbs. This has a direct impact on sage grouse due to the disturbance to the birds during critical periods, and indirectly due to removal of herbaceous cover during grazing. In the long term, this repeated annual spring use has also reduced the vigor and stature of herbaceous upland vegetation needed for sage grouse nesting habitat.

Reduced grazing allocations and adherence to the intensive management actions prescribed in the Proposed Action would facilitate achievement or progress toward achieving the Standards for Pubic Land Health in Colorado. These actions done in combination with grazing permit reductions and other management actions completed on adjacent allotments would expand the benefits of improved rangeland health across the Gunnison Basin.

Even with the reductions in grazing and prescribed management, the CDOW would need to consider the impacts of big game to their habitat within this and other allotments and how that agency may help to manage big game to improve rangeland health within the overall CDOW game management unit.

IV. PERSONS / AGENCIES CONSULTED

On August 12, 2005 an initial Notice of Public Scoping was mailed to the following parties. On October 18, 2005 the plan for 2006 permit renewals and land health assessments was also mailed to these parties. Both mailings requested public comment on 36 permit renewals, including those on the Cabin Creek and Alder Creek Allotments, and on the land health assessments planned for 2006. Parties who responded are indicated by an asterisk.

American Lands Alliance
Army Corps of Engineers
Board of Grazing Advisors
Buddy Elze
Burt Guerrieri
*Center for Native Ecosystems
Cimarron Land and Cattle Co.
Colorado Cattleman's Association
Colorado Division of Wildlife
Colorado Environmental Coalition
Colorado Mountain Club
Colorado Native Plant Society
Colorado Off-Highway Vehicle Coalition
Colorado Outfitters Association
Colorado State Forest Service
Colorado Trail Riders
Congressman John Salazar
Crested Butte Chronicle and Pilot
Crested Butte Library
* David and Nola Means
* David J. McClain
Deldorita Ranches
* Duane and Donna Phelps
Esty Ranch, Inc.
*Forest Guardians
Fred and Bette Benson
Fred Field
Grand Valley Audubon Society
Gregory F. and Patricia J. Kruthaupt
Gunnison Basin Weed Commission
Gunnison City Manager
Gunnison Country Times
Gunnison County Board of Commissioners
Gunnison County Library
*Gunnison County Stockgrowers Assoc., Inc.
*High Country Citizen's Alliance
High Country News
Hinsdale County Board of

* Howard S. Funk
Irby Ranches, LLC
John Judson
Lee Taramarcaz
* Lost Miner Enterprises, LLC
* Minerich Land & Cattle Company, LLC
National Wildlife Federation
Paul P. Guerrieri and Sons
Penn Enterprises, LLC
Remy and Ruth Labrouche
Roger and Junior Cole
Rudy Rudibaugh
Scott P. And Gregg A. Rennick
Senator Ken Salazar
Sierra Club
Sinapu
The Gunnison Country Shopper
*The Sagebrush Sea Campaign
Trout Unlimited, Gunnison Angling Society
USDA Forest Service
USDI National Park Service
Van Tuyl Ranches
Wallace and Tracy Hildreth
Ward Ranches, Inc.
Western Area Power Administration
Western Land Exchange Project
*Western Watersheds Project
Westside Land and Timber
Commissioners
Jerry Smith
Lake City Public Library
Les Cook
Miller Ranches
Montrose Library District
Nicolas Livestock
Paul Taramarcaz
Peterson Ranch, Inc.
Rocky Mountain Biological Lab
Ron and Wanda Brink
Saguache County Board of Commissioners
Senator Wayne Allard
Silver World Publishing Co.
Spann Ranches
*The Nature Conservancy
The Wilderness Society
USDA - NRCS
USDI Fish and Wildlife Service
* Vader Cloverleaf Ranch, Ltd.
W.A. Moncrief, Jr.
Wapiti Canyon Ranch, Ltd.
Waunita Hot Springs Ranch
Western Colorado Congress
Western State College Environmental Center
Wilber W. And Ann Watson

Gunnison BLM consulted closely with the permittees on the Cabin Creek and Alder Creek Allotments during the development of the Proposed Action and Alternatives:

February 14, 2006 and September 19, 2006: Alternative development meeting with permittees
October 2006: First Draft Environmental Assessment (EA)
February 22, 2007: Alternative development meeting with permittees
February 2008: Second Draft Environmental Assessment
September 9, 2008: Alternative development meeting with permittees
January 2009: Draft of new Proposed Action and Alternatives
March 25, 2009 and April 27, 2009: Discussion of new Proposed Action and Alternatives with permittees.
December 10, 2009 – Third Draft Environmental Assessment sent to permittees and interested publics.
January 26, 2010 – Discussion with permittees on several points of the EA

V. INTERDISCIPLINARY REVIEW

Name	Title	Area(s) of Responsibility
Arden Anderson	Recreation Planner	Access, Noise, Transportation Recreation, Visual Resources
Jodi Stevens	Forester	Forest Management
Alex Birchfield	Natural Resource Specialist	Vegetation
Sandy Borthwick and Russ Japuntich	Wildlife Biologists	Migratory Birds Threatened, Endangered and Sensitive Species Terrestrial Wildlife
Art Hayes	Natural Resource Specialist	Floodplains, Water Quality Wetlands and Riparian Areas Soils, Aquatic Wildlife Hydrology and Water Rights
David Lazorchak & Liz Francisco	Archaeologist/Geologist Archaeologist	Cultural Resources Native American Religious Concerns Geology and Minerals Paleontology
Marnie Medina	Realty Specialist (former Rangeland Mgmt Spec)	NEPA Realty Authorizations Vegetation Invasive, Non-Native Species Rangeland Management
Carrol Sohl and Tara de Valois	Rangeland Management Specialists	Invasive, Non-Native Species Vegetation Rangeland Management

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U.S. Department of the Interior
Bureau of Land Management
Gunnison Field Office
DOI-BLM-COS060-2009-OO15-EA

FONSI
FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis of potential environmental impacts contained in the referenced environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the action will not have a significant effect on the human environment. Therefore, preparation of an environmental impact statement is not necessary.

RATIONALE

The Bureau of Land Management (BLM), Gunnison Field Office (GFO) prepared an Environmental Assessment (EA) #DOI-BLM-COS060-2009-OO15 to analyze the effects of issuing 10-year permits for livestock grazing in the Cabin Alder Creek Allotment.

The EA analyzed potential site-specific impacts on resources that would result from implementing the proposed action or alternatives. The analysis addressed whether or not the proposed action and alternatives would: 1) address public lands that are failing to achieve the Public Land Health Standards and/or not conforming to the Guidelines for Livestock Management in Colorado due to livestock grazing (43 CFR 4180.2 (c)); and, 2) assure compliance with the objectives of the Approved Gunnison Resource Area Resource Management Plan (RMP).

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Brian St. George
Brian St. George, Gunnison Field Manager

DATE SIGNED: 3/27/11