

**United States Department of the Interior
Bureau of Land Management
Royal Gorge Field Office
3028 E. Main Street
Cañon City, CO 81212**

Environmental Assessment

VVN Ranch Allotment #05106 Grazing Authorization

DOI-BLM-CO-200-2013-0048 EA

February, 2013



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CHAPTER 1 - INTRODUCTION

1.1 IDENTIFYING INFORMATION

PROJECT TITLE: Range – Authorization to Graze Livestock on the VVN Ranch Allotment #05106

PLANNING UNIT: Badger Creek Subregion #3

LEGAL DESCRIPTION: T.15S., R.75W., sec 23 E½, & sec. 24 NW¼,S½.
Park County, CO.
Public Land Acres: 813

APPLICANT: Aspen Creek Land Co. LLC

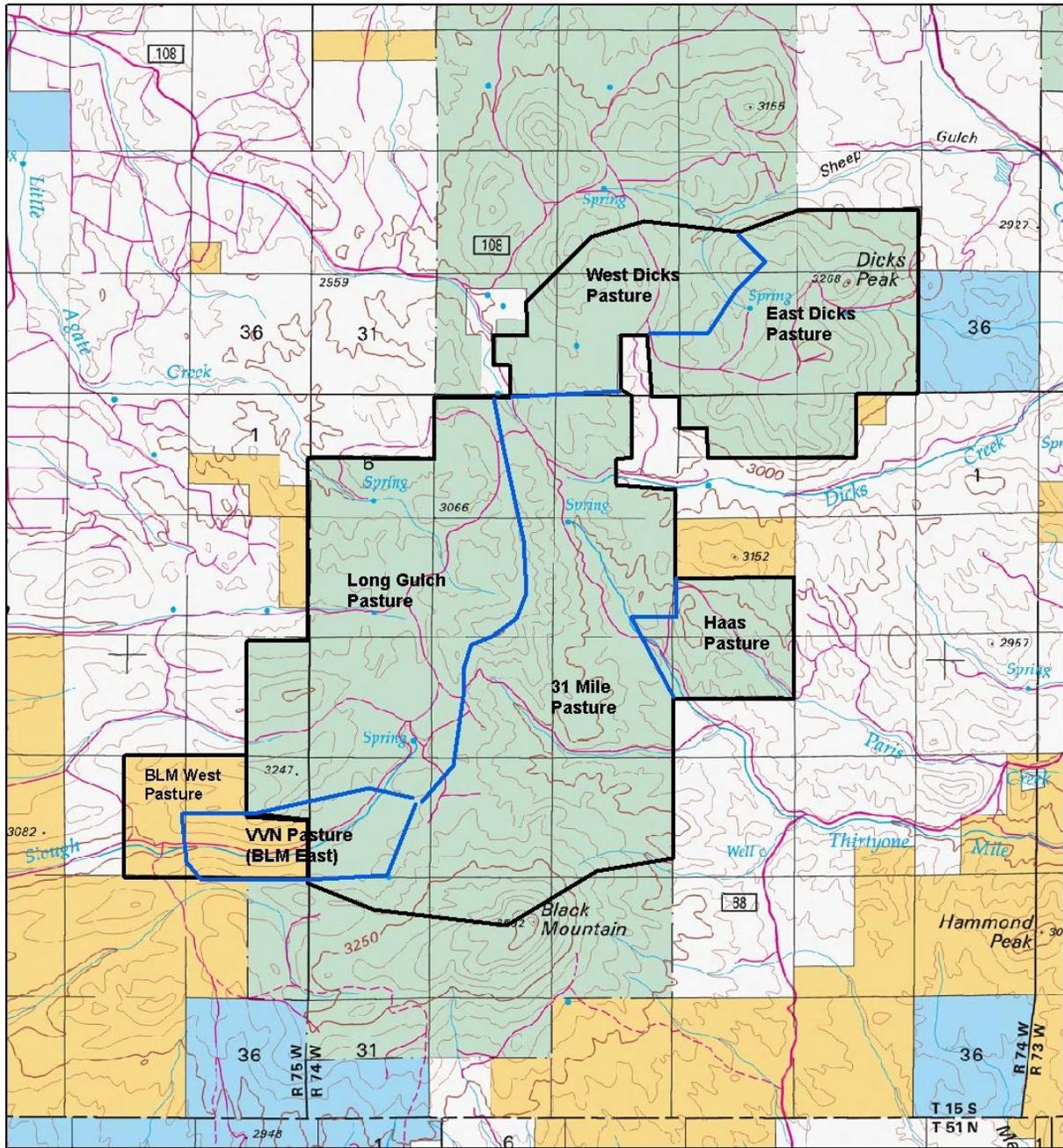
1.2 INTRODUCTION AND BACKGROUND

BACKGROUND: This EA has been prepared by the BLM to analyze the authorization to graze livestock on the VVN Ranch Allotment for a term of ten years. In addition, this EA analyzes on the ground structural range improvements. The BLM portion of the allotment was acquired in 1997 through CO-050-RG-97-35 ADR signed on May 20, 1997. Both the BLM and USFS participated in this acquisition.

There is approximately 360 acres of Forest Service (FS) lands fenced in with the BLM VVN Ranch Allotment and these FS lands are supervised by the South Park Ranger District. The Forest Service portion is allotted and identified as the Black Mountain Allotment which constitutes a larger area encompassing the west and north aspects of Black Mountain ([See Forest Map](#)). The FS Black Mountain Allotment is managed under a multi pasture rotational grazing system run from June 1 through October 10. BLM is working with the South Park Ranger District and their grazing permittee to incorporate the BLM lands (VVN Ranch Allotment) in with the Forest Service grazing system.

Review of grazing use on this allotment included an assessment of the “health” of public land in relation to Standards for Public Land Health and conformance with Guidelines for Livestock Grazing Management in Colorado. “On the ground” efforts to gather information necessary to assess the land health on the VVN Ranch Allotment occurred in 2012. The interdisciplinary land health evaluations indicated that the area is meeting applicable standards for public land health.

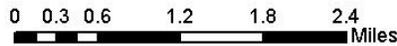
Forest Map



Legend

- Pasture Boundary
- Black Mountain Allotment
- BLM
- State
- USFS
- Private

VVN Ranch Allotment in Relation to the Forest Service Black Mountain Allotment



NOTE TO MAP USERS
 No warrantee is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of the data layers shown on this map. The official land records of the data providers should be checked or current status on any specific tract of land.

1.3 PURPOSE AND NEED

The purpose of the proposed action is to complete a site-specific evaluation of grazing that provides information to be analyzed by the BLM in conformance with the implementing regulations for the NEPA (40 CFR Part 1500), FLPMA, and Public Law 106-113 section 325 to determine whether changes are necessary to current management of the allotment to be in accordance with 43 CFR 4100 and consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act. The purpose of the action is also to ensure that all authorizations implement provisions of, and is in conformance with, the Royal Gorge Resource Management Plan (5-13-1996), and in conformance with the Secretary Approved Rangeland Health Standards for Colorado. The action is needed to respond to application of new grazing use on BLM land.

1. This analysis is needed to consider the impacts of livestock grazing use on public lands within the respective allotment to determine if they are meeting the Standards for Public Land Health and are within the Guidelines for Livestock Grazing in Colorado.
2. Secondly, the proposed action is needed to ensure that grazing use continues to help the allotment meet Standards for Public Land Health and future grazing use on the allotment is consistent with Guidelines for Livestock Grazing Management in Colorado.

1.4 DECISION TO BE MADE

The BLM will decide whether to approve the proposed grazing authorization based on the analysis contained in this Environmental Assessment (EA). This EA will analyze impacts associated with issuing a ten year grazing permit with the installation of new range improvements. The BLM may choose to: a) accept the project as proposed, b) accept the project with modifications/mitigation, c) accept an alternative to the proposed action, or d) not authorize the project at this time. The finding associated with this EA may not constitute the final approval for the proposed action.

1.5 PLAN CONFORMANCE REVIEW

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

Name of Plan: Royal Gorge Resource Management Plan

Date Approved: 05/13/96

Decision Number/Page: 3-4, 3-7, C-30, C-31, C-35, C-36, C-38, C-41, C-42, C-43, C-44

Decision Language:

3-4: Grazing is authorized on 22 allotments

3-7: 12 allotments are categorized as Improve

C-30: Base livestock grazing management on the 1981 Royal Gorge Area Grazing EIS.

C-31: Authorize adjustments in the actual AUMs when warranted by weather and other conditions.

- C-35: Conduct EIS on allotments with conflicts, and adjust stocking rates and season of use accordingly.
- C-36: Grazing systems will be implemented by an IAP. Plans will be prepared in consultation, cooperation, and coordination with the permittee and other affected parties to meet multiple use objectives.
- C-38: Continue to construct range improvement projects on an as needed basis. Complete NEPA documentation on each project as needed.
- C-41: Adjustments in grazing use will be made by allotment on a case by case basis. Changes in number of livestock, season of use, duration of use, and class of livestock can be made based on monitoring studies and inventory data.
- C-42: The grazing treatment on Improve category allotments will require a rest standard to allow a time period for forage species to recover from the last grazing period before the plants are regrazed.
- C-43: Maximum allowable utilization on allotments with dormant season grazing will be 80% annual production on grass species and 60% of annual production on shrub species.
- C-44: On single pasture allotments with season long spring-summer grazing, utilization will be held to the 40 – 60% range on forage species in lieu of a rest standard. This requirement will be on high elevation allotments where deferment or dormant season use is impracticable because of deep snow and fencing the allotment into smaller units is uneconomical.

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land health and apply to all uses of public lands.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.

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.

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.

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.

Because standards exist for each of these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in Chapter 3 of this document.

1.6 SCOPING, PUBLIC INVOLVEMENT AND ISSUES

1.5.1 Scoping: NEPA regulations (40 CFR §1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

Persons/Public/Agencies Consulted: Scoping, by posting this project on the Royal Gorge Field Office website, was the primary mechanism used by the BLM to initially identify issues. In addition to the website, agencies from the South Park Ranger District, USFS and Colorado Parks and Wildlife were consulted. No comments or issues were received.

Issues Identified: No issues were identified during public scoping.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail are also discussed.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

The Proposed Action:

1. Authorizes grazing use on the VVN Ranch Allotment as scheduled below and issues a ten year term grazing permit.
2. Installation of a new cattle guard.
3. Analysis of Grazing Use Adaptive Management

Grazing use on the VVN Ranch Allotment would be incorporated in with the Forest Service Black Mountain Allotment rotational grazing system ([See Forest Map](#)). Grazing use under this alternative would be compatible with the Forest Service objectives and standards to minimize confusion with the permitted user and land managers. The scheduled grazing period (6/1-10/10) encompasses a timeframe when livestock may use the VVN allotment, but does not imply livestock will use the allotment for the entire grazing period. Livestock use on the BLM will be limited to the forage utilization and scheduled AUMs for each pasture. Based on the grazing schedule (livestock numbers and AUMs), the number of days in each BLM pasture would be limited to no more than 15 days of grazing use. The pasture rotation sequence would be changed from year to year. Prior to grazing use, the pasture sequence and grazing duration would be determined during an annual operating plan meeting between the Forest Service, permittee and BLM. The permittee would be held to the grazing schedule set in the annual operating plan for that year and documented in the authorization case file.

Under the Proposed Action alternative, the [VVN Ranch Allotment](#) would be scheduled as follows:

<u>Pasture</u>	<u>Number</u>	<u>Kind</u>	<u>Grazing Period</u>		<u>% BLM</u>	<u>AUMs</u>
			<u>Begin</u>	<u>End</u>	<u>Land</u>	
West Pasture	105	Cattle	June 1	October 10	100%	53
East Pasture	105	Cattle	June 1	October 10	41%	22

The following terms and conditions would be included in the new grazing permit:

1. Maximum utilization levels on key upland forage species will be limited to 60% (moderate use). Utilization on riparian grasses & sedges will be limited to a 4 inch stubble height. If grazing use reaches these levels, livestock will be removed.
2. The permittee will be held to the grazing schedule developed during the Annual Operating Plan for the grazing year. Any changes to this plan must be approved by the Forest Service and BLM.
3. Salting and supplements will be placed at least ¼ mile away from riparian and water resources.
4. The permittee is required to perform maintenance annually on range improvements in accordance with signed Cooperative Agreements/Section 4 Permits prior to livestock turn-out.
5. The permittee and all persons associated with the allotment operations shall not damage, destroy, remove, move or disturb any objects or sites of cultural, paleontological or scientific value, such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils and artifacts. If in connection with allotment operations under this authorization any of the above resources are encountered, the permittee shall protect such resources and immediately notify the BLM authorized officer of the findings.
6. This Grazing Permit has been fully processed in accordance with all applicable laws and regulations. The grazing schedule complies with Guidelines for Grazing Management in Colorado and is designed to help the public land achieve the Standards for Public Land Health. **In the event that the grazing schedule fails to help public land achieve the Standards for Public Land Health, grazing use on this allotment may be revised at any time.**

New Range Improvements: New range improvements are proposed under this alternative to help reduce any negative impacts and ensure that future livestock use continues to help the allotment meet Standards for Public Land Health. These improvements are designed to serve as livestock control features to improve even utilization and defer grazing use in areas as needed.

One new range improvement is proposed under this alternative and includes a [new cattle guard](#) placed where the pasture division fence intersects the existing road. Currently there is a wire gate that crosses the road and typically this gate is left open. The new cattle guard would replace the wire gate.

Monitoring Plan

The VVN Ranch Allotment would be monitored for general compliance and management effectiveness. Utilization on upland and riparian forage would be studied for the first three years to determine accuracy in stocking rates and compliance.

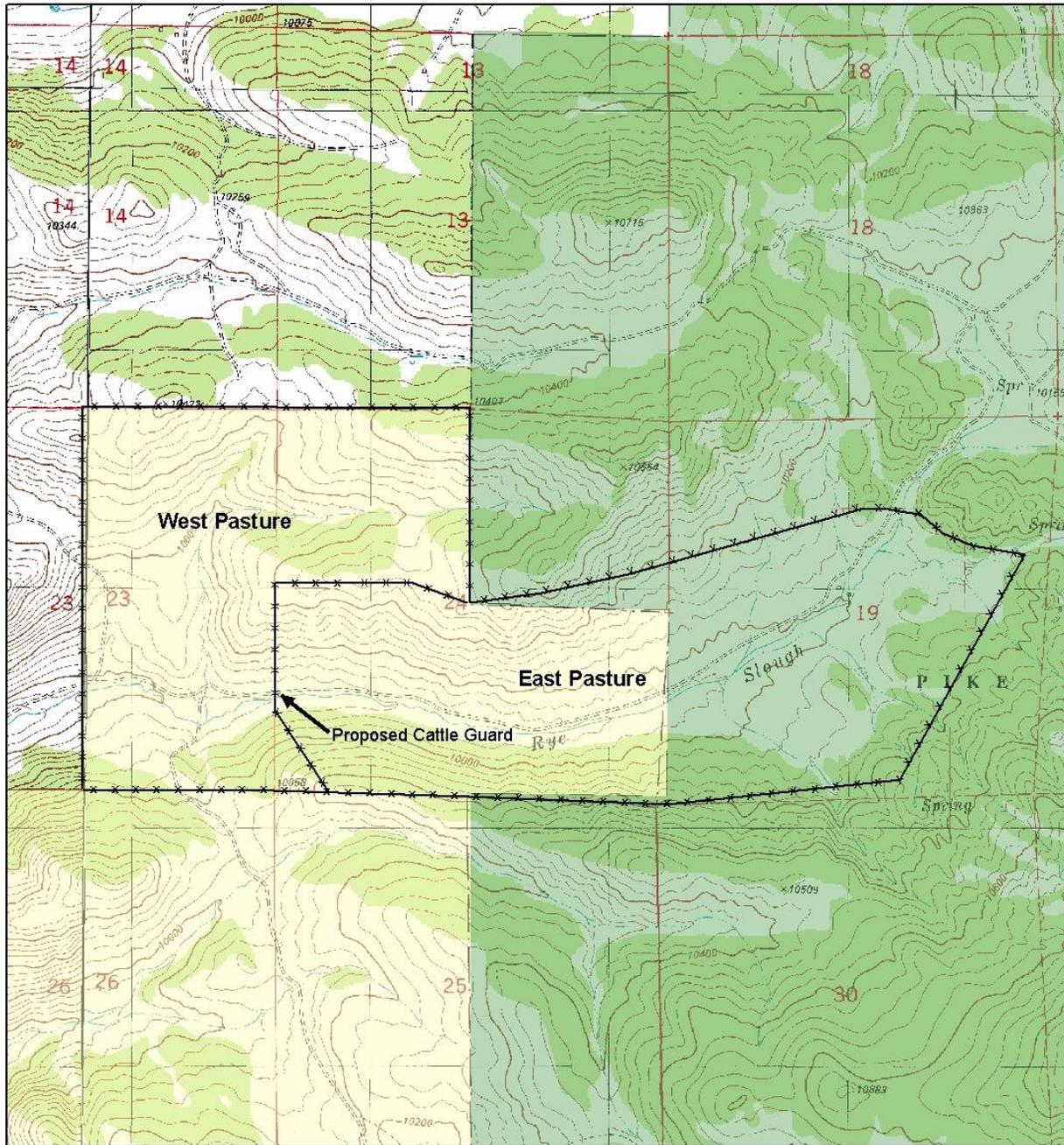
Adaptive Management Options

Adaptive management is defined as a process where land managers implement management practices that are designed to achieve an acceptable resource condition in a timely manner. In addition, practices could be implemented when unforeseen circumstances occur such as drought and/or fire. All adaptive actions will be within the scope of effects in this document, or a supplemental NEPA document (DNA) will be prepared. The table below provides a list of potential Adaptive Grazing Management Actions that can be applied as necessary:

Adaptive Grazing Management Actions (Tool Box):

1. Change animal numbers- do not exceed permitted AUMs
2. Change animal class from cattle to yearlings or vice versa - do not exceed permitted AUMs
3. Adjust permitted AUMs based on appropriate monitoring averaged over three years
4. Rest from livestock grazing for one or more seasons
5. Construction of permanent fencing to control livestock distribution patterns, or exclude livestock from areas of concern (riparian, wetlands, springs)
6. Construct electric temporary fencing to control livestock distribution patterns
7. Remove permanent fencing and temporary fencing
8. Construct livestock water developments (springs, infiltrators, pipelines, tanks, windmill, sediment traps, wells, stock dams, submersible pumps, solar)
9. Remove existing water developments (springs, infiltrators, pipelines, tanks, windmill, sediment traps, wells, stock dams, submersible pumps, solar)

VVN Allotment



<p>Legend</p> <ul style="list-style-type: none"> ✕✕ Existing Fence ■ BLM ■ State ■ USFS □ Private 	<p>VVN Ranch Allotment #05106 Grazing Authorization DOI-BLM-CO-200-2013-0048 EA</p>	<p>NOTE TO MAP USERS No warrantee is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of the data layers shown on this map. The official land records of the data providers should be checked or current status on any specific tract of land.</p>
<p>0 0.1 0.2 0.4 0.6 0.8 Miles</p>		

2.2.2 No Grazing Alternative

Under this alternative grazing use would not be authorized on the VVN Ranch Allotment. Under this alternative a new fence would be required along the BLM/FS boundary to keep livestock assigned to the Black Mountain Allotment off BLM lands. This fence would be 1 mile in length and BLM would be responsible for the construction and future maintenance of this fence.

2.2.3 BLM GRAZING ONLY Alternative

Under this alternative the BLM parcel would be separated from the Forest Service allotment and managed by itself. The allotment would be grazed either in the spring or fall.

The [VVN Ranch Allotment](#) would be scheduled as follows:

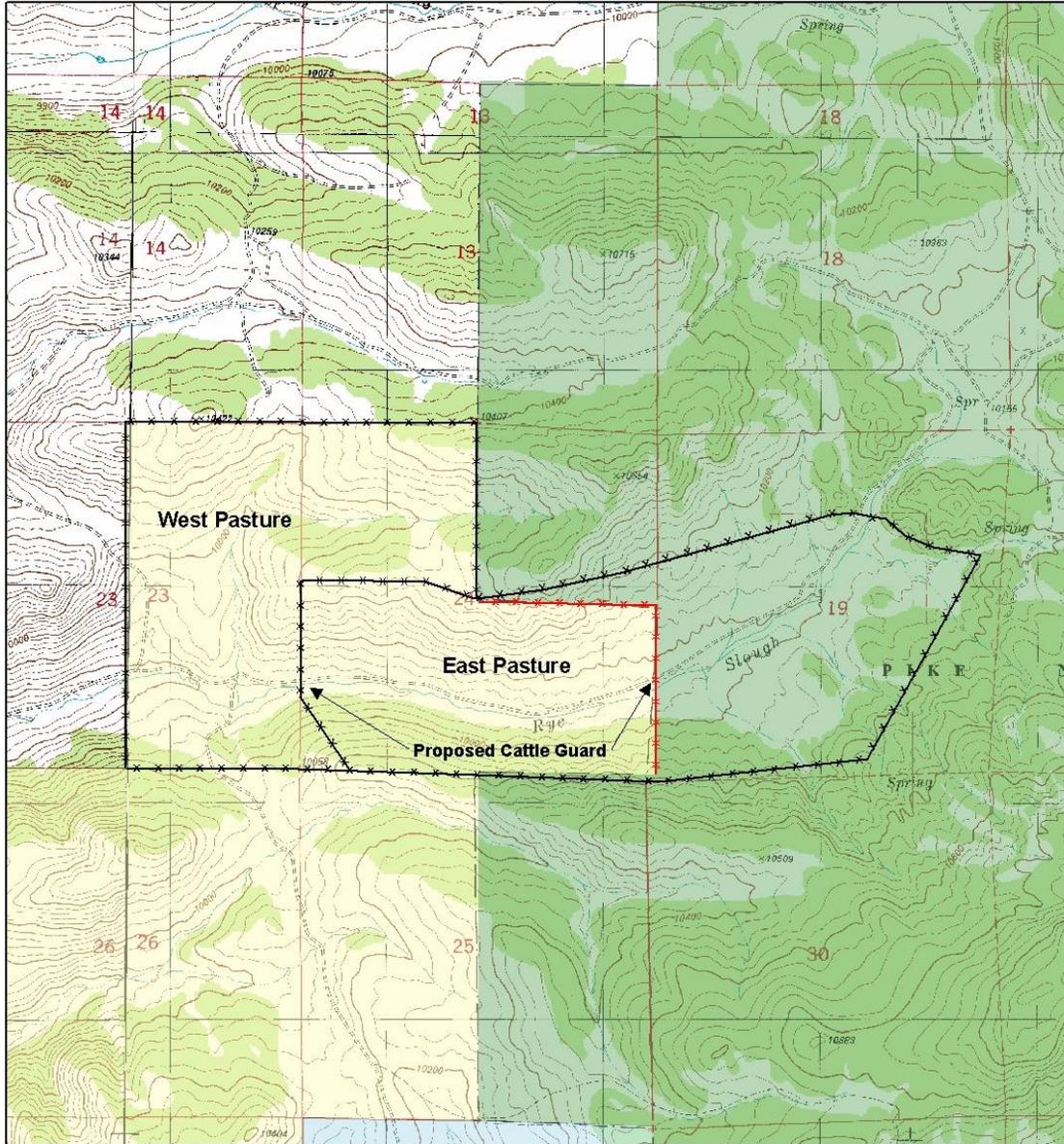
<u>Pasture</u>	<u>Number</u>	<u>Kind</u>	<u>Grazing Period</u>		<u>% BLM Land</u>	<u>AUMs</u>
			<u>Begin</u>	<u>End</u>		
East Pasture	105	Cattle	May 9 –	May 15	100%	22
West Pasture	105	Cattle	May 16 –	May 31	100%	53
West Pasture	105	Cattle	Oct 1 –	Oct 15	100%	53
East Pasture	105	Cattle	Oct 16 –	Oct 21	100%	22

1. Grazing use is authorized either in the spring or fall, not both. Pasture sequence may be reversed under BLM approval.
2. Maximum forage utilization levels on upland and riparian vegetation will be limited to 60%. If grazing use reaches these levels, livestock will be removed.
3. Salting and supplements will be placed away from riparian and water resources.
4. The permittee is required to perform maintenance annually on range improvements in accordance with signed Cooperative Agreements/Section 4 Permits prior to livestock turn-out.
5. The permittee and all persons associated with the allotment operations shall not damage, destroy, remove, move or disturb any objects or sites of cultural, paleontological or scientific value, such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils and artifacts. If in connection with allotment operations under this authorization any of the above resources are encountered, the permittee shall protect such resources and immediately notify the BLM authorized officer of the findings.
6. This Grazing Permit has been fully processed in accordance with all applicable laws and regulations. The grazing schedule complies with Guidelines for Grazing Management in Colorado and is designed to help the public land achieve the Standards for Public Land Health. **In the event that the grazing schedule fails to help public land achieve the Standards for Public Land Health, grazing use on this allotment may be revised at any time.**

Range Improvements: A new fence would be required along the BLM/Forest Service boundary. The fence would be 1 mile in length and the basic four wire BLM fence specifications would apply to all new fences under this proposal. The bottom wire would be smooth and set no less than 16 inches from ground level. The top wire would be barbed and set no more than 42 inches from ground level. The new fence would be built along the BLM/Forest Service boundary and the boundary line would be surveyed. Two new cattle guards would be required under this alternative. A new cattle guard would be placed on the road along the existing fence dividing the two pastures and another placed along the new boundary fence between BLM and Forest Service.

Adaptive Management & Monitoring would be implemented under this alternative as described in the Proposed Action.

BLM Alternative



Legend		VVN Ranch Allotment #05106 Grazing Authorization DOI-BLM-CO-200-2013-0048 EA	0 0.125 0.25 0.5 0.75 1 Miles	<p><small>NOTE TO MAP USERS</small> No warrantee is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of the data layers shown on this map. The official land records of the data providers should be checked or current status on any specific tract of land.</p> 
<ul style="list-style-type: none">  Proposed Fence  Existing Fence  BLM  State  USFS  Private 				

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

None.

CHAPTER 3 - AFFECTED ENVIRONMENT AND EFFECTS

3.1 INTRODUCTION

This section provides a description of the human and natural environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the actions under the Proposed Action and other alternatives analyzed.

3.1.1 Interdisciplinary Team Review

The following table is provided as a mechanism for resource staff review, to identify those resource values with issues or potential impacts from the proposed action and/or alternatives. Those resources identified in the table as impacted or potentially impacted will be brought forward for analysis.

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Air Quality</u> <i>Ty Webb, Chad Meister, Melissa Hovey</i>	TW 4/13/2013	This action will not result in significant impacts to air quality within the region.
<u>Geology/Minerals</u> <i>Stephanie Carter, Melissa Smeins</i>	SSC, 4/18/2013	This action will not result in significant impacts to mineral resources.
<u>Soils</u> <i>Jeff Williams</i>	JW 5/20/13	Standard 1 is currently being met on the allotment and the proposed action and alternatives as described will not deviate from this achievement. Any impacts would be negligible.
<u>Water Quality</u> <u>Surface and Ground</u> <i>John Smeins</i>	JS 4/9/2013	The allotment lies in the upper reaches of Rye slough. Water quality standards are being met and water quality is not expected to degrade with implementation of the Proposed Action.
<u>Invasive Plants</u> <i>John Lamman</i>	JL, 04/24/2013	See affected environment section.
<u>T&E and Sensitive Species</u> <i>Matt Rustand</i>	MR, 4/9/13	There are no records of any federally listed or BLM sensitive species within or near the project area. The Proposed Action will not result in impacts to TES species.
<u>Vegetation</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	JW, 5/20/13	See affected environment
<u>Wetlands and Riparian</u> <i>Dave Gilbert</i>	DG 4/4/13	See affected environment section.

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Wildlife Aquatic</u> <i>Dave Gilbert</i>	DG 4/4/13	See affected environment section.
<u>Wildlife Terrestrial</u> <i>Matt Rustand</i>	MR, 4/9/13	See affected environment section.
<u>Migratory Birds</u> <i>Matt Rustand</i>	MR, 4/9/13	See affected environment section.
<u>Cultural Resources</u> <i>Monica Weimer, Michael Troyer</i>	MT 5/30/13	Both prehistoric and historic sites are present in the vicinity of the area of potential effect [see Report CR-RG-13-124 (P)]. Although 5PA4707, 5PA4708, and 5PA4709 were recorded during the cultural resources inventory, the former two are not eligible for the National Register of Historic Places, and the latter, while eligible for inclusion on the national register, will not be impacted by the proposed action. Therefore, no historic properties will be affected by the proposed undertaking.
<u>Native American Religious Concerns</u> <i>Monica Weimer, Michael Troyer</i>	MT 5/30/13	Although aboriginal sites are present in the vicinity of the area of potential effect, no possible traditional cultural properties were located during the cultural resources inventory (see Cultural Resources section, above). There is no other known evidence that suggests the project area holds special significance for Native Americans.
<u>Economics</u> <i>Dave Epstein, Martin Weimer</i>	mw, 4/3/13	This action will not result in significant impacts to the socio economics of individuals or the region.
<u>Paleontology</u> <i>Melissa Smeins, Stephanie Carter</i>	SSC, 4/18/2013	This action will not result in significant impacts to paleontological resources.
<u>Visual Resources</u> <i>Kalem Lenard</i>	KL, 3/27/2013	The project is located within a Visual Resource Management Class III area where the management goal is to partially retain the existing character of the landscape and that projects should not dominate the view of a casual observer. The proposed action would meet the management objectives and would not impact visual resources.
<u>Environmental Justice</u> <i>Martin Weimer</i>	mw, 4/3/13	The proposed action affects areas that are rural in nature. The land adjacent to these parcels is open rangeland as a result there are no minority or low-income populations in or near the project area. As such, the proposal will not have a disproportionately high or adverse environmental effect on minority or low-income populations.
<u>Wastes Hazardous or Solid</u> <i>Stephanie Carter</i>	SSC, 4/18/2013	The proposed actions will not involve use of materials that would result in generation of solid and/or hazardous wastes. Therefore, there is no concern with potential impacts involving wastes.
<u>Recreation</u> <i>Kalem Lenard</i>	KL, 3/27/2013	The project is within the Royal Gorge Extensive Recreation Management Area (ERMA) where the primary recreation management goal is to provide dispersed recreation. The primary recreation use within the project area is generally associated with hunting activities. The proposed action would not impact recreation resources.
<u>Farmlands Prime and Unique</u> <i>Jeff Williams, Chris Cloninger, John</i>	JW 5/20/13	Not present

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<i>Lamman</i>		
<u>Lands and Realty</u> <i>Steven Craddock</i>	SRC 6/3/2013	All real property within the boundaries of the proposed action is owned by the United States of America, including surface estate, minerals, and water rights. The BLM has not issued any use authorizations, withdrawals, or segregations pertaining to the subject real property. Therefore, the proposed action would not impact Lands and Realty.
<u>Wilderness, WSAs, ACECs, Wild & Scenic Rivers</u> <i>Kalem Lenard</i>	KL, 3/27/2013	This resource is not present within the project area.
<u>Wilderness Characteristics</u> <i>Kalem Lenard</i>	KL, 3/27/2013	This resource is not present within the project area. The affected parcel does not meet the minimum size or adjacency requirement to be considered.
<u>Range Management</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	JW 5/20/2013	See effected environment
<u>Forest Management</u> <i>Ken Reed</i>	KR 3/27/13	There is approximately a 100 acre dense Engelmann spruce stand in this allotment. Spruce beetle has moved into Jack Hall Mtn. which is approximately 12-13 miles south of the project area. If spruce beetle is there today or moves into this area in the future then fence damage due to trees falling should be anticipated where it travels through this stand. The proposed action will have no impact to forest health or future forest management actions.
<u>Cadastral Survey</u> <i>Jeff Covington</i>	JC 6/4/13	This action will not result in significant impacts to cadastral survey corners.
<u>Noise</u> <i>Martin Weimer</i>	mw, 4/3/13	This action will not result in any significant impacts due to noise or result in any increased noise levels.
<u>Fire</u> <i>Bob Hurley</i>	BH, 3/26/2013	The proposed action will not create or elevate risk factors leading to unwanted wildland fire ignition.
<u>Law Enforcement</u> <i>Steve Cunningham</i>	mw, 4/3/13 for SC	There are no law enforcement issues associated with this action.

The affected resources brought forward for analysis include:

- Invasive Plants
- Vegetation
- Wetlands/Riparian
- Wildlife Aquatic
- Wildlife Terrestrial
- Migratory Birds

- Range Management

3.2 BIOLOGICAL RESOURCES

3.2.1 INVASIVE PLANTS*

Affected Environment: Invasive plants known to occur within the project boundary include: Canada thistle. Invasive plants known to occur within a seven mile radius of the project boundary include: Yellow toadflax.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The impacts from the type of grazing proposed in this alternative would not result in the type of soil disturbance needed to increase the risk of invasive plant invasion. The cattle guard installation has potential to spread and or introduce invasive plants.

Protective/Mitigation Measures: Equipment used to implement cattle guard installation should be washed prior to entering the project area to remove any plant materials, soil, or grease. Areas disturbed by project implementation should be monitored for the presence of weeds on the Colorado State Noxious Weed list. Identified noxious weeds will be treated.

No Grazing Alternative

Direct and Indirect Impacts: Removal of livestock grazing from the allotment in the proposed action could allow some populations of invasive plants to increase in size.

Protective/Mitigation Measures: None

BLM Grazing Only Alternative: Same as Proposed Action.

*Invasive plants are plants that are not part of (if exotic), or are a minor component of (if native), the original plant community or communities that have the potential to become a dominant or co-dominant species on the site if their future establishment and growth are not actively controlled by management interventions, or are classified as exotic or noxious plants under state or federal law. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants.

3.2.2 VEGETATION (includes a finding on standard 3)

Affected Environment: The average elevation for the allotment is around 10,500 feet. The climate is semi-arid with precipitation averaging 12 to 18 inches annually. Typically the average frost free period is between June 8 and September 12.

The vegetation communities on the allotment is diverse depending on aspect and includes large open park areas on the south aspects dominated by Arizona fescue, mountain muhly, Parry

oatgrass, prairie junegrass, blue grama, and fringed sage. Most of the steeper and north facing aspects consist of intermixed spruce, fir and aspen forests. Forage production in the open parks is fairly productive while production is very limited in the forested areas.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The action incorporates BLM grazing use in with the Forest Service Black Mountain Allotment rotational grazing system. Grazing use would be limited to the forage utilization and scheduled AUMs for each pasture and the grazing period would be changed from year to year. Forage vegetation would be given opportunity for full growth most years and given the ability to disperse new seed sources for new recruitment. The action also utilizes adaptive management tools to allow for flexibility due to environmental changes and better livestock control management. This would increase residual vegetation in areas where it is less than desirable and increase the vigor of individual plants through better livestock distribution across the allotment. The Proposed Action would help the area achieve Public Land Health for Standard #3.

Protective/Mitigation Measures: None.

Cumulative Impacts: See Cumulative Impact Summary

No Grazing Alternative

Direct and Indirect Impacts: Not authorizing grazing use as prescribed by this alternative would remove grazing use on vegetation on the public land. This in turn would result in an initial increase in plant vigor and litter production. However, precipitation in this area can be fairly low. Due to these dry conditions, decomposition of litter and “standing dead” plant material is relatively slow and the return of nutrients from these materials to the soil is therefore also slow. Livestock grazing, when managed properly, tends to harvest plant biomass and return a higher portion of the nutrients to the soil (and more quickly) than allowing the plant to decompose without grazing use. Furthermore, harvesting a portion of a plant’s biomass, when done properly, tends to stimulate new growth and improve plant vigor. The effect of livestock hooves also tends to break up soil crusts and improve the soil surface as a seed bed for plant reproduction. Therefore, a lack of periodic grazing use in the area could result in an eventual decrease in plant vigor, and the amount of vegetative and litter cover. This alternative would initially increase plant vigor and litter production but would eventually result in movement away from applicable standards.

Protective/Mitigation Measures: Monitor for livestock trespass

BLM Grazing Only Alternative:

Direct and Indirect Impacts: Grazing use is deferred to the early spring and fall. Under this alternative forage plants are still allowed opportunity for mature growth and new re-vegetation. This alternative would not have any significant impacts to vegetation resources. The Alternative would continue to help the area achieve Public Land Health for Standard #3.

Protective/Mitigation Measures: None.

Cumulative Impacts: See Cumulative Impact Summary

Finding on the Public Land Health Standard for Plant and Animal Communities: The area was evaluated for public land health standards in 2012. The assessment indicated that, under current management, livestock grazing does not appear to be preventing public land from meeting applicable land health standards. Through the assessment however, it was determined that there are large stands of mature aspen throughout this area in decline due to conifer encroachment, age and drought. Treatments that remove conifer trees from these accessible areas can improve the aspen stand vigor and overall health by creating the disturbance that this species thrives on. The spruce bark beetle population may have recently increased in this area based on spruce beetle activity on Jack Hall Mtn. Numerous standing green spruce were found to be under attack by spruce beetle in the Fall of 2012 on Jack Hall Mtn. Forest management recommendations to ensure optimum tree health include providing adequate space, water, and avoid the wounding of the trees. Generally an overcrowded forest is more susceptible to catastrophic wildfire, insect infestations and diseases.

3.2.3 WETLANDS & RIPARIAN ZONES (includes a finding on standard 2)

Affected Environment: This action affects approximately 1.5 miles of BLM managed riparian and wetland habitat associated with Rye Slough, a small headwater stream. In addition, because there is no fence between BLM and USFS lands in the east pasture, an additional approximately 0.75 miles of USFS managed Rye Slough is involved in the same pasture discussed here (in addition to the other USFS managed pastures under their permit). Much of the land setting became public through federal land acquisition, limiting the amount of time that BLM has managed the area. Rye Slough shows past heavy grazing impacts of trails, hummocks, minimal woody riparian vegetation and some older head-cutting. These indicators are becoming remnant as recent grazing has allowed for initial recovery, but there is prominent homestead evidence: e.g. a home site, historic corrals, remnant cross fencing, etc. typical of heavily used areas years ago. Rye Slough is perennial and gains flow from seep water through the pasture collecting to a form single thread stream by the lower end. Stream flow usually subs below the streambed lower down in its watershed prior to entering Badger Creek and BLM has completed some recovery actions in those downstream reaches to improve resource conditions in another allotment. Some areas of large wet meadow are becoming saturated enough in recent years that grazing is light, as cattle avoid the excessive wet conditions. Grazing distribution is not even in the wetland environments tending to be heavier along the wetland area margins and stream banks rather than the high saturation areas. Some remnant earthen dykes, ditch cuts, and dugout areas are also present, but are all generally healing. The smaller range improvement projects mentioned to make the pastures operational do not affect Rye Slough riparian resources.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The annual operation plan discussed is important to the protection and enhancement of resources in these pastures. The rotation planned will alternate grazing pressure in wet areas because timing and forage palatability will change the way livestock graze. With utilization level thresholds neither period of use will prevent the riparian area from functioning. The adaptive management approach offers the ability for additional adjustments if utilization is not uniform. It is probable that wetland and stream margins will reach a limiting utilization level before adjacent uplands. A tendency to continue graze would set back riparian recovery so other livestock distribution approaches would help the operator stay longer. The larger allotment (includes all FS pastures) rotation offers the ability to start utilization at different points in the season in this pasture which can aid the riparian recovery. However, depending upon the dates grazed, the same amount of AUM's will yield varying utilization by year making annual monitoring necessary.

Protective/Mitigation Measures: Utilization monitoring is necessary in wetland and riparian habitats. Attaining an even 4 inch utilization across riparian vegetation will be difficult given the variation in saturation on the wet meadows, but will be necessary to avoid over-use on the stream margin; likely the first areas to reach a 4 in stubble height.

Cumulative Impacts: There is extensive grazing in the region on private, public, and state lands. Grazing this pasture (and allotment) is cumulative to all other grazing. Because this is the headwater pasture, grazing affects do not occur outside of agency control above this pasture so the prescription set annually for when to graze this pasture is the primary impact to this segment of stream. Regionally, because of the harsh weather, most grazing on riparian areas nearby is also during the growing season. Therefore, time allotted for regrowth in these pastures is important to maintain riparian health on public lands which may not be a consideration on other lands in the region.

No Action Alternative

Direct and Indirect Impacts: With no livestock grazing occurring, riparian and wetlands habitats would continue to recover at a rate only affected by local wildlife.

Protective/Mitigation Measures: Without scheduled grazing, BLM would still need to monitor to make sure trespass grazing does not occur because an individual permittee would not be maintaining fences and monitoring use of the area. Livestock drift from adjacent grazed lands could occur and damage the stream. Lush forage along the bottomlands would be attractive to trespass livestock, so inspections will still be necessary.

BLM Grazing Only Alternative:

Direct and Indirect Impacts: Splitting the BLM public land off of the USFS permit puts the annual management planning solely on the BLM. With only 2 smaller pastures, the flexibility to adapt to annual precipitation cycles is reduced and the amount of land available to any one livestock operator is smaller; however fixed dates can be advantageous to continued riparian enhancement. The dates planned under this alternative; rotating spring/fall with alternative grazing years would be similar to that planned under the Proposed Action with use starts at different times. The dates allow for good growth, or regrowth of wetland/riparian plants between repeated uses. Both use windows will have Rye Slough in robust condition during the mid

summer rainy period when stream erosion probability is highest to counter flood impacts. Fall grazing yields less residual spring grass to withstand exceptionally high snowpack runoff years, however if utilization standards are followed the stream would function adequately against a high snowmelt runoff. It is also likely that grazing late will put a higher percentage of the utilization in uplands away from the wetter areas so distribution would be more even in those years. Grazing under this alternative with AUM adjustments necessary to meet utilization would allow Rye Slough riparian area to continue to be in proper functioning condition.

Protective/Mitigation Measures: Monitor similar to the proposed action.

Cumulative Impacts: Similar to the proposed action.

Finding on the Public Land Health Standard for Riparian Systems: Rye Slough is in early succession, but in a proper functional condition. Each of the three alternatives keeps Rye Slough in good condition and will continue to meet Public Land Health Standards for riparian systems.

3.2.4 WILDLIFE AQUATIC (includes a finding on standard 3)

Affected Environment: Rye Slough is a small headwater stream forming from various seeps while it descends in elevation eventually becoming a single thread channel. The stream is most often disconnected from Badger Creek subbing at lower reaches. Disconnected flow combined with periodic low flows has kept this stream from supporting fish. The habitat values that Rye Slough provides to amphibians, however, would appear high because the stream and adjacent areas are in good and recently improving condition (see riparian section above). The habitat is high-elevation, (just below 10,000 feet) and relatively cold with a short reproductive season. It is probable that chorus frogs, tiger salamanders, or northern leopard frogs are found in the local area, but utilization of habitat in Rye Slough is likely limited by the lack of ponded habitat and cold temperatures.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The annual operating plan is important to the protection and enhancement of aquatic habitat in these pastures. The planned rotation will alternate the magnitude of use by given year. The adaptive management approaches offer the ability to do additional work if utilization is not uniform. It is probable that wetland and stream margins will reach a limiting utilization level before adjacent uplands. Continued grazing beyond acceptable utilization levels would set back riparian recovery. Additional distribution approaches may help spread out livestock and improve grazing use. Protection of riparian resources is important to aquatic wildlife to maximize ponded habitat in backwaters, puddled areas, etc. Riparian areas left unprotected will impact water that drains from the seeps through the wet meadows and stream system, thereby reducing available habitat preferred by amphibian species. Given the more varied allotment rotation afforded by combining FS and BLM lands, utilization of vegetation at different times in the season of use aids in the recovery of the riparian habitat. However, depending upon the dates the same amount of AUM's will see varying utilization by alternate year. Different levels of riparian utilization should be expected and will need to be monitored.

Protective/Mitigation Measures: Utilization monitoring is necessary in wetland and riparian habitats.

Cumulative Impacts: There is extensive grazing in the region on private, public, and state lands. Grazing this pasture (and allotment) is cumulative to all other grazing. Because this is the headwater pasture, grazing does not occur outside of agency control upstream of this pasture so the prescription set annually for when to graze this pasture will be the primary impact to this segment.

No Action Alternative

Direct and Indirect Impacts: With no livestock grazing occurring riparian, wetland and aquatic habitats would continue to recover at a rate only affected by local wildlife grazing use.

Protective/Mitigation Measures: Without scheduled grazing, BLM would still need to monitor to make sure trespass grazing does not occur because an individual permittee would not be maintaining fences, etc. Livestock drift from adjacent grazed lands could occur and damage the stream environment. Lush forage along the bottomlands would be attractive to trespass livestock so inspections will still be necessary.

BLM Grazing Only Alternative:

Direct and Indirect Impacts: Splitting the BLM public land off of the USFS permit puts the annual management planning upon the BLM. With only 2 smaller pastures the flexibility to adapt to annual precipitation cycles is reduced and the amount of land available to any one livestock operator is small; however fixed dates can be advantageous to continued riparian enhancement. The dates planned under this alternative; rotating spring/fall over alternative grazing years would be similar to that planned under the Proposed Action with use starts at different times. The dates allow for good growth, or regrowth of wetland/riparian plants between repeated uses. Both use windows will have Rye Slough in robust condition during the mid summer rainy period when stream erosion probability is highest to counter flood impacts. Fall grazing yields less residual spring grass to withstand exceptionally high snowpack runoff years, however if utilization standards are followed the stream would function adequately against a high snowmelt runoff. It is also likely that grazing late will put a higher percentage of the utilization in uplands away from the wetter areas so distribution would be more even in those years. Grazing under this alternative with AUM adjustments necessary to meet utilization, would allow Rye Slough riparian area to continue to be in proper functioning condition and optimize aquatic habitat conditions of providing some standing water.

Protective/Mitigation Measures: Monitor similar to the proposed action.

Cumulative Impacts: Similar to the proposed action

Finding on the Public Land Health Standard for Plant and Animal Communities: This public land has not been surveyed for its herpeterfauna however habitat is good and improving and there are no factors on this allotment that would limit their future use related to any of the three

alternatives. The habitat here is relatively fragmented, isolated and cold but the planned grazing should not limit use by aquatic wildlife.

3.2.5 WILDLIFE TERRESTRIAL (includes a finding on standard 3)

Affected Environment: The action area is located along the Rye Slough watershed. The habitat type most prevalent is high elevation short grass prairie. The north slopes are dominated by spruce forests and with aspen occurring at the bottom of the slope before transitioning to grassland. The project area shows past heavy grazing impacts of trails, hummocks, minimal woody riparian vegetation and some older head-cutting. These indicators are becoming remnant as recent grazing has allowed for initial recovery, but there is prominent homestead evidence: e.g. a home site, historic corrals, remnant cross fencing, etc. typical of heavily used areas years ago. Rye Slough provides a perennial water source through the east and west pastures associated with the allotment. The action area provides year around habitat for elk and serves as severe winter range.

A variety of raptor species occur in the planning area including: golden eagle, prairie falcon, red-tailed hawk, Coopers hawk, sharp-shinned hawk, and kestrel. Other species that may occur in smaller numbers include: ferruginous hawk, rough-legged hawk, Swainson's hawk, harrier, osprey and goshawk. In addition, a wide variety of small mammals and migratory birds are found throughout the allotment common to the shortgrass prairie environment.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The results of several studies debating grazing versus non-grazing impacts to wild ungulates remain contradictory. If grazing is managed correctly, long-term benefits may be an increase in plant species diversity, plant vigor, and reduction of excessive vegetation litter. However, grazing will reduce the available forage base for elk that are present periodically throughout the year. Studies have presented evidence that spatial competition between wild ungulate species and cattle may occur. Stewart et al. (2002) found that when cattle were present they would displace both deer and elk, forcing wild ungulates to less preferred feeding grounds. Generally, native ungulates focus on different plant species than cattle; however, when feed is scarce (late winter, early spring) these animals become generalist and compete for a common forage base.

The most noticeable impact of grazing will likely be to small mammal populations. Research notes a positive trend in small mammal populations and diversity when grazing is removed from the landscape (Jones 2000). Reductions in herbaceous height, density and residual component, particularly in livestock concentration areas may suppress small mammal populations on a localized scale. Non-game populations associated with the upland communities, particularly dense mountain shrub basins that retain more fully developed understories, likely occur at densities that approach habitat potential. The proposed grazing system is not expected to have measureable influence on these habitats as livestock generally make limited use of these areas. The abundance of non-game animals associated with gentle gradient upland shrub types where the ecological status of herbaceous ground cover is classified as mid-seral are likely suppressed

to some degree, and will likely remain suppressed under the proposed grazing system, however population viability probably remains relatively intact.

The proposed grazing schedule is not anticipated to have any direct influence on raptor nesting activities. Livestock generally make limited use of woodland habitats due to low forage availability and more rugged terrain. Reductions in understory height and density in addition to litter amount would be expected to some degree. This could lead to reductions in avian and small mammal prey populations at a local scale; however it would likely have little measureable influence on nest densities and overall nestling success of woodland raptors.

Protective/Mitigation Measures: Monitoring is of greatest importance. Ensuring over-utilization does not occur on the riparian willow (an important browse species) wet meadow grasses, and uplands. Monitor grazing utilization to ensure adequate forage base remains for wintering elk herd.

Cumulative Impacts: Grazing is present on adjacent private and public lands affecting forage, browse, and cover available to all terrestrial species. Within the last fifteen to twenty years, recreation and residential development has increased markedly resulting in increased road and trail densities. All of these factors result in impacts to wildlife habitat. It is important to ensure that BLM manages wildlife habitats to provide for the long-term viability of wildlife populations.

No Grazing Alternative

Direct and Indirect Impacts: This alternative would remove grazing use on the public land which in the short-term may result in an initial increase in plant vigor and litter production benefiting wildlife habitat. Removal of livestock from the allotment would be expected to elicit the greatest response in small mammal species that typically benefit from increasing vegetative, forage and litter cover (shrews, voles). The allotment has been in a non-use state for some time and therefore it is suspected that small mammal densities are likely at or near potential. The most noticeable improvements would be in mid-seral communities.

Protective/Mitigation Measures: None.

BLM Grazing Only Alternative:

Direct and Indirect Impacts: Similar to proposed action.

Protective/Mitigation Measures: Similar to proposed action.

Cumulative Impacts: Similar to proposed action.

Finding on the Public Land Health Standard for Plant and Animal Communities: Ultimately, any grazing removes resources that would have been available to wildlife communities, but if managed properly, plant communities may sustain their productivity providing resources to both wild and domestic fauna. The proposed action is reflective the Bureau's multiple use mission and it is not expected to negatively impact the public land health standards for plant and animals communities.

3.2.6 MIGRATORY BIRDS

Affected Environment: The Colorado Bird Conservation Plan identifies 13 vegetation habitat types important to birds in Colorado. The habitat classifications and assignment of bird species to the habitats were developed by Colorado Bird Observatory (CBO) staff along with individuals who contributed to early development of the conservation prioritization scheme. Bird species were assigned to specific habitats based on their restriction to, or strong representation within, that habitat type. Of these 13 habitat categories, four are described for this allotment (aspen, mountain grassland, riparian, and spruce-fir). Bird species typically found in these habitats are described for each habitat type.

Aspen provides habitat for a variety of wildlife species from large ungulates to small non-game birds and mammals. Because aspen is considered early-seral vegetation to and is usually mixed with adjacent conifer types, the importance of aspen dominated woodlands to birds and other wildlife far exceeds the aerial extent of the stands themselves. Approximately 134 species of birds are reported to use aspen-dominated habitats. This list includes 34 cavity nesters, 7 canopy nesters, 10 shrub nesters, and 10 ground nesters. Few species are limited to aspen, but some reach their highest breeding densities within this habitat type. Bird communities within aspen stands are often composites of aspen-associated species along with many species found in the surrounding conifer habitats. However, the exact species mix depends on the relative amounts of aspen and conifer in the stand.

Perhaps the most important contribution of aspen-dominated woodlands to avian nesting habitat is as a structural substrate for primary cavity excavators and secondary cavity nesters. False tinder rot is a major source of heartwood decay in live aspens; it produces a hard sapwood shell surrounding a soft interior that is ideal for cavity excavation. Habitat preferences of primary cavity excavators and the decay characteristics of aspen combine to produce much higher cavity densities in aspen than in surrounding conifer habitats. Species that are typically found in aspen habitats include broad-tailed hummingbird, house wren, Lincoln's sparrow, white-crowned sparrow, dark-eyed junco, violet-green swallow, purple martin, mountain bluebird, Cooper's hawk, western wood-pewee, warbling vireo, red-naped sapsucker, mountain chickadee, pygmy and white-breasted nuthatches, and western bluebirds.

Grasslands provide habitat for many species. The severity of the semi-arid climate produces contrasts in vegetation. Grassland birds thus evolved in a shifting landscape mosaic, with access to patches of vegetation in a variety of successional stages and conditions. Species that are typically found in the grassland habitat in the planning area are ferruginous hawk, prairie falcon, upland sandpiper, burrowing owl, Cassin's sparrow, lark bunting, grasshopper sparrow, McCown's longspur, western meadowlark, great-horned owl, golden eagle, common raven, mourning dove and American kestrel.

These are typically grasslands of forest openings and park-like expanses in the montane and subalpine coniferous forests. Although smaller montane grasslands are scattered throughout the Southern Rocky Mountains eco-region, the largest occurrence by far (over a million acres) is on the valley floor of South Park in central Colorado. This ecological system typically occurs between 7,200 and 10,000 feet on gentle to steep slopes, parks, or on lower side slopes. The montane grassland community, Arizona fescue-slimstem muhly (*Festuca arizonica* -

Muhlenbergia filiculmis), is rated as S3 by the Colorado Natural Heritage Program (CNHP) and is wide spread in the area of this allotment.

These large patch grasslands are intermixed with matrix stands of spruce-fir, lodgepole, ponderosa pine, mixed conifer, and aspen forests. In limited circumstances (e.g., South Park in Colorado) they form the "matrix" of high-elevation plateaus. Montane and subalpine grasslands are generally interspersed in forest communities as park-like openings that vary in size from a few to several thousand acres.

Species most commonly found in the subalpine riparian shrubland habitats are broad-tailed hummingbird, dusky flycatcher, yellow warbler, MacGillivray's warbler, Wilson's warbler, Lincoln's sparrow, song sparrow, white-crowned sparrow, and fox sparrow. In deciduous foothills riparian systems, yellow warbler is the species most frequently detected, followed by American robin, northern flicker, house wren, warbling vireo, song sparrow, western wood-pewee, and broad-tailed hummingbird. In coniferous systems, Cordilleran flycatcher is the most frequently detected species, followed by broad-tailed hummingbird, ruby-crowned kinglet, American robin, golden-crowned kinglet, Swainson's thrush, mountain chickadee, yellow-rumped warbler, and western tanager.

Spruce-fir forests are present at 9,000-12,000 feet in elevation. Engelmann spruce and subalpine fir are the dominant tree species. Engelmann spruce is found without subalpine fir at the lower elevations, but only on cool, sheltered sites. Lodgepole pine and aspen are often mixed in at lower and middle elevations, and limber pine and bristlecone pine are present at middle and higher elevations. Understory vegetation can vary from sparse to quite dense, perhaps the densest of the conifer forests in this region with the exception of dense Gambel oak under ponderosa pine. Blueberry, shrubby cinquefoil, and Colorado currant are common components. The avian community in this area has a comparatively large number of seed-eating birds, a reflection of the abundant cone crops available here. Compared to eastern spruce forests, fewer birds of this region are of conservation concern. Birds commonly found in this forest type include the Gray Jay, Mountain Chickadee, Red-breasted Nuthatch, Ruby-Crowned Kinglet, Hermit Thrush, Pine Grosbeak, and Pine Siskin.

The following birds are listed on the U.S. Fish and Wildlife Service Birds of Conservation Concern (BCC) – 2002 List for BCR 16-Southern Rockies/Colorado Plateau. These species have been identified as species that may be found in the project area, have declining populations and should be protected from habitat alterations.

The golden eagle is a bird of grasslands, shrublands, pinyon-juniper woodlands, and ponderosa pine forests, but may occur in most other habitats occasionally, especially in winter. Nests are placed on cliffs and sometimes in trees in rugged areas, and breeding birds range widely over surrounding habitats.

Flammulated owls prefer old-growth or mature ponderosa pine, apparently due to the presence of large broken-top and lightning-damaged snags and trees for nesting cavities, large cavities excavated by northern flickers and other woodpeckers, open structure of trees and understory for foraging, and high prey availability. They will utilize other habitats with similar structure, such

as open mixed-conifer and aspen forests. Key habitat features seem to be the presence of large trees and snags, scattered clusters of shrubs or saplings, clearings, and a high abundance of nocturnal arthropod prey.

Northern harriers reside throughout Colorado, with highest densities on the eastern plains, mountain parks, and western valleys. These hawks feed on small mammals, birds, reptiles, and amphibians. They hunt by flying low over wetlands, grasslands, shrublands, and croplands.

Prairie falcons nest in scattered locations throughout the state where they inhabit the grassland and cliff/rock habitat types. These falcons breed on cliffs and rock outcrops, and their diet during the breeding season is a mix of passerines and small mammals.

Williamson's sapsuckers breed in forested regions and in Colorado populations are concentrated along the eastern edge of the Rockies. Williamson's sapsuckers nest primarily in ponderosa pine and in aspen components of mixed-conifer. They often place nest cavities in aspen trees, and often choose nest trees in aspen stands adjacent to open ponderosa pine or mixed-conifer forest.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The results of several studies debating grazing versus non-grazing impacts to migratory birds remains mixed. If grazing is managed correctly, long-term benefits may be an increase in plant species diversity, plant vigor, and reduction of excessive vegetation litter. Over grazing reduced cover of grasses, facilitating establishment of pinyon- juniper seedlings and simultaneously reducing ground fires that otherwise might eliminate woody vegetation. The change in herbaceous structure caused a change in migratory bird species occupancy by negatively affecting species dependent on herbaceous and shrubby cover or species that require open savannahs, but positively affecting species requiring closed canopy systems. Currently, BLM's standards for public land health do not allow for excessive grazing that would alter forest structure in the manner historical grazing regimes may have.

Grazing has a strong influence on abundance and species richness of migratory birds. Research evidence suggests that every type of North American grassland community includes a fauna of grazing-tolerant or grazing-dependent species, and another equally intolerant of grazing. Neotropical migratory birds fall into both groups. Therefore, while grazing may be a detriment to one species, it is beneficial to another. Riparian areas are of extreme importance for migratory birds in the arid southwest. The highest densities of breeding birds in all of North America have been reported from southwestern riparian woodlands. In these allotments, the riparian communities are generally in good condition, and will likely continue to meet standards. Grazing will not in itself create a "take" situation for migratory birds, meeting the requirements of the Migratory Bird Treaty Act. If grazing stipulations continue to be followed, implementing the Proposed Action will likely have no measurable effect on migratory bird species or their habitat.

Protective/Mitigation Measures: In order for BLM to be in compliance with the Migratory Bird Treaty Act, requiring that BLM avoid actions that "take" migratory birds, it is recommended that

all vegetation disturbances be avoided from May 15 thru July 15. This is the breeding and brood rearing season for most Colorado migratory birds. Construction and maintenance of allotment infrastructure that may take migratory birds and/or nests should be completed outside the primary nesting season of May 15 thru July 15.

Cumulative Impacts: Grazing on the adjacent public and private lands is the largest impact. Overall, minimal acreage is rested, reducing available cover and nesting habitat for migratory birds.

No Grazing Alternative

Direct and Indirect Impacts: This alternative would remove grazing use on public land which in the short-term may result in an initial increase in plant vigor and litter production benefiting wildlife habitat. Impacts of grazing on upland sandpipers indicated a reduction in nest density in grazed pastures; however, nesting success between grazed and non-grazed pastures remained unchanged (Bowen and Kruse 1993). Bock et al. (1993) conducted a literature review on avian responses to grazing in a multitude of habitats and found that bird species generally showed a negative response. Reasons for a negative response include, but are not limited to a reduction in nesting cover and disturbance or destruction of nests by cattle. However, some bird species benefit from grazing such as the BLM sensitive mountain plover. Overall, migratory birds would likely show a net benefit from the no grazing alternative.

Protective/Mitigation Measures: None.

BLM Grazing Only Alternative:

Direct and Indirect Impacts: See proposed Action

Protective/Mitigation Measures: Similar to proposed action.

Cumulative Impacts: Similar to proposed action.

3.3 LAND RESOURCES

3.3.1 RANGE MANAGEMENT

Affected Environment: The allotment encompasses 813 acres of BLM lands and consists of highly productive rangelands. Existing range improvements are limited to boundary fences and livestock water sources are limited primarily to Rye Slough Creek.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The proposed action as scheduled for the allotment meets the Standards for Public Land Health and Guidelines for Livestock Grazing in Colorado. The grazing schedule provides for vegetation deferment during most of the growing season and utilization restrictions that will allow for soil stability and plant health. Implementing the new range improvements on the allotment will promote even and dispersed livestock use on the

allotment and open new areas to grazing that typically would not be grazed. Adaptive management gives the BLM and permittee the flexibility to implement a number of tools to meet desired conditions on the ground and adapt to environmental changes that may occur on an annual basis.

Protective/Mitigation Measures: None.

Cumulative Impacts: See Cumulative Impacts Summary

No Grazing Alternative

Direct and Indirect Impacts: Under this alternative, grazing use would not be authorized on the BLM portion of the allotment. There are negative impacts inherited by both the applicant and the BLM under this alternative. There are interior BLM fences located on the parcel that would require annual maintenance by BLM or BLM would be required to remove these improvements. Since the Forest Service and BLM boundary is unfenced either the FS or BLM would be required to build a new boundary fence consisting of 1.5 miles. The cost to the government would be approximately \$10,000 for the survey, materials and labor. There is likely potential for unauthorized grazing use in this area and BLM would be responsible to monitor the public lands and take legal action as this occurs. Lastly, the applicant would acquire a financial burden by having to locate other AUMs to meet their ranch operation needs.

Protective/Mitigation Measures: None.

BLM Grazing Only Alternative

Direct and Indirect Impacts: This alternative isolates the BLM parcel and is managed alone without the Forest Service management. A new fence would be required along the BLM/Forest Service boundary. The new fence would be 1 mile in length and would require a property line survey. In addition, two new cattle guards would be required under this alternative. A new cattle guard would be placed on the road along the existing fence dividing the two pastures and another placed along the new boundary fence between BLM and Forest Service. The cost under this alternative would be significant encompassing the survey, fence material & installation and cattle guards. The total cost is estimated at approximately \$30,000 which this cost would be shared between the BLM and grazing permittee. In addition to the initial cost there is the need for future maintenance.

Protective/Mitigation Measures: None

Cumulative Impacts: See summary

3.5 CUMULATIVE IMPACTS SUMMARY

The geographic scope of cumulative impacts is the area described as the Badger Creek Eco-Sub-region in the Royal Gorge Resource Area Resource Management Plan. Within this area, BLM manages approximately 34,592 acres of public land. The area also consists of approximately 27,173 acres of private and 36,815 acres of state land. Livestock grazing has been a major component in this area since settlement and is integral to the local economy. Grazing management as prescribed on public lands is more intensive than management of the

surrounding private and state lands and takes other resource values, such as wildlife, cultural, soils, vegetative and riparian on the public land into account to a greater degree. The proposed action includes protection for vegetative, soils, cultural and riparian values. These standards assure sufficient residual vegetation to protect soil from wind and water erosion and allow adequate seed dissemination and seedling establishment. Therefore, the impacts of the proposed action on the allotments in this assessment, together with those of other similar BLM actions within the sub-region, will be protection and improvement of the diversity and vigor of vegetative resources on public land in the sub-region over time. Other foreseeable impacts include private land development and fragmentation, and local drought conditions. These impacts could have direct and indirect impacts to these public lands.

There is extensive grazing in the region on private, public, and state lands. Grazing this pasture (and allotment) is cumulative to all other grazing. Because this is the headwater pasture, grazing affects do not occur outside of agency control above this pasture so the prescription set annually for when to graze this pasture is the primary impact to this segment of stream. Regionally, because of the harsh weather, most grazing on riparian areas nearby is also during the growing season so time allotted for regrowth here is important where that may not be considered so much regionally.

There is extensive grazing in the region on private, public, and state lands. Grazing this pasture (and allotment) is cumulative to all other grazing. Because this is the headwater pasture, grazing does not occur outside of agency control upstream of this pasture so the prescription set annually for when to graze this pasture will be the primary impact to this segment.

Grazing on the adjacent public and private lands is the largest impact. Overall, minimal acreage is rested, reducing available cover and nesting habitat for migratory birds.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 LIST OF PREPARERS AND PARTICIPANTS

Please see Interdisciplinary Team Review list for BLM Participants

4.2 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

CHAPTER 5 - REFERENCES

Bureau of Land Management. 1996. Royal Gorge Resource Area Resource Management Plan and Record of Decision. Royal Gorge Resource Area. Canon City, Colorado.

Bureau of Land Management. 2012. Public Land Health Assessment.

Jones, A. 2000. Effects of cattle grazing on North American arid ecosystems: A quantitative review. *Western North American naturalist* 60: 155-164.

Stewart, K. M., R. T. Bowyer, J. G. Kie, N. J. Cimon, and B. K. Johnson. 2002. Temporospatial distributions of elk, mule deer, and cattle: resource partitioning and competitive displacement. *Journal of Mammalogy* 83: 229-244.

Finding Of No Significant Impact (FONSI)

DOI-BLM-CO-200-2013-0048 EA

Based on review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects from any alternative assessed or evaluated meet the definition of significance in context or intensity, as defined by 43 CFR 1508.27. Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below:

RATIONALE:

Context:

The Proposed Action alternative authorizes grazing use on the VVN Ranch Allotment and issues a permit for ten years. Adaptive Management measures are included to help mitigate potential future impacts. Grazing use as described in the Proposed Action would be incorporated with the existing grazing rotation on the adjacent Black Mountain Forest Service Allotment.

The allotment is located in Park County Colorado at an elevation of 10,000 feet and consists of large open grassland parks and dense forested stands of spruce and fir. The allotment is essential to the permittee's livestock operation and economic wellbeing.

Intensity:

I have considered the potential intensity/severity of the impacts anticipated from the Grazing Authorization decision relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

Impacts that may be beneficial and adverse: Through the land health assessments and environmental analysis, adverse impacts to the allotment and the environment can be managed and mitigated. The benefits of these analyses that are reflected in the proposed action consist of proper grazing management practices. Grazing use on the vegetation is limited to a short period thereby allowing for plant rest and recovery. Utilization restrictions are in place to protect the soil resources and provide forage and cover for wildlife. Adaptive management practices are used when resource conditions are at risk and tools are in place to remedy the situation in a timely manner. In addition, practices could be implemented when unforeseen circumstances occur such as drought and/or fire. The allotment proposed for grazing authorization is meeting BLM Land Health Standards.

Public health and safety: The proposed action reflects analyses and management practices that do the most to protect important water supplies by preventing erosion and sediment production.

Due to the dry, upland nature of a portion of the allotment being analyzed, sediment production, from a water quality standpoint, is the biggest concern from grazing. The proposed action would leave sufficient ground cover present to protect the soils from eroding and downstream waters would not be affected from grazing on public lands.

Unique characteristics of the geographic area: The EA evaluated the area of the proposed action and determined that no unique geographic characteristics such as: wild and scenic rivers, prime or unique farmlands, Areas of Critical Environmental Concern or designated wilderness areas or wilderness study areas were present.

Degree to which effects are likely to be highly controversial: Analysis for the renewal of grazing permits is a common action conducted under NEPA. Conditions and impacts will vary and be unique to each allotment. There is no disagreement or controversy among ID team members or reviewers over the nature of the effects of the action on resource values.

Degree to which effects are highly uncertain or involve unique or unknown risks: BLM has a long history of managing public lands for multiple-use. Grazing is one part of that multiple-use mandate. Given the BLM's institutional knowledge on this subject, all risks were considered in the EA and were found to be neither unique nor unknown.

Consideration of whether the action may establish a precedent for future actions with significant impacts: The proposed action does establish a standard of precedent for the permit renewal process, in that there is comprehensive review of all resource values and land health standards are either met or exceeded.

Consideration of whether the action is related to other actions with cumulatively significant impacts: In general, the allotment in this analysis area is adjacent to Forest Service, private and state lands. The continuation of livestock grazing on public lands will in part help promote or maintain ranching in the area and open space. In addition, the continuation of livestock grazing as described in the proposed action will not create any new cumulative impacts to the existing situation and given BLMs intense management practices, renewing the grazing could contribute to enhancing land health and productivity.

Scientific, cultural or historical resources, including those listed in or eligible for listing in the National Register of Historic Places: Pursuant to BLM Instruction Memorandum Number CO-2002-029, RGFO cultural resources staff conducted a literature review of previous inventories conducted and sites recorded on the public land in the allotment area. During a field visit, the areas of new range improvements were evaluated and no historic properties were present. Based on the information collected during the literature review, it was determined that no historic properties would be impacted by the proposed undertaking.

Threatened and endangered species and their critical habitat: No T&E species are present on the allotment. Two sensitive plant species occur near the action area, but are not likely to be found.

Any effects that threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment: The proposed action conforms with the provisions of NEPA (U.S.C. 4321-4346) and FLPMA (43 U.S.C. 1701 et seq.) and is compliant with the Clean Water Act and The Clean Air Act, the National Historic Preservation Act, Migratory Bird Treaty Act (MBTA) and the Endangered Species Act.

NAME OF PREPARER: Jeff Williams

SUPERVISORY REVIEW: Melissa K.S. Garcia

NAME OF ENVIRONMENTAL COORDINATOR: /s/ Martin Weimer

DATE: 7/30/13

SIGNATURE OF AUTHORIZED OFFICIAL:

/s/ Keith E. Berger
Keith E. Berger, Field Manager

DATE SIGNED: 8/2/13

APPENDICES:

ATTACHMENTS: