

Scoping Summary Report

November 2015

Domestic Sheep Grazing Environmental Impact Statement

US Department of the Interior
Bureau of Land Management

Gunnison
Field Office



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ACRONYMS AND ABBREVIATIONS

BLM	United States Department of the Interior, Bureau of Land Management
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DOI	Department of the Interior
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
NIO	Notice of Intent
RAC	Resource Advisory Council
ROD	Record of Decision
RMP	Resource Management Plan
US	United States
USDA	United States Department of Agriculture

SECTION 1

INTRODUCTION

Project Background

The planning area is located in the Gunnison Field Office in Gunnison, Hinsdale, and portions of Montrose, Ouray and San Juan Counties, Colorado and includes about 115,000 acres of public land. Over the past 30 years, the bighorn sheep population in the area has increased to a level indicating a healthy, stable population. New information about disease transmission between domestic sheep and bighorn sheep indicates that contact between the species can pose a risk to the health of the bighorn population. The potential for disease transmission is of particular concern in areas where the risk of contact between species is high and can't be effectively mitigated by management actions. An evaluation of the permit renewals encompasses 12 domestic sheep allotments. According to the preliminary analysis, four of those allotments are at high risk of contact with native bighorn sheep. Additionally, four vacant high-elevation allotments are also at high risk of contact.

The subject grazing allotments are currently scheduled for analysis on a 10-year schedule for grazing permit renewal. In 2013, the permittee on the Grizzly Gulch allotment expressed interest in either restocking the allotment, or otherwise realizing the value of his grazing preference. Grizzly Gulch allotment has been in cooperative non-use status since 1999. The four high risk allotments completely overlap with a priority bighorn sheep herd and three of the allotments have been actively grazed each year (American Flats, American Lake, and Henson Creek). One allotment (Grizzly Gulch) has been in cooperative non-use status since 1999 due to concerns over disease transmission. The BLM and USFS completed a cooperative bighorn sheep contact risk model in January 2013. According to the model, allotments that overlap with bighorn sheep habitat are automatically rated at a high risk of direct contact between domestic and bighorn sheep. The model assumes disease transmission for one in four times a bighorn sheep enters an allotment grazed by domestic sheep (i.e. the bighorn will have direct contact with a diseased domestic sheep, it will contract a disease, it will return to the herd and transmit the disease, resulting in a die-off event). Therefore, an Environmental Impact Statement will analyze multiple allotments to analyze the potentially significant effects of authorizing or not authorizing domestic sheep grazing within Rocky Mountain bighorn sheep habitat.

The Gunnison Field Office intends to develop an environmental impact statement prior to issuing a decision regarding five domestic sheep permit renewals.

The analysis will address three categories of 16 grazing allotments:

- 1) four domestic sheep grazing allotments where the risk of contact with native bighorn sheep is high and design criteria or mitigation measures to achieve separation may not be effective;
- 2) eight domestic sheep grazing allotments where risk of contact is lower yet which are part of the permittees' overall grazing operation; and,
- 3) four allotments which are currently vacant and for which there is no demand from livestock operators where the risk of contact with native bighorn sheep is high if permitted.

The key issues are related to the risk of contact between domestic sheep and native bighorn sheep including: Rocky Mountain bighorn sheep population health, domestic sheep grazing, and socio-economic impacts. Other preliminary issues include riparian area conditions, noxious weeds, Canada lynx habitat, Gunnison sage-grouse habitat, and upland soils.

Purpose and Need for the Project

The purpose of the action is to authorize livestock grazing on 16 allotments (West Powderhorn, Devil's Lake, Henson Creek, American Lake, American Flats, Grizzly Gulch, Mill Gulch, Upper Burrows, Lower Burrows, Red Cloud, Alpine Plateau, Blue Canyon, Cox Park, Highway, Sapinero Mesa, Goose Creek) 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 Canada Lynx Conservation Assessment and Strategy, and 4) meets the habitat and management guidelines of the Candidate Conservation Agreement for Gunnison Sage-grouse (CCA). This action is needed now because the 16 grazing allotments are currently scheduled for analysis on a 10-year schedule for grazing permit renewal analyses. Currently livestock grazing on these allotments is being authorized under the authority of Public Law 111-8.

Description of the Planning Area

The planning area is located in the Gunnison Field Office in Gunnison, Hinsdale, and portions of Montrose, Ouray and San Juan Counties, Colorado and includes about 115,000 acres of public land. The 16 allotments include West Powderhorn, Devil's Lake, Henson Creek, American Lake, American Flats, Grizzly Gulch, Mill Gulch, Upper Burrows, Lower Burrows, Red Cloud, Alpine Plateau, Blue Canyon, Cox Park, Highway, Sapinero Mesa, Goose Creek.

Overview of Public Involvement Process

Public involvement is a vital and legal component of the EIS processes. Public involvement vests the public in the decision-making process and allows for full environmental disclosure. Guidance for

implementing public involvement under NEPA is codified in 40 CFR Section 1506.6, thereby ensuring that federal agencies make a diligent effort to involve the public in the NEPA process.

Scoping is an early and open process for determining the scope of issues to be addressed and identifying the significant issues related to a proposed action. Information collected during scoping may also be used to develop the alternatives to be addressed in a NEPA document. The process has two components: internal scoping and external scoping. Internal scoping is conducted within an agency or cooperating agencies to determine preliminary and anticipated issues and concerns. External scoping is a public process designed to reach beyond the BLM and identify the concerns of high importance to the public. External scoping helps ensure that real problems are identified early and properly studied, that issues of no concern do not consume time and effort, and that the proposed action and alternatives are balanced, thorough, and able to be implemented. Public involvement is being considered in the phases for the Domestic Sheep Grazing EIS:

- Notice of Intent published in the Federal Register
- Public outreach and news releases
- Public Meetings
- Public review and input on the Domestic Sheep Grazing EIS
- Collaboration with federal, state, local, and tribal governments
- Collaboration with the BLM Colorado Southwest Resource Advisory Council (RAC)
- Cooperating Agencies involvement
- Public review of and comment on the Draft EIS, which analyzes likely environmental effects of the proposed action and alternatives
- This scoping summary report documents the results of the public involvement process beginning with public scoping and including the comments received on the EIS, and provides information about the ongoing collaboration process.

Public Involvement Details

The BLM follows the public involvement requirements documented in Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1501.7 for scoping and 1506.6 for public involvement). The BLM also follows public involvement requirements described in the BLM's planning regulations (43 CFR 1601-1610 [BLM 2005]) and NEPA handbook (BLM 2008). The BLM solicits comments from relevant agencies and the public, organizes and analyzes all comments received, and then distills them to identify issues that will be addressed during the environmental analysis process. These issues define the scope of and are used to develop the project alternatives. The following public involvement activities were conducted for the Domestic Sheep Grazing EIS project.

- Notice of Intent (NOI) was published in the Federal Register on February 13, 2015.
- A press release was released on February 13, 2015 announcing the publishing of the NOI in the Federal Register and request for comments.

- 11 letters were sent to other government agencies to determine interest and eligibility a formal Cooperating Agency in the EIS process. BLM received positive interest from 4 agencies.
- A second notice was released to the press on March 11, 2015 announcing public meetings and urging people to submit scoping comments.
- Scoping letters were sent to 79 interested parties on March 16, 2015 urging them to attend the public meetings or submit scoping comments.
- Public scoping meetings were held Thursday, Apr. 2, at the Lake City Visitor Center (800 Gunnison Ave) from 3 to 7 p.m.; Monday, Apr. 6, at the BLM Gunnison Field Office (210 W. Spencer St.) from 3 to 7 p.m.; and Thursday, May 7, at the BLM Uncompahgre Field Office (2465 S. Townsend in Montrose) from 3 to 7 p.m..
- 63 unique written submissions were received from 21 different commenters during the public scoping period.

Letters to Interested Parties

Scoping letters were sent to 79 interested parties on March 16, 2015 urging them to attend the public meetings or submit scoping comments. The interested party letter is included in **Appendix A**, Scoping and Public Notice Materials.

Press Releases

A press release was released on February 13, 2015 announcing the publishing of the NOI in the Federal Register and request for comments. A second notice was released to the press on March 11, 2015 announcing public meeting and urging people to submit scoping comments. The press releases are included in **Appendix A**, Scoping and Public Notice Materials.

Project Website

The project website located at <http://www.blm.gov/co/st/en/fo/gfo.html> and provides project information, public participation opportunities and project documents. A screen shot of the project website is located in **Appendix A**, Scoping and Public Notice Materials.

Federal Register Notice

The Notice of Intent notified the public of the BLM's intent to produce and Environmental Impact Statement for Domestic Sheep Grazing on 16 grazing allotments; and was published in the *Federal Register* on February 13, 2015. The BLM will consider all comments received during the Environmental Impact Statement process, both before and after the publication of the Notice of Intent. The Notice of Intent is available in **Appendix A**.

COLLABORATIVE INVOLVEMENT PROCESS

In addition to formal scoping, the BLM has implemented collaborative outreach and public involvement process that has included working closely with cooperating agencies and the Southwest RAC. These efforts are summarized below. The BLM will continue to meet with interested agencies and organizations throughout the environmental analysis process, as appropriate, and will coordinate closely with cooperating partners. Status and information sharing about the EIS effort has also been discussed during other meetings with residents and groups.

Cooperating Agencies

A cooperating agency is any federal, state, or local government agency or Indian tribe that enters into a formal agreement with the lead federal agency to help develop an environmental analysis. More specifically, cooperating agencies “work with the BLM, sharing knowledge and resources, to achieve desired outcomes for public lands and communities within statutory and regulatory frameworks” (BLM Land Use Planning Handbook H-1601-1 [BLM 2005]). The benefits of enhanced collaboration among agencies in preparing NEPA analyses are:

- Disclosing relevant information early in the analytical process
- Applying available technical expertise and staff support
- Avoiding duplication with other federal, state, tribal, and local procedures
- Establishing a mechanism for addressing intergovernmental issues

The BLM has Invited several cooperating agencies to participate in the Domestic Sheep Grazing EIS planning process including:

- Colorado Parks and Wildlife
- Gunnison County
- Hinsdale County
- National Park Service
- Ouray County
- San Juan County
- USFS Gunnison Ranger District
- USFS Uncompahgre Ranger District
- Office of Archaeology and Historic Preservation
- Ute Mountain Ute Tribe
- Ute Tribe
- Southern Ute Tribe

To date, four agencies are expected to work with the BLM as cooperating agencies, including Colorado Parks and Wildlife, Montrose County, Hinsdale County and the National Park Service.

Interactions with the cooperating agencies will include alternative development, periodic briefings and reviews of preliminary internal draft sections of text. The BLM will continue to engage the cooperating agencies throughout the preparation of the EIS.

Resource Advisory Council

A Resource Advisory Council (RAC) is a committee established by the Secretary of the Interior to provide advice or recommendations to BLM management (BLM Land Use Planning Handbook H-1601-1 [BLM 2005]). A RAC is typically composed of 15 members of the public representing different areas of expertise. The Colorado Southwest RAC includes members appointed to represent constituent public land users and provides input on public management issues to the BLM's Southwest RAC Designated Federal Officers and Western Slope Center Manager. Domestic sheep grazing issues in the Gunnison Field Office were discussed at the February 2013 Southwest District RAC meeting.

Collaboration and Consultation with Tribes

The Gunnison Field Office has initiated consultation with tribes that are identified as having interests or Traditional Cultural Properties in the planning area. Consultation will be that required by the National Historic Preservation Act and the American Indian Religious Freedom Act. The identified tribes are Northern Ute, Southern Ute, and Ute Mountain Ute.

- **April 7, 2015** - Attended Tribal Consultation meeting in Grand Junction - verbal presentation of information to Ute Tribe & Southern Ute Tribe that included a summary of the Sheep EIS - packet included written document and same document on a CD. There were no questions posed nor letters sent re. this project.
- **April 8, 2015** - Sent letter by certified mail w/ GFO projects to Ute Mtn. Ute Tribe. There were no replies regarding this project.
- Certified-Return Receipt Letters were also sent to all three Tribes on **January 14, 2015** explaining the Domestic Sheep EIS. No replies received.
- On **October 14, 2014** GFO also gave a verbal presentation to the 3 Tribes in Montrose that included a brief summary of the Sheep EIS. No reply regarding this issue was received.

SECTION 2

Scoping Comment Summary

METHOD OF COMMENT COLLECTION AND ANALYSIS

A total of 63 unique written submissions were received from 21 different commenters during the public Notice of Intent scoping period. The most common format used for submissions was electronic mail. Submissions were also hand written during scoping meetings and mailed via US Mail.

A list of commenters and the dates of submittal are provided in **Table 2-1**, List of Commenters. A list of substantive comments used to identify issues is provided in **Table 2-2**. All submissions received are available for public review at the Gunnison Field Office. A summary of issues identified in comments received during these periods is included in **Section 3, Issue Summary**. Comments received during the EIS process will be considered in alternative formulation and project planning.

SUMMARY OF PUBLIC COMMENTS RECEIVED DURING SCOPING

A list of commenters, their affiliations, and the submittal date of their comment letters are listed in **Table 2-1**. A list of substantive written comments is provided in **Table 2-2**.

Table 2-1: List of Commenters

Last Name	Name	Organization	Commenter Type	Date received
Public	Jean		Individual	2/14/2015
Ratner	Jonathan B	Western Watersheds Project	Organization	3/16/2015
Molvar	Erik	Wild Earth Guardians	Organization	3/12/2015
Etchart	Ernie	Western Slope Wool Growers Association	Organization	3/16/2015
Brown	Bonnie	Colorado Wool Growers Associations, Colorado Sheep and Wool Authority, Colorado Lamb Council	Organization	3/25/2015

Rayburn	Tom		Individual	4/14/2015
Hayes	Art		Individual	5/14/2015
Alexander	Kevin	Western State Colorado University	Government	5/21/2015
Alexander	Kevin		Individual	5/21/2015
Dozier	Cindy	Hinsdale County Commissioner	Government	4/01/2015
Hansen	Eddie	Etchart Sheep Ranch	Individual	4/02/2015
Courtin	Bruno	Alpine Moose Lodge	Individual	4/02/2015
Inda	Juan		Individual	5/07/2015
Meyers	Terry	Rocky Mountain Bighorn Society	Organization	5/22/2015
Parkinson	Dan		Individual	5/22/2015
O'Neill	Susanne	Colorado Wildlife Federation	Organization	5/22/2015
Robertson	Leigh	Sheep Mountain Alliance	Organization	5/22/2015
Brass	Timothy	Backcountry Hunters & Anglers	Organization	5/22/2015
Robinson	Collin		Individual	5/21/2015
Armentrout	Scott	USFS	Federal	5/29/2015
Stahlnecker	Ken	NPS - Curecanti/Black Canyon	Federal	5/26/2015

Table 2-2; List of Comments

Letter ID	Comment
008A	These permits overlap with bighorn sheep habitat (increasing potential disease transmission to bighorns) and potentially overlap with Gunnison sage grouse habitats.
008A	In addition to the issues raised above, we must stress the need for maintaining separation between bighorn and domestic sheep in all the allotments under analysis, and in all guidance within the RMP. The allotments with current domestic sheep grazing are: West Powderhorn, Devil’s Lake, Henson Creek, American Lake, American Flats, Grizzly Gulch, Alpine Plateau, Blue Canyon, Cox Park, Highway, Sapinero Mesa, and Goose Creek. Although the Federal Register Notice (80 Fed. Reg. 8105, 8106) indicates only 8 of these allotments overlap with bighorn sheep habitat, the basis for that conclusion is not clear, and unless supported by a robust scientific analysis conducted with a Risk of Contact analysis (detailed further below), that conclusion is questionable. The four vacant allotments that overlap with bighorn habitat are also of concern to us: Upper Burrows Park, Lower Burrows Park, Red Cloud and Mill Gulch.
008A	As you have recognized in the Federal Register Notice (id.), domestic sheep can transmit lethal pathogens to bighorn sheep which leads to disease-induced all age die-offs and threatens the viability of bighorn sheep populations (Schommer and Woolever 2008, Lawrence et al. 2010, Besser et al. 2012a, Cassirer et al. 2013). Herds affected by these epizootics often remain suppressed for decades following a die-off due to low recruitment rates (Besser et al. 2012b). For a recent example of the ample science documenting disease transmission from domestic sheep to bighorn, we refer you to Drew et al. (2014).
008A	Moreover, a single contact between bighorn and domestic sheep may result in a disease event encompassing an entire herd, which might then be transmitted to other nearby herds. Separation is the only way to ensure continuing viability of bighorn sheep in the planning area, with no risk of contact between bighorn and domestic sheep. Therefore, reducing the risk of interaction between domestic sheep and bighorn sheep is of primary importance for maintaining stable populations of bighorn sheep.
008A	The issue of contact between bighorn and domestic sheep is of the utmost importance to the continued viability of bighorn in the Gunnison Field Office area. Without separation, disease transmission is all but guaranteed. We urge you to follow the Best Available Science and utilize robust modeling tools to determine the risk of contact and risk of disease transmission, and once that modeling is complete, take the necessary steps to ensure separation between bighorn and domestic sheep, which in some cases may include the retirement of sheep allotments. The Wildlife Society and American Association of Wildlife Veterinarians recently issued a statement concluding that such separation is the only management strategy that would effectively address the disease transmission issue. See Attachment 10.

008A	<p>In short, we request that the Gunnison Field Office does not reauthorize domestic sheep grazing in any portion of the Field Office shown by the Risk of Contact and Disease Models to create an elevated risk of contact between bighorn and domestic sheep. Further, we request that no new domestic sheep grazing allotments be created—nor conversions in class of livestock to domestic sheep occur—in areas that pose an elevated risk of contact between bighorn and domestic sheep. And finally, we request that the four vacant allotments be permanently closed in order to protect bighorn sheep.</p>
008A	<p>Scientific studies are split on the effectiveness of this approach, with many studies pointing out that it is the number of Animal Unit Months, not the pattern of grazing, that is the key factor in maintaining rangeland health. Bock et al. (1993) noted that rotational or uniform grazing pressure leads to uniform habitat types rather than a mosaic of successional stages, a result of the slow recovery of ecological succession compared to the typically rapid frequency of grazing rotation.</p>
008A	<p>Due to more succulent vegetation and easy access to water, cattle often concentrate in riparian areas, leading to heavy damage to these important habitats. In Oregon, Bryant (1982) found that cattle used riparian zones disproportionately, regardless of aspect, during early summer, while use of uplands increased in late summer. Armour et al. (1994: 11) summarized potential impacts of grazing in riparian areas as follows: “Damage includes (1) loss of riparian vegetation by changing the composition and quantity of streamside vegetation and altering channel morphology, (2) lowering the groundwater table and decreasing summer stream flows, and (3) increasing summer water temperatures and winter icing.” The BLM’s grazing policies and practices should discourage the concentration of cattle in the riparian zone to protect sage grouse brood-rearing habitats.</p>
008A	<p>The pattern of grazing may have a significant effect on efforts to maintain riparian areas in Properly Functioning Condition. Bryant (1985) found that season-long grazing had the greatest negative impact on riparian vegetation. Late season grazing may result in less disturbance to riparian communities (Green and Kauffman 1995). Clary (1995:24) made the following recommendation for grazing in riparian areas: “If utilization guidelines are used, those rates that do not exceed 30% of the annual biomass production will likely maintain production the following year.” Riparian areas should be the focus of monitoring efforts, as these areas can become ecologically impaired before upland habitats begin to show signs of damage. The federal agencies need properly functioning riparian areas to provide adequate brood-rearing habitat for sage grouse.</p>
008A	<p>Placing salt blocks in upland areas is not an effective means of drawing cattle use away from riparian areas. Bryant (1982:784) found that salt placement and alternate water sources did not influence cattle preference for riparian habitats, and came to the following conclusion: “These cattle used the salt when convenient but did not alter behavior patterns to obtain it.” Thus, the BLM should not rely on the placement of salt blocks as a means to draw livestock away from riparian habitats.</p>

008A	A change in grazing regime may also lead to the restoration of Properly Functioning Condition in some cases. Bryant (1985) found that while rest from grazing showed the greatest increase in riparian vegetation, short-duration grazing elicited a threefold increase in vegetation in riparian areas. Productivity was enhanced when no more than 70% of the forage was removed annually (Ibid.).
008A	Recovery of riparian areas may be rapid following cessation of grazing. In their eastern Oregon study, Case and Kaufman (1997) found that following removal of cattle after more than a century of heavy grazing, riparian shrubs and trees recovered quickly both inside and outside game exclosures. This indicates that riparian areas can recover even while grazing by wild ungulates continues, when an area is rested from domestic livestock grazing. Clary et al. (1996) found that removal of grazing and reduction to moderate levels allowed streamside willows to recover, while heavy grazing prevented willow recovery. In this study, spring grazing regimes promoted willow recovery much more than autumn grazing. All of the aforementioned methods for protecting riparian habitats, which are key late brood-rearing habitats for Gunnison sage grouse, should be considered in detail in the forthcoming EIS.
008A	Manage for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve sage-grouse seasonal habitat objectives.
008A	For domestic sheep grazing in particular, these livestock potentially browse sagebrush used by grouse for food and cover, and potentially compete with grouse for forbs that serve as high-nutrient food necessary to support chick growth during the brood-rearing period.
008A	Timing of grazing in Gunnison sage grouse habitat is also important. According to Call and Maser (1985: 17), “rapid removal of forbs by livestock on spring or summer ranges may have a substantial adverse impact on young grouse, especially where forbs are already scarce.” According to Casazza et al. (2011, Attachment 11), forb availability is critical to brood survival in sage grouse.
008A	The RCP’s grazing recommendations cite Apa (2004) as their source of scientific authority; this document (Attachment 2) is a draft document never finalized, was never intended for publication in peer-reviewed scientific literature, contains no scientific analysis (experimental or literature review) to support speculation that site potential in Gunnison sage grouse range cannot support the 7-inch grass height recommended in scientific studies, and also contains no analysis or literature review to support the implicit assumption that a 4-6 in grass height provides sufficient herbaceous cover to support nest success by Gunnison sage grouse.
008A	Heavy cattle grazing near springs, seeps, and riparian areas can remove grasses used for cover by grouse (Klebenow 1982). According to Call and Maser (1985: 17), “rapid removal of forbs by livestock on spring or summer ranges may have a substantial adverse impact on young grouse, especially where forbs are already scarce.”

008A	<p>The potential conflict between livestock grazing and sage grouse is intensified near water sources due to the importance of these areas to sage grouse. Heavy cattle grazing near springs, seeps, and riparian areas can remove grasses used for cover by grouse (Klebenow 1982). According to Call and Maser (1985: 17), “rapid removal of forbs by livestock on spring or summer ranges may have a substantial adverse impact on young grouse, especially where forbs are already scarce.” BLM should require the fencing off of natural springs with buck-and-pole fences (to reduce collision mortalities) and place livestock water sources outside the fences rather than at the spring itself. If past actions have dried up natural springs or wetlands to create stock tanks, then remedial action should be required return some water to ground for sage grouse and vegetation, in an area protected from livestock.</p>
008A	<p>Analyze springs, seeps and associated pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within priority sage-grouse habitats. Make modifications where necessary, considering impacts to other water uses when such considerations are neutral or beneficial to sage-grouse.</p>
008A	<p>Conduct grazing management for all ungulates in a manner consistent with local ecological conditions that maintains or restores healthy sagebrush shrub and native perennial grass and forb communities and conserves the essential habitat components for sage grouse (e.g. shrub cover, nesting cover).</p>
008A	<p>Water developments can concentrate livestock grazing in areas important as sage grouse habitat especially during the late brood-rearing period. In considering future water developments, the National Technical Team (2011: 16) recommended, Authorize new water development for diversion from spring or seep source only when priority sage-grouse habitat would benefit from the development. This includes developing new water sources for livestock as part of an AMP/conservation plan to improve sage-grouse habitat.</p>
008A	<p>Sage grouse inhabit wide-open habitats with abundant avian predators, are clumsy fliers, and rely primarily on hiding and camouflage to escape their predators. In this context, maintaining adequate grass cover in sagebrush habitat provides critical hiding cover, without which land managers tilt the scales toward the predators. The increased predation that follows is a direct result of excessive grazing and inadequate livestock management, not the predators themselves. The best available science has established that at least 7 inches of residual stubble height needs to be provided in nesting and brood-rearing habitats throughout their season of use.</p>

008A	<p>The BLM is at present losing ground in the battle to stop the spread of cheatgrass and other invasive weeds. The spread of cheatgrass, which thrives in the wake of fire (both natural and human-caused) further complicates post-fire sagebrush recovery (Baker 2011). Once cheatgrass invasion begins, fires often result in pure stands of cheatgrass, which tends to burn on a 2-5 year cycle, preventing the re-establishment of native vegetation. Cheatgrass also suppresses recovery of biological soil crusts (Ponzetti et al. 2007). Biologists have observed, “Under current, altered fire regimes, natural re-establishment of sagebrush after burning (especially basin big sagebrush and Wyoming big sagebrush) is unlikely” (WAFWA 2006: 66). Fires and subsequent cheatgrass invasion were a cause of major habitat loss in many of the sage grouse units in northern Nevada, and risk of large-scale habitat loss was high even in areas that had not experienced major problems in the past (Baker 2007). Even in the absence of fire, the presence of cheatgrass alone is avoided by sage grouse (Kirol et al. 2012). BLM must prescribe conservation measures, including reduction in grazing intensity, to combat cheatgrass spread.</p>
008A	<p>The effects of grazing management on sage-grouse have been little studied, but correlation between grass height and nest success suggest that grazing may be one of the few tools available to managers to enhance sage-grouse populations. Our analyses predict that already healthy populations may benefit from moderate changes in grazing practices. For instance, a 2 in increase in grass height could result in a 10% increase in nest success, which translates to an 8% increase in population growth rate.</p>
012A	<p>The pre-determined situation of contact between bh and ds sheep just because habitat overlap doesn’t constitute contact between species. This is something that can’t be hidden, given the amount of people out on the ground, whether recreationalists or others.</p>
012A	<p>The GMUG Forest Service conducted an EA on allotments that join a large portion of the area in question in 2008. Risk of contact between bh and ds was not found to be high just because of habitat overlap. Using the Payette Principles to evaluate risk contact shouldn’t be used in this area because the area, timing of use, ect., are not the same. The risk model should be developed for this area’s situation and condition. Don’t paint every area with the same brush because each one is different.</p>
012A	<p>The bighorn sheep population within this area is found to be healthy, with lamb recruitment levels adequate to maintain or grow this population, according to Colo. Parks and Wildlife. This should be considered a positive rational when considering risk assessments. These domestic sheep allotments have been in use for over 100 years, some of the oldest allotments in the State of Colorado. There are many areas in Colorado, where bighorn sheep have health and survival problems, and those populations are far removed from domestic sheep.</p>

013A	As stated by the BLM, “ The BLM and USFS completed a cooperative bighorn sheep contact risk model in January 2013. According to the model, allotments that overlap with bighorn sheep habitat are automatically rated at a high risk of direct contact between domestic and bighorn sheep.” This assumption is in direct conflict with Secretary Jewell’s statement in her September 26, 2014 letter (see attached) that the BLM does not have to manage for zero risk to bighorn sheep from domestic sheep grazing, and that the BLM will assess risk on a case-by-case basis to make informed decisions.
013A	BLM should not advocate single-use management in direct contravention to existing laws such as the TGA. Rather, we urge BLM to provide a true holistic approach to managing multiple ownership lands in an economically sustainable manner. The BLM’s modeling assumption that overlapping habitat creates a high risk of contact scenario clearly undermines the multiple-use mandate that allows domestic sheep grazing.
013A	BHS have die-offs without contact with DS and are negatively impacted by other factors such as predators, habitat conditions and, perhaps most importantly, weather. DS should not have to bear an unfair burden in respect to the viability of bighorns.
013A	We urge BLM not to assume that overlap of BHS and DS range equates in all cases to one or more contacts per year. Contact between the species does not automatically equate to disease transmission; and disease outbreaks in BHS are multi-factorial, and can occur in the absence of any contact from domestic sheep.
013A	Assuming overlapping polygons equates to contact or shared habitat is not accurate and should not be used in the modeling or risk analysis process.
013A	The economic, social and environmental cost of BLM’s proposed actions must be carefully considered. Agriculture and public lands grazing is incredibly important to the local economy, the state and the nation.
014	the Etchart and Inda operations together employ approximately 20 people. These are year round employees legally in the USA on three year contracts. In these small mountain counties, that makes them major employers. To reduce or eliminate their grazing activities would have a disastrous effect on our economies
015A	My greatest concern with domestic sheep grazing on public lands in Colorado is the transference of diseases from domestic sheep to our native wild sheep. Die-offs of native bighorn sheep populations in the western U.S. from disease transmitted by domestic sheep have been numerous and well documented. As recently as this spring, the bighorn sheep herd near Gardnier, Montana was reduced by 40% due to pneumonia linked to contact with domestic sheep.
015A	It’s common to see soil damage from overgrazing in the alpine areas where domestic sheep are grazed during the summer. The plant communities of the high elevation alpine areas are extremely slow to recover from excessive grazing and soil damage.

015A	<p>I've seen domestic sheep on the south side of Blue Mesa Reservoir adjacent to the Sapinero Mesa grazing allotments late in the summer, months after the domestic sheep herds have moved on to the alpine areas of the San Juan Mountains. I've also seen domestic sheep that were separated from the herds along Highway 149 near Indian Creek and along Henson Creek far from the main herds. This lack of control by the domestic sheep managers clearly indicate the likelihood of lost or sheep separated from the main herds to wander far and wide for months increasing the possibility of contact with native wild sheep populations.</p>
016	<p>The issue involves the potential grazing of domestic sheep in allotments near the federally endangered Uncompahgre fritillary butterfly (<i>Boloria acrocne</i>). I value land based livelihoods such as domestic sheep grazing but I would like to avoid potential conflicts in the small areas of alpine tundra containing Uncompahgre fritillary butterflies or their potential habitats. We are beginning to see data that may be indicating that domestic sheep trailing through colonies could be having an impact to long term sustainability of these populations. This potential impact could be through the removal of flowers that the adult Uncompahgre fritillary butterfly use for nectar sources, grazing upon the larval caterpillars host plant (<i>Salix nivalis</i>), trampling or a combination of the above. These impacts are also in addition to impacts from wild ungulates and recreationalists that visit these areas. Land based livelihoods are important and valued in these areas but developing an RMP that can avoid these impacts to this federally endangered species should be considered with options for sheep grazers to avoid these while still being able to maintain a livelihood.</p>
017	<p>According to wildlife biologists, one of the greatest threats to wild Bighorn sheep populations and the reason this species is at such a low population compared to historical times, is disease transmission from domestic sheep to the wild Bighorn sheep. I spend much time of every summer and fall in the San Juan Mountains and Powderhorn Mountains where these allotments are and I see these populations of Bighorn sheep. Unfortunately, I have also seen numerous Bighorn sheep in respiratory distress and I have even watched one die. I contacted the Colorado Parks and Wildlife who did an necropsy on the one that I observed dying. I have also witnessed the death of lambs from respiratory disease and I notice the poor lamb to ewe ratio. This is particularly disturbing since much of this is preventable if we manage lands to reduce the chance of contact between domestic sheep and Bighorn sheep.</p>
017	<p>if the BLM fails to protect the Bighorn sheep from contact with domestic sheep, the sheep near or in these allotments can become infected. Then the roaming of Bighorn sheep across areas managed by different agencies can infect the wild Bighorn sheep throughout this area. I strongly encourage the BLM to manage these domestic sheep grazing allotments to eliminate or minimize to the greatest extent possible the contact between domestic sheep and Bighorn sheep throughout all parts of the Bighorn sheep range.</p>

017	I am unsure of how the numbers of domestic sheep allowed in each allotment is determined. I would encourage the BLM to conduct a range condition analysis that looks at how many domestic sheep can be supported on the range in this area, in addition to what range production is required to support healthy deer and elk herds. If the complete community of ungulates is considered, then appropriate land management can be conducted that that does not damage but maintains sustainability and resilience in the range within these allotments. This may be most important in not reducing forage in Bighorn Sheep winter concentration areas because this may one of the limiting habitats for the Bighorn sheep during the most stressful, winter seasons. Ensuring substantial winter forage for the ability of the populations of Bighorn sheep to thrive should be a high priority.
021	No Private land and access to BLM on Blue Canyon and Highway (No water on highway)
022a	as the majority of the allotments in question either directly overlap or are within 4 miles of bighorn sheep overall range as mapped by Colorado Parks and Wildlife (CPW). It is widely accepted that domestic sheep and goats can transmit lethal pathogens to bighorn sheep which can lead to disease-induced all age die-offs and threaten the viability of bighorn sheep populations (Schommer and Woolever 2008, Lawrence et al. 2010, Besser et al. 2012a, Cassirer et al. 2013). Herds affected by these epizootics often remain suppressed for decades following a die-off due to low recruitment rates (Besser et al. 2012b).
022a	The RBS-21 San Juans West bighorn sheep herd is identified as a Tier 1, primary population by CPW, based on population size, population performance, and the lack of transplanted bighorn sheep into the population (Diamond 2012). As such, the herd is given the highest priority for inventory, habitat protection and improvement, disease prevention, and research (George et al. 2009). The greatest threat to this bighorn sheep herd is respiratory disease outbreaks from contact with domestic sheep (Beecham et al. 2007, USDA Forest Service 2009, Ghormley 2010, Diamond 2012). This herd has experienced multiple die-offs associated with respiratory disease historically, and despite a habitat evaluation suggesting that the area could support upwards of 2,000 bighorns, the current management objective is 400-500 sheep, to reduce the likelihood of interaction with domestic sheep (Diamond 2012).
022a	A single contact between bighorn and domestic sheep may result in a respiratory disease event encompassing an entire herd, which may spread to nearby herds through the interconnected metapopulation structure of bighorn sheep herds in this region. Therefore, reducing the risk of interaction between domestic sheep and bighorn sheep is of primary importance for maintaining stable populations of bighorn sheep. Effective separation is the only way to ensure continuing viability of bighorn sheep in the GFO management area, with no risk of contact between bighorn and domestic sheep.

022a	We request that the EIS fully consider the economic and recreational values, both consumptive and non-consumptive, of bighorn sheep populations distributed across suitable habitats in the analysis area. The opportunity to hunt bighorn sheep is among the most cherished to big game hunters in Colorado, as evidenced by the 14,838 applications submitted in 2014 for the chance to draw one of 254 Colorado bighorn sheep licenses. In the last five years the auction of five bighorn sheep licenses has garnered \$560,000 for bighorn sheep conservation in the state. Bighorn sheep are also identified by CPW as one of the most sought after watchable wildlife species in the state.
023	Bighorn sheep have considerable and growing economic value for wildlife watchers and hunters.
023	Reducing the risk of interaction between domestic sheep and bighorn sheep is of primary importance for maintaining stable populations of bighorn sheep. Effective separation is the only way to ensure continuing viability of bighorn sheep in the GFO management area.
025A	We ask that the BLM considers all options, for example, retiring grazing leases whiter it is permissible by law and total separation of domestic sheep and bighorn sheep so there is no direct contact. With bighorn numbers down it is critical to do everything possible to keep herds free from diseases transmitted by domestic sheep.
025A	Regarding Canada lynx we ask that you consider the impacts of climate change and the fact that many spruce forests have been or could be impacted by beetle kill. Since Lynx will change their prey species when snowshoe hare numbers are low to include small rodents, ground birds, and small ungulates, it's important to ensure the domestic sheep are not impacting natural environments to the detriment of the other lynx prey species.
025A	Safety of humans and wildlife in the presence of guard dogs
025A	Continue to evaluate and implement livestock grazing management practices consistent with achieving GUSG seasonal habitat objectives during allotment permit renewals and associated NEPA analysis, or as identified through LHAs.
025A	Plants used by the Uncompahgre fritillary butterfly
025A	The introduction and spread of invasive weeds
026A	As a sportsmen conservation organization of built by members who work to promote healthy populations of wildlife, and believe that both land and wildlife management should be based on sound science, we felt the need to comment on the Gunnison BLM Field Office's proposed Resource Management Plan. We greatly appreciate the fact that the BLM has decided to include an analysis of land use conflicts between wild and domestic sheep. With an undisputable body of science in hand which has repeatedly shown the population level impacts from disease transmission between from domestic populations of sheep and goats (see references below), we urge the BLM to use the Risk Analysis Model that was developed through the join BLM and USDA Forest Service Working Group.
026A	Throughout each alternative the BLM must account for the fact that disease transmission to bighorn from a single point of contact with domestic sheep can cause herd-level die-off's – an issue that has been documented over the years by CPW and other wildlife watchers.

026A	Auctioned bighorn hunting tags in Colorado, netting more than \$100,000 each have shown the immense value that hunters are willing to pay to pursue this species so symbolic of wild western landscapes. Not only are bighorn a desirable species to hunt, but they are used as Colorado Parks & Wildlife’s emblem. The bighorn sheep is recognized and valued for much more than the hunting opportunity it provides – hundreds of people come to Hindsdale County each year with the hopes of just seeing one of these animals.
026A	Lastly, while we understand that the focus of this plan is on the long-term health of bighorn sheep populations, we expect each alternative to also address the impacts that domestic sheep grazing has on other important species, such as the health of Gunnison Sage Grouse and the distribution of elk and mule deer.
027	Impact of contact with domestic sheep to bighorn sheep herd health. Please keep working to restore population size and vigor.
028	management of stock driveways that cross both jurisdictions
028	access to corrals and other holding facilities
029	Rocky Mountain bighorn sheep populations health should be considered in this plan and steps should be taken to limit interaction between domestic sheep and bighorn sheep to prevent the spread of Pasteurellosis spp.
029	Maintain healthy range conditions in Gunnison Sage-grouse critical habitat.

SECTION 3

Issue Summary

An issue is a conflict or dispute over resource management activities, allocations, or land use that is well defined or topically discrete and entails alternatives between which to choose. The BLM will use the issues and other information collected in the early planning and scoping phases to help formulate a reasonable range of alternative management strategies that will be analyzed during the EIS process.

The issue statements presented below are preliminary and are based on the best information known to date and include issue statements from the Notice of Intent scoping period for the EIS. The process of developing this EIS will afford opportunities for collaboration with local, state, federal, and tribal governments; land- management agencies; public interest groups; and public land users. As a result, these issues and concerns may need to be modified and perfected to reflect public comments and concerns. The overarching issues the Gunnison Field Office will address in the EIS are listed below.

ISSUES IDENTIFIED AT INTERNAL AND EXTERNAL SCOPING

Information received during project scoping, internal and external, were compiled to develop issue statements. The following issues of key environmental, social, and economic concern were identified:

- 1) How will domestic sheep grazing affect the health of Rocky Mountain bighorn sheep?
 - Risk of contact and disease transmission between RMBS and domestic sheep
 - Forage competition between RMBHS and domestic sheep

- 2) How will domestic sheep grazing affect Threatened and Endangered Species?
 - Gunnison Sage-grouse
 - Uncompahgre Fritillary butterfly
 - Canada lynx

- 3) How will domestic sheep grazing affect local and regional socioeconomics?

Preliminary resource concerns that did not direct the development of alternatives and may be addressed through design features.

- Are there other factors that affect RMBS die-offs?
- How does domestic sheep grazing affect range conditions and forage competition for wild ungulates?
- What are the economic and recreational values of RMHS populations?
- How will range management decisions affect Canada lynx habitat?
- How will safety of humans in the presence of guard dogs be addressed?
- How will domestic sheep grazing affect the spread of noxious and invasive weeds?
- How will domestic sheep grazing affect cultural resources?
- How will domestic sheep grazing affect migratory birds?
- How will the management of domestic sheep grazing affect ecosystems within the project area? (placement of salt blocks, timing, properly functioning condition, vegetation recovery and plant communities, soil erosion/compaction, flood plain, water quality, riparian health)
- How will physical infrastructure impact range management? (management of stock driveways, access to corrals and other holding facilities, livestock water on the Highway Allotment, access across private property on Blue Canyon and Highway allotments)
- How will domestic sheep grazing affect head cutting in Sapinero Mesa and Goose Creek allotments?
- How will riparian standards be achieved in the Alpine Plateau allotment?
- What effect would domestic sheep grazing have on fisheries?
- How are domestic sheep bedding grounds affecting the ecosystem?
- How will domestic sheep grazing affect reforestation dead stands of timber after insect and disease infestation?
- How will domestic sheep grazing affect fire and fuels?
- How will climate change affect domestic sheep grazing?
- How will domestic sheep grazing affect Abandoned Mine Land projects?