

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

Environmental Assessment

**New Grazing Authorizations for
East Bald Hill, Santa Maria
& Mexican Ridge South Allotments**

DOI-BLM-CO-F02-2014-009 EA

November, 2013



TABLE OF CONTENTS

CHAPTER 1 - INTRODUCTION.....	3
1.1 IDENTIFYING INFORMATION.....	3
1.2 INTRODUCTION AND BACKGROUND.....	3
1.4 DECISION TO BE MADE.....	10
1.5 PLAN CONFORMANCE REVIEW.....	10
1.6 SCOPING, PUBLIC INVOLVEMENT AND ISSUES	11
CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES.....	12
2.1 INTRODUCTION.....	12
2.2 ALTERNATIVES ANALYZED IN DETAIL	12
2.2.1 PROPOSED ACTION	12
2.2.2 NO GRAZING ALTERNATIVE.....	17
2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL	17
2.3.1 NO ACTION ALTERNATIVE.....	17
CHAPTER 3 - AFFECTED ENVIRONMENT AND EFFECTS	18
3.1 INTRODUCTION.....	18
3.1.1 INTERDISCIPLINARY TEAM REVIEW	18
3.2 PHYSICAL RESOURCES.....	21
3.2.1 GEOLOGIC AND MINERAL RESOURCES	21
3.2.2 WATER QAULITY.....	21
3.3 BIOLOGICAL RESOURCES	23
3.3.1 INVASIVE PLANTS*.....	23
3.3.2 THREATENED, ENDANGERED, AND SENSITIVE SPECIES	24
3.3.3 VEGETATION	25
3.3.4 WETLANDS & RIPARIAN ZONES.....	26
3.3.5 WILDLIFE AQUATIC.....	28
3.3.6 WILDLIFE TERRESTRIAL.....	29
3.3.7 MIGRATORY BIRDS	31
3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT.....	32
3.4.1 CULTURAL RESOURCES	32
3.4.2 TRIBAL AND NATIVE AMERICAN RELIGIOUS CONCERNS.....	33
3.4.3 PALEONTOLOGICAL RESOURCES.....	34
3.4.4 WASTES, HAZARDOUS OR SOLID.....	35
3.5 LAND RESOURCES	35
3.5.1 RANGE MANAGEMENT.....	35
3.6 CUMULATIVE IMPACTS SUMMARY	39
CHAPTER 4 - CONSULTATION AND COORDINATION.....	40
4.1 LIST OF PREPARERS AND PARTICIPANTS	40
4.2 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED.....	40
CHAPTER 5 - REFERENCES.....	41
FINDING OF NO SIGNIFICANT IMPACT.....	42

CHAPTER 1 - INTRODUCTION

1.1 IDENTIFYING INFORMATION

PROJECT TITLE: Range – New Grazing Authorization for East Bald Hill #03773, Santa Maria #05744 (new parcel), and Mexican Ridge South #03980 Allotments. Install new range improvements on East Bald Hill Allotment.

PLANNING UNIT: South Park #4

LEGAL DESCRIPTION: Colorado, Sixth Principle Meridian

<u>ALLOTMENT</u>	<u>COUNTY</u>	<u>LEGAL</u>	<u>PUBLIC ACRES</u>
East Bald Hill*	Park	T. 10 S., R. 75 W., secs. 30 and 31. T. 10 S., R. 76 W., secs. 24 and 25. T. 11 S., R. 75 W., sec. 5 and 6.	1664
Santa Maria (existing)	Park	T. 11 S., R. 75 W., sec. 18.	120
Santa Maria* (add to existing)	Park	T. 11 S., R. 75 W., secs. 7 and 18.	583
Mexican Ridge South*	Park	T. 10 S., R. 76 W., secs. 12 and 13.	168

1.2 INTRODUCTION AND BACKGROUND

BACKGROUND: This EA has been prepared by the BLM to analyze the authorization to graze livestock on the East Bald Hill Allotment, an additional parcel of BLM land to be included into the existing Santa Maria Allotment, and the Mexican Ridge South Allotment for a term of ten years. In addition, this EA analyzes on the ground structural range improvements. The existing Santa Maria Allotment was previously analyzed for permit renewal under BLM-CO-200-2007-58 EA. A portion of the proposed East Bald Hill Allotment was previously analyzed for permit renewal under CO-050-RG-97-103 ADR. Unallotted public lands incorporated under the proposed action into the Mexican Ridge South allotment was formerly included in Management Unit number 28 and was included in analysis under the Royal Gorge Livestock Grazing Program EIS.

*East Bald Hill Allotment is currently unallotted and has been for a number of years and was previously included in the Reinecker Ridge Allotment #5870 as did a portion of the unallotted Santa Maria parcel. Mexican Ridge South is also currently unallotted. Through the Sipal Land Exchange, the BLM has acquired parcels of BLM lands in 2005 that will be included into the new East Bald Hill Allotment and to the Santa Maria Allotment through CO-200-2004-0036 EA signed on October 14, 2005.(See Overview Map – Current Condition below).

The previous and future management for the Santa Maria Allotment and Mexican Ridge South Allotment was and will be “custodial management”. Custodial management is generally used on allotments that consist of relatively small or scattered parcels of public lands that are unfenced from large amounts of private land, are difficult to manage separately, and have limited resource issues. In order to be included in a “Custodial” classification, resources on an allotment are generally considered to be in acceptable condition and are generally producing at or near their potential. Under custodial management, the permit includes a specific number of livestock and the specific amount of grazing use (AUMs) authorized on the public land. However, the lessee is not restricted to that specific number of livestock, nor restricted to specific grazing dates, as long as the authorized amount of grazing use on public land within the pasture is not exceeded.

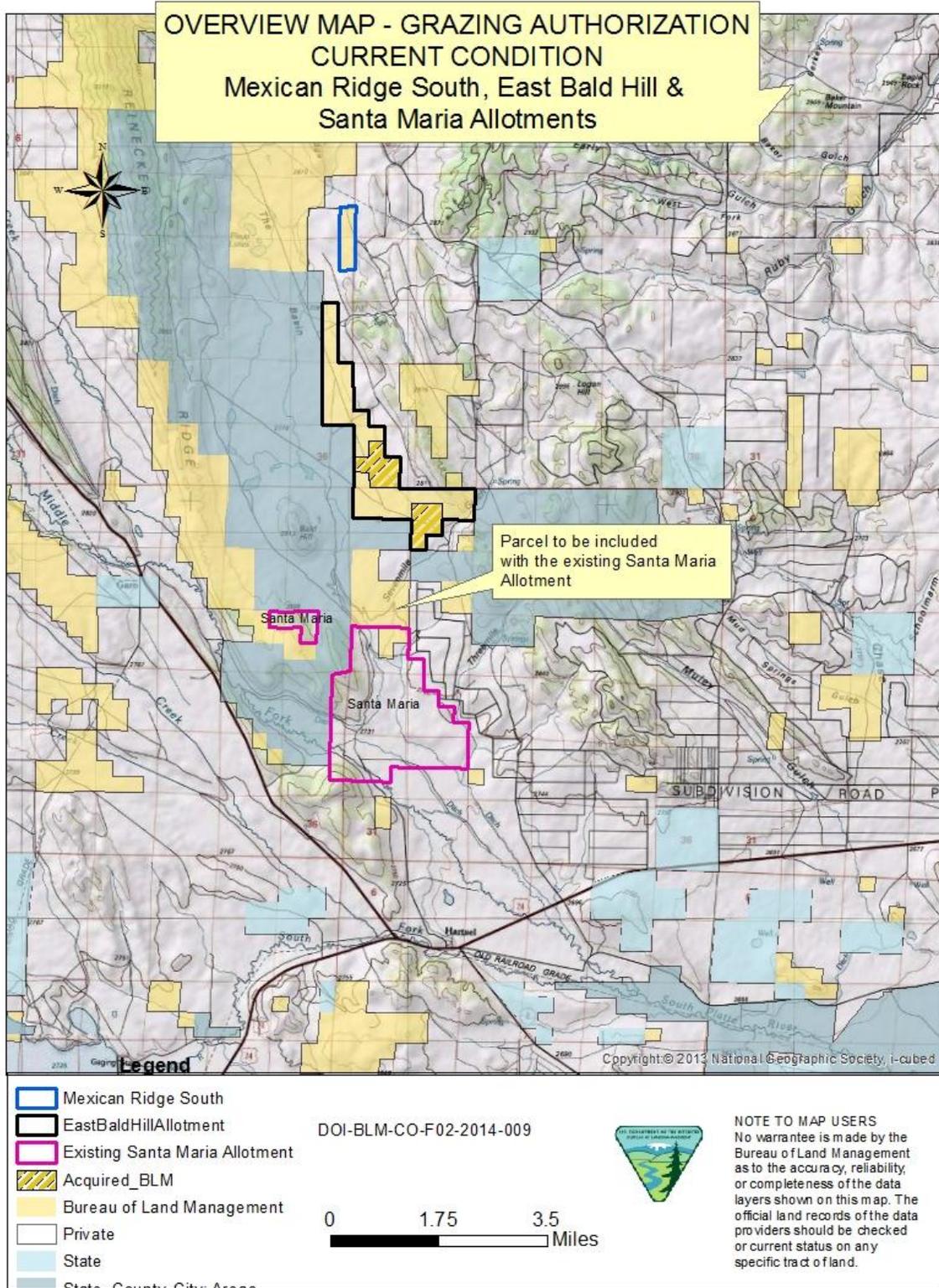
Currently, the East Bald Hill Allotment is unallotted, future management will be an “M” or “Maintain” category of management. The management objective on an “M” category allotment is to maintain the existing livestock management and/or resource conditions. Maintain management is generally used on allotments where: 1) the present rangeland condition is satisfactory, 2) moderate to high resource potentials exist and is producing at their potential and/or 3) no serious resource conflicts exist.

Grazing use on the allotments was previously scheduled as follows:

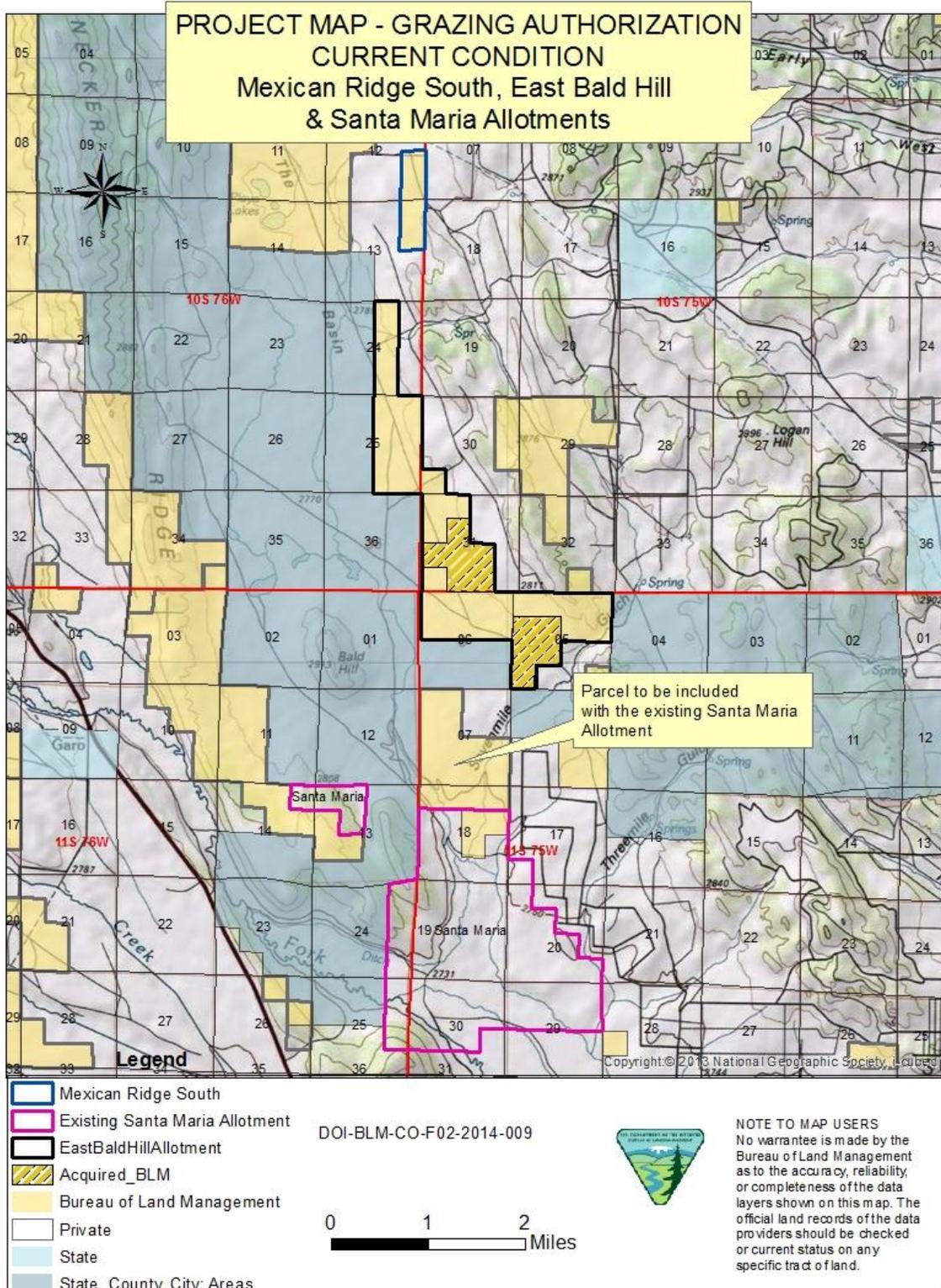
<u>Allotment</u>	<u>Number</u>	<u>Kind</u>	<u>Grazing Period</u>		<u>% Public Land</u>	<u>AUMs</u>
			<u>Begin</u>	<u>End</u>		
East Bald Hill			Currently unallotted			
Mexican Ridge South			Currently unallotted			
Santa Maria (existing 120 ac.)	1	Cattle	03/01	02/28	100	14

Review of grazing use on the allotments included an assessment of the “health” of public land within these allotments in relation to Standards for Public Land Health and conformance with Guidelines for Livestock Grazing Management in Colorado. Efforts to gather information necessary to assess the land health on the allotments listed above occurred in 2011 & 2013. The interdisciplinary land health evaluations indicated that the allotments are meeting applicable standards for public land health.

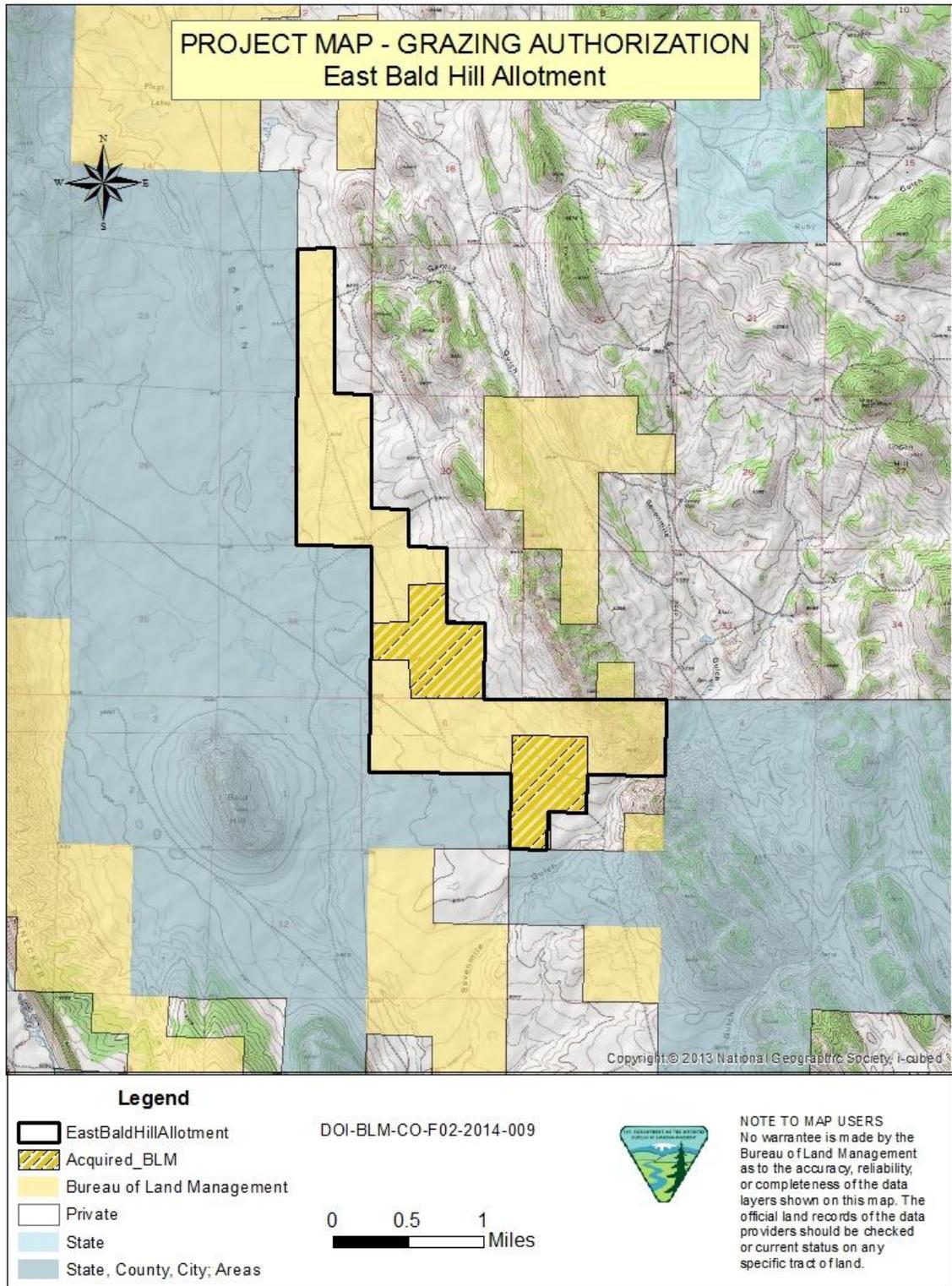
Map 1



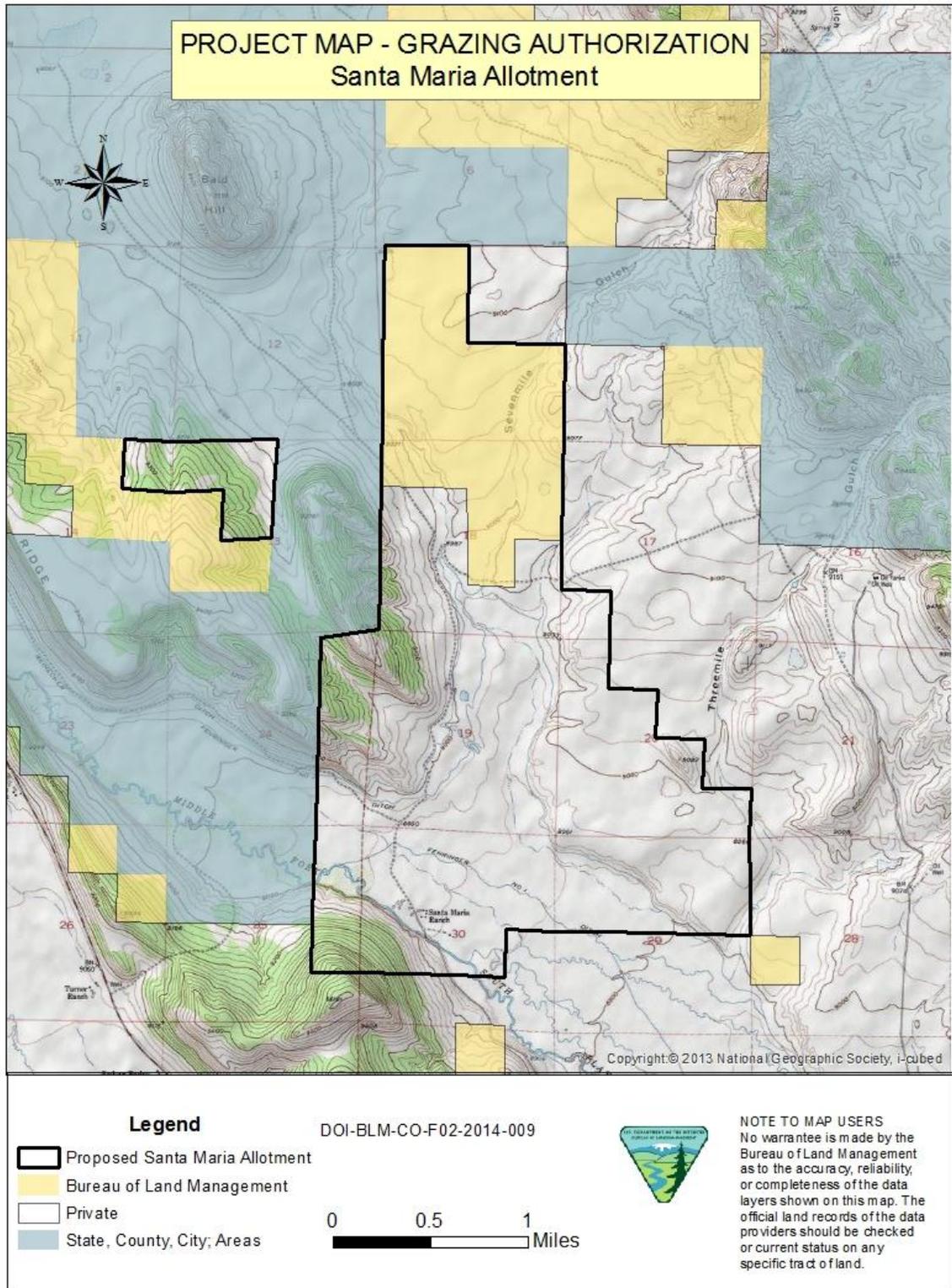
Map 2



Map 3: Proposed



Map 4: Proposed



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 allotments 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 allotments 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 authorizations based on the analysis contained in this Environmental Assessment (EA). This EA will analyze impacts associated with issuing a ten year grazing permit and 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: 4-2, 4-4, C-30, C-31, C-32, C-35, C-36, C-38, C-41, C-43, C-44

Decision Language:

4-2: Season of use and stocking rates will continue based on the Grazing EIS and vegetation monitoring.

4-4: Grazing is authorized on 49 allotments.

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-32: Prepare an environmental assessment (EA) before a term permit is issued for acquired lands outside the existing allotment boundary.

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-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, the 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 East Bald Hill, Santa Maria, and Mexican Ridge South Allotments as scheduled below and issues a ten year term grazing permit. Changes in the grazing schedule on the Santa Maria Allotment as a result of including additional unallotted public land into the existing allotment.
2. BLM is analyzing potential future range improvements including installation of a new cattle guard and two livestock water wells and 4 tanks within the East Bald Hill Allotment with partnership cooperation and contribution.
3. Analysis of Grazing Use Adaptive Management.

The proposed action is to issue grazing authorizations on the three allotments listed below for the next 10 years under custodial management for Santa Maria and Mexican Ridge South and under maintain management for East Bald Hill. New “Terms and Conditions” addressing forage utilization, cultural and paleontological resources will be included in the new authorizations (see below).

Range conditions or livestock distribution may warrant new range improvements. These improvements include but are not limited to: water developments, fences, livestock trails, livestock handling facilities and cattleguards. Proposals for new range improvement projects are subject to review under NEPA. This review will determine the appropriate level of NEPA analysis to be conducted.

The change in additional land to be included into the existing Santa Maria Allotment has resulted in the following update:

Prior to including the unallotted BLM into the existing Santa Maria Allotment (current condition):

Allotment	BLM ACRES	AUM’S	PERCENT PUBLIC LAND
Santa Maria	120	14	100

With inclusion of the unallotted BLM parcel (proposed action):

Allotment	BLM ACRES	AUM’S	PERCENT PUBLIC LAND
Santa Maria	703	86	100

Acres and stocking rates were derived from the previous Santa Maria Term Permit Renewal EA, NRCS soil mapping data, and GIS.

Under the Proposed Action alternative, grazing on the allotments would be scheduled as follows:

<u>Allotment</u>	<u>Number</u>	<u>Kind</u>	<u>Grazing Period</u>		<u>% Public Land</u>	<u>AUMs</u>
			<u>Begin</u>	<u>End</u>		
East Bald Hill**	44	Cattle	09/01 – 12/31		100	176
Mexican Ridge South	1	Cattle	03/01 – 02/28		100	17
Santa Maria	7	Cattle	03/01 – 02/28		100	86

**The lessee will have the flexibility to run more numbers for a shorter period of time as long as they don't exceed the authorized AUM's. The lessee will also have the flexibility to run yearlings instead of cattle at the conversion factor of 0.75 or (1.75 yearlings to 1 pair) which is used to convert the amount of forage consumed by an adult to the equivalent amount of forage consumed by a yearling. This is due to the fact that yearling cattle do not consume as much forage as an adult cow, but a yearling must be considered a full animal unit for billing purposes because it is over 6 months of age.

East Bald Hill Allotment:

BLM has received three applications for grazing preference for the East Bald Hill allotment from Kid Land & Livestock, Inc., Theresa and Dennis Springer, and Walker Ranching Enterprises, LLC (see map below.) All three of the applicants applied for grazing use in the fall/winter months. All three applicants are subject to the same grazing terms and conditions and impacts are expected to be similar (See Range Management analysis for details).

The following terms and conditions would be included in the term grazing lease for **Mexican Ridge South** and **Santa Maria Allotments**:

- Grazing use on the allotment will be authorized under Custodial Management. Although, the permit/lease shows a specific number of livestock authorized on public land, the lessee is not restricted to that specific livestock number nor restricted to specific grazing dates as long as the authorized amount of grazing use on public land is not exceeded and the allotment is used in conjunction with the unfenced private land.
- The authorized amount of grazing use on this allotment is the estimated carrying capacity of the allotment and is expected to result in utilization levels of 40% - 60% of the total annual forage production of key forage species. Utilization will be limited to 40% - 60% on grass forage species during the growing season and 80% of previous growth during the dormant season. Utilization on woody riparian species such as cottonwoods, aspen and willows will be limited to 40% of the current year's growth. Grazing use that exceeds these levels is not authorized. Livestock will be moved prior to the maximum utilization levels being exceeded.
- The lessee 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, vertebrate fossils and artifacts. If in connection with allotment operations under this authorization any of the above resources are encountered, the lessee shall protect such resources and immediately notify the BLM authorized officer of the findings.
- 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 proposed grazing schedule fails to help public land achieve the Standards for Public Land Health, grazing use on any of these allotments may be revised at any time.

The following terms and conditions would be included in the term grazing lease for **East Bald Hill Allotment**:

- The authorized amount of grazing use on this allotment is the estimated carrying capacity of the allotment and is expected to result in utilization levels of 40% - 60% of the total annual forage production of key forage species. Utilization will be limited to 40% - 60% on grass forage species during the growing season and 80% of previous growth during the dormant season. Utilization on woody riparian species such as cottonwoods, aspen and willows will be limited to 40% of the current year's growth. Grazing use that exceeds these levels is not authorized. Livestock will be moved prior to the maximum utilization levels being exceeded.
- The lessee is responsible for keeping actual use records. These records must be submitted to BLM within 2 weeks of the close of the grazing season. In the event that these records are not submitted, the lessee may be billed for the full permitted use.
- Salting and supplements will be placed at least ¼ mile away from riparian and water resources.
- The lessee is required to perform maintenance annually on range improvements in accordance with signed Cooperative Agreements/Section 4 Permits prior to livestock turn-out.
- The lessee 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 lessee shall protect such resources and immediately notify the BLM authorized officer of the findings.
- 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.**

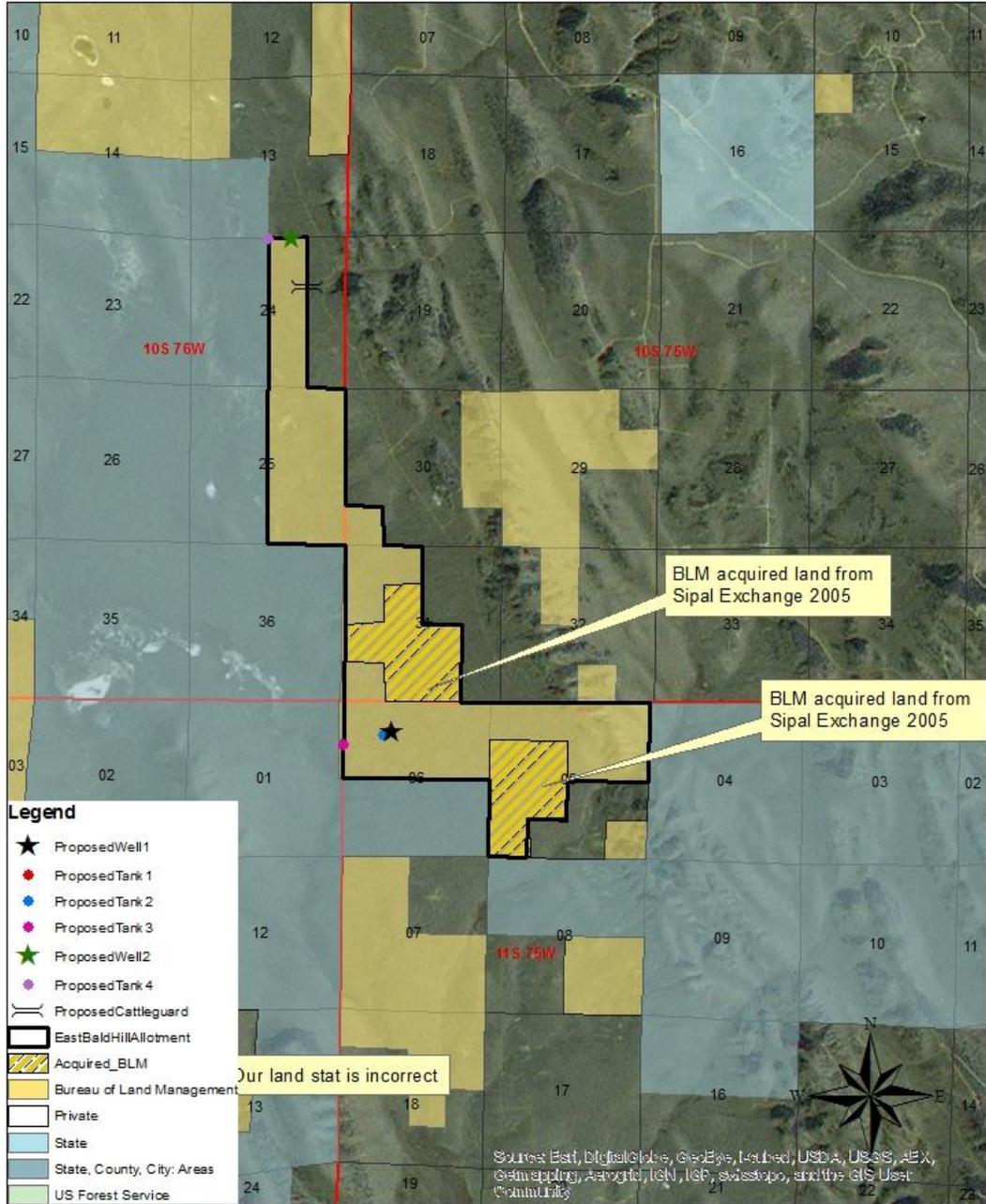
New Range Improvements: New range improvements may be proposed in the future under this alternative to help reduce any negative impacts and ensure that future livestock use continues to help the allotment meet Standards for Public Land Health. These improvements would be designed to serve as livestock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

- New construction will require temporary motorized access to these improvements. All efforts will be made to hide or post closed any remnant travel routes created.
- All improvements (new or existing) may require motorized access for future maintenance needs.
- 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.

- Some vegetative brush clearing may be required for all projects. Tree and brush clearing would occur outside the breeding and brood rearing season for migratory birds (May 15 thru July 15).

Three new range improvements are proposed under this alternative within the East Bald Hill Allotment and include a **new cattleguard** placed where the BLM boundary 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. In addition to the cattleguard, the proposed action also includes construction of **two livestock water wells** that will distribute the cattle more evenly across the allotment. These water wells will draw the cattle away from the two wetland areas that are located within the allotment. Funding for this work will come from the Grazing Advisory Board, internal BLM programs, the Colorado Park's and Wildlife's Habitat Partnership Program, and the Lessee. The new tanks would consist of a 4-13 foot rubber tires permanently established with a concrete base. The tanks would include a wildlife ramp. The lessee would be responsible for maintenance of the facility under a Range Improvement Cooperative Agreement. (See map below)

**PROJECT MAP: EAST BALD HILL ALLOTMENT #03773
NEW GRAZING AUTHORIZATION AND RANGE IMPROVEMENTS**



T11SR75W S. 6, T10SR76W S. 24

0 0.5 1 Miles

NOTE TO MAP USERS
No warranty 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 for current status on any specific tract of land.

Monitoring Plan

The Allotments would be monitored for general compliance, utilization on upland and riparian forage, and management effectiveness.

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

2.2.2 NO GRAZING ALTERNATIVE

Under this alternative grazing use would not be authorized on the East Bald Hill, Santa Maria (new portion to be added to existing Santa Maria), and Mexican Ridge South Allotments. The BLM would initiate a process in accordance with the 4100 regulations to permanently eliminate grazing use on these allotments.

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

2.3.1 NO ACTION ALTERNATIVE

The proposed action is subject to an EA because previous NEPA was determined to be inadequate. The no Action Alternative would be the same as the proposed action because no changes in management are proposed. Therefore, the No Action Alternative was considered but not analyzed in detail.

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, 11/23/2013	This action will not result in any significant impacts to air quality.
<u>Geology/Minerals</u> <i>Stephanie Carter, Melissa Smeins</i>	MJS 12/30/2013	See affected environment
<u>Soils</u> <i>Chris Cloninger</i>	CC 11/21/2013	Standard 1 is currently being met on the allotments 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, 1/15/14	See water quality section.
<u>Invasive Plants</u> <i>John Lamman</i>	JL, 01/28/2014	See affected environment.
<u>T&E and Sensitive Species</u> <i>Matt Rustand</i>	MR, 11/26/12	See affected environment.
<u>Vegetation</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	CC 11/21/2013	See affected environment
<u>Wetlands and Riparian</u> <i>Dave Gilbert</i>	DG 1/31/14	See affected environment, these resources present on East Bald Hill Allotment only
<u>Wildlife Aquatic</u> <i>Dave Gilbert</i>	DG 1/31/14	See affected environment, Aquatic resources present on East Bald Hill Allotment only.

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Wildlife Terrestrial</u> <i>Matt Rustand</i>	MR, 11/26/13	See affected environment.
<u>Migratory Birds</u> <i>Matt Rustand</i>	MR, 11/26/13	See affected environment.
<u>Cultural Resources</u> <i>Monica Weimer, Erin Watkins</i>	MDT 12/18/14	See affected environment
<u>Native American Religious Concerns</u> <i>Monica Weimer, Michael Troyer</i>	MDT 12/18/14	See affected environment
<u>Economics</u> <i>Martin Weimer</i>	mw, 11/22/13	This action will not result in significant impacts to the socio economics of the region or individuals.
<u>Paleontology</u> <i>Melissa Smeins, Stephanie Carter</i>	MJS 12/30/2013	See affected environment
<u>Visual Resources</u> <i>Kalem Lenard</i>	KL, 12/6/2013	The new range improvements identified in the proposed action would introduce minimal contrasts to the natural environment and are changes expected by the public in association with the ranching culture of the area. This proposal will not impact visual resources.
<u>Environmental Justice</u> <i>Martin Weimer</i>	mw, 11/22/13	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>	MJS 12/30/2013	See affected environment
<u>Recreation</u> <i>Kalem Lenard</i>	KL, 12/6/2013	Hunting is the primary recreation use in the project area and would not be impacted by the proposed action.
<u>Farmlands Prime and Unique</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	CC, 11/06/2013	No prime or unique Farmlands.
<u>Lands and Realty</u> <i>Greg Valladares</i>	GDV, 04/08/2014	One Realty Authorization (COC-74449) exists in Section 24 and will be unaffected by the proposed action.
<u>Wilderness, WSAs, ACECs, Wild & Scenic Rivers</u> <i>Kalem Lenard</i>	KL, 12/6/2013	Not present.
<u>Wilderness Characteristics</u> <i>Kalem Lenard</i>	KL, 12/6/2013	Not present.

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Range Management</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	CC, 11/21/2013	See affected environment.
<u>Forest Management</u> <i>Ken Reed</i>	KR 12/2/13	The proposed action shall not impact forest health or future forest management activities.
<u>Cadastral Survey</u> <i>Jeff Covington</i>	12/6/13	This action will not result in any significant impact.
<u>Noise</u> <i>Martin Weimer</i>	mw, 11/22/13	This action will not result in any significant impacts due to noise or result in any increased noise levels.
<u>Fire</u> <i>Ty Webb</i>	TW, 11/22/13	This action will not result in any significant impacts or result in any increase in fire activity or suppression needs.
<u>Law Enforcement</u> <i>Steve Cunningham</i>	1/27/14	There is no law enforcement issues associated with this action.

The affected resources brought forward for analysis include:

- Geologic and Mineral Resources
- Water Quality
- Invasive Plants
- Threatened, Endangered, and Sensitive Species
- Vegetation
- Wetlands and Riparian
- Wildlife Aquatic
- Wildlife Terrestrial
- Migratory Birds
- Cultural Resources
- Tribal and Native American Religious Concerns
- Paleontologic Resources
- Wastes, Hazardous or Solid
- Range Management

3.2 PHYSICAL RESOURCES

3.2.1 GEOLOGIC AND MINERAL RESOURCES

Affected Environment: The proposed parcels are located in the intermontane South Park Basin, located in the west-central part of the RGFO. The South Park Basin is flanked by the Front Range on the east and by the Mosquito Range on the west. In South Park several generally north-south-trending, down-to-west, Laramide-age, reverse faults disrupt the rocks. Recent mapping has led to the discovery of several east-west-trending, Laramide-age faults that interact with the north-south-trending faults. The east-west-trending faults separate blocks with widely varying styles of structural deformation and may be compartmental faults.

The basin contains mineral commodities such as oil and gas, coal, uranium, and construction materials such as sand and gravel. There are 4 federal oil and gas leases and 4 proposed oil well locations in this area including 2 federal wells. The 6-6-11-75 Bald Hill Federal well is located in the southern part of the proposed East Bald Hill allotment. The other federal well is located on the adjacent Logan Hill allotment.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: There are geologic and mineral resources present; however, this project will not have a direct adverse impact to the resource.

Protective/Mitigation Measures: The federal minerals in the proposed project area are open to mineral location and contain federal oil and gas leases (COC 67363, COC 37367, COC 37770, and COC 68343), therefore requiring coordination between surface uses as applicable. If there are unpatented mining claims that are active in the proposed project location, any associated claim markers encountered during project implementation cannot be disturbed.

Cumulative Impacts: This area has high potential for Oil and Gas development and is open to mineral location but coordination between surface users will allow for multiple use of this public land as mandated by FLPMA.

No Grazing Alternative:

Direct and Indirect Impacts: None

Protective/Mitigation Measures: None

3.2.2 WATER QUALITY

Affected Environment:

The proposed grazing would take place in allotments that are mainly dry upland site with limited water availability. Two water sources exist on the allotments. The first is an isolated playa that was modified many years ago when in private ownership on East Bald Hill allotment. The playa was at one time fenced and deepened. Exclusionary fencing is in disrepair and the banks of the ponded water area are trampled. Water has held in the playa in spite of no recent rainfall

suggesting ground water supplements erratic filling from rainwater and overland flow. A water sample was collected to aid in determination of this playa as a livestock or wildlife water supply, the sample showed no reason that livestock could not drink. The second area is a <0.25 mile reach of Sevenmile Gulch. In the summer of 2013, this gulch had interrupted surface water where the stream may be reacting to drought. It may be more perennial in higher precipitation years and vegetation indicated normally wetter conditions, but the drainage was mostly dry. At this location like the playa, indications of high grazing use in the recent past prevailed even though it was unallotted.

Environmental Effects

Livestock grazing can have several negative effects on water quality including increased nutrients, such as nitrogen and phosphorus, increased fecal bacteria, increased temperatures and increased sediment production. All factors of which can cause water to not meet state standards. Most of these impacts result from livestock spending large amounts of time in and near water sources due to poor distribution and lack of additional water sources to aid in livestock dispersal. One of the biggest factors influencing the amount of impact is the condition of the riparian vegetation. The riparian areas along drainages act to decrease velocity and increase roughness of flow leading to more infiltration and less runoff entering the waterway. Riparian vegetation also stabilizes the stream channel resulting in less sediment production. The riparian section of this document discusses the riparian area condition and impacts. In this case riparian condition can be used as a surrogate for water quality. In addition to riparian areas, upland condition can also have a large role in water quality by stabilizing soils and lessening runoff.

Proposed Action

Direct and Indirect Impacts: The Proposed Action would allow for managed grazing on these allotments. Grazing hasn't been authorized on these allotments recently, however it appears grazing has been taking place. The managed grazing of these allotments as outlined in the Proposed Action would have little impact to water quality due to the dry nature of the parcels. The addition of water developments to the allotments should help better distribute livestock away from the existing water sources, i.e. playa. This should lead to some recovery of vegetation surrounding these areas and lead to some improvement in water quality.

Protective/Mitigation Measures: Mitigation measures for water quality are the same as outlined in the Riparian Section.

Cumulative Impacts: Cumulatively, within the sixth order watersheds where the respective allotments lie, there are a lot of activities that could add up to negatively impact water quality. These activities include highways, oil and gas development, housing, recreation and grazing. At this time, the water quality in the area is good and the addition of the proposed activities would not add to the current situation in the future.

No Grazing Alternative:

Direct and Indirect Impacts: If no grazing is authorized conditions would remain as they currently are.

Protective/Mitigation Measures: None

Finding on the Public Land Health Standard for Plant and Animal Communities:

Water quality on the allotments is currently meeting standards and is expected to improve under the Proposed grazing alternative.

3.3 BIOLOGICAL RESOURCES

3.3.1 INVASIVE PLANTS*

Affected Environment: Data does not indicate that invasive plants occur within the project boundary. Invasive plant known to occur within 10 miles of the project area include: Canada thistle, Russian knapweed, scentless chamomile, and 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. Livestock can transport invasive plant seeds clinging to fur and contained in their digestive system.

Protective/Mitigation Measures: Allotments would be monitored by BLM staff and grazing lessees for the presence of weeds on the Colorado State Noxious Weed list A and B. Identified noxious weeds will be treated.

Cumulative Impacts: The impacts of the proposed action when considered in addition to the existing surface disturbing activities in the general area would not increase the risk of noxious weed invasion.

No Grazing Alternative

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

Protective/Mitigation Measures: Allotments would be monitored by BLM staff for the presence of weeds on the Colorado State Noxious Weed list A and B. Identified noxious weeds would be treated.

Cumulative Impacts: The impacts of the proposed action when considered in addition to the existing noxious weeds in the general area would not increase the risk of noxious weed invasion.

*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.

3.3.2 THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on standard 4)

Affected Environment: In general, characteristics of available habitat in South Park are consistent with those found on the eastern Colorado Plains. Blue grama and buffalo grass are mostly replaced by slimstem muhly and Arizona fescue, although both blue grama and buffalo grass occur in South Park. Overall structure of grassland communities is similar to that found on the plains, but with more bare ground throughout. There are no threatened or endangered species or their habitat expected to occur within the project area. Mountain plover and Gunnison's prairie dog are Bureau of Land Management sensitive species that either occur or have potential habitat located within the allotment boundaries.

Mountain plover and its habitat are expected to occur within the project area. The Colorado Natural Heritage Program inventoried mountain plover habitat in all South Park in 2001 in project spearheaded by the Bureau of Land Management (Grunau and Wunder 2001). The results of the inventory revealed that plover habitat does exist throughout the allotments in the proposed action. Additionally, in 2012, a Bureau of Land Management biologist and technicians recorded observations of mountain plover within the allotment boundaries.

Preferred habitat attributes for Gunnison's prairie dog are generally similar to that of mountain plover. Gunnison's prairie dogs were once abundant throughout South Park; however, past control measures (i.e. shooting, poisoning) have nearly extirpated prairie dogs from the region. Although the project area is not occupied, the allotments do contain habitat that is adequate to support colonies of Gunnison's prairie dog.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Grazing is considered beneficial to the maintenance of mountain plover habitat. The mountain plover is adapted to sparsely vegetated and bare ground areas associated with various disturbances such as heavy grazing (Federal Register 1999). Before cattle were introduced to South Park, the shortgrass prairie supported Gunnison's prairie dogs and herds of pronghorn, elk and bison as primary grazers. Ungulate grazers and cattle now occupy plover nesting habitat within the allotments subjecting the shortgrass prairie to light grazing, maintaining the historical landscape. Existing livestock grazing guidelines employed by BLM in South Park are compatible with maintaining mountain plover habitat (Grunau and Wonder 2001).

No direct impact to Gunnison's prairie dog is expected because they do not currently exist within the project area. However, research indicates that a grazing can improve prairie dog habitat by maintaining preferred short-grass prairie conditions (Ursek et al. 1981). Maintaining preferred habitat may facilitate future expansion of prairie dogs to the project area.

Protective/Mitigation Measures: None.

Cumulative Impacts: Grazing is present on adjacent private and public lands affecting forage, browse, and cover available to all terrestrial species. Within the last 30 years, recreation and residential development has increased markedly resulting in increased road and trail densities. Oil and gas wells have been drilled within the allotment in the last three years increasing human presence, and road densities and road traffic. All of these factors result in potential negative 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: Not authorizing grazing could be detrimental to mountain plover habitat. Grazing is beneficial to the maintenance of mountain plover habitat because wild animals that historically grazed (i.e. bison, prairie dogs) have largely been removed from the landscape. The no grazing alternative will lead to habitat that exceeds the preferred vegetative structure for breeding mountain plover. Currently, there are no Gunnison's prairie dogs within the allotment boundaries but implementing the no grazing alternative would reduce the quality of potential habitat for prairie dogs in the future.

Protective/Mitigation Measures: None

Cumulative Impacts: None

Finding on the Public Land Health Standard for special status, threatened and endangered species: The proposed action will have a positive impact to special status species and their habitat located within the project area.

3.3.3 VEGETATION (includes a finding on standard 3)

Affected Environment: The majority of these allotments are dominated by open, rolling grasslands. Slopes generally vary between 0 - 30%. Most of the allotments are generally characterized as a high, cool desert. The growing season usually begins in earnest in late May or June. Generally, the temperatures at night in early to mid-September at this elevation begin to fall low enough to significantly reduce and eventually halt plant growth. Precipitation records indicate that July and August in this area are the wettest months of the year as well as the warmest. The combination of available moisture and warm temperatures tend to provide July and August with the most favorable conditions for plant growth during the year. June can also provide favorable growth conditions but is often fairly dry and averages only approximately ½ the amount of precipitation as July or August. The dominate upland grasslands in the area include prairie junegrass, Arizona fescue, blue gramma, western wheatgrass, bottlebrush squirreltail, mountain muhly, parry oatgrass, elk sedge and sun sedge. Shrubs and half-shrubs such as mountain mahogany, plains pricklypear, wax currant, cinquefoil, rabbitbrush, snakeweed and fringed sage are also common.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The allotments are currently meeting public land health for Standard 3. The authorized use in the Proposed Action is the estimated grazing capacity of the public land on the allotments and is estimated to result in utilization of 40 to 60% of the annual

forage production of desirable forage species during the growing season. This level of forage utilization will meet Colorado Livestock Grazing Management Guidelines. Authorizing grazing use on the allotments as described in the proposed action would not have any negative impacts and continue to promote achievement of public land health standards.

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 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. 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. A lack of periodic grazing use could result in an eventual decrease in plant vigor due to slow decomposition of 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.

Cumulative Impacts: See Cumulative Impact Summary

Finding on the Public Land Health Standard for Plant and Animal Communities:

Rangeland Health Evaluations were completed on the allotments in 2011 & 2013. According to evaluations, most of the areas exhibit ground cover and species composition appropriate to the area and are meeting current public land health standards. They tend to have sufficient vegetative and litter cover to protect soil and to trap and hold moisture during precipitation events. All of the allotments are currently meeting Public Land Health Standard for Plant Communities.

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

Affected Environment: The East Bald Hill allotment has two wetland areas rapidly evaluated in 2011 while exploring options to permit this public land for future grazing. The first is an isolated playa that was modified many years ago when in private ownership. The playa was at one time fenced and deepened. Exclusionary fencing is in disrepair and the banks of the ponded water area are trampled. Water has held in the playa in spite of no recent rainfall suggesting ground water supplements erratic filling from rainwater and overland flow. A water sample was collected to aid in determination of this playa as a livestock or wildlife water supply, the sample showed no reason that livestock could not drink. The condition of this wetland was not formally

accessed by an Interdisciplinary Team, but upon rapid evaluation the area has not been rested even though the land has been unallotted and a managed grazing scenario was recommended. The second area is a <0.25 mile reach of Sevenmile Gulch. This gulch had interrupted surface water where the stream may be reacting to drought. It may be more perennial in higher precipitation years and vegetation indicated normally wetter conditions, but the drainage was mostly dry. At this location like the playa, indications of high grazing use in the recent past prevailed even though it was unallotted. There were some scarped pools among interrupted flow holding surface water available for livestock. The area was also informally assessed to not be meeting the BLM riparian land health standard. The general region is arid and water sources are lacking, so wet areas will receive disproportionate use without forced rotation, season of use restriction, or the development of other water sources.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: This allotment has not been rested and conditions at the two wetland areas are below desirable levels. The proposed action which describes fixed livestock grazing dates and utilization levels and limits grazing to begin no earlier than September 1 while providing two new water sources should allow for recovery of the wetland areas. The proposed range improvements would help to improve livestock distribution across the East Bald Hill Allotment and to help improve conditions in the James Mark Jones SWA improving landscape level range and habitat conditions. If livestock still concentrate at the natural water sources and set back the summer rest period then adaptive management will be needed, but recovery is anticipated.

Protective/Mitigation Measures: This allotment will need evaluation during the time period livestock are in the pasture when using natural/native water sources. If indicators reveal no positive change with a fall (essentially dormant season) grazing plan, then an adaptive management scenario of protective fencing may be necessary. However, livestock use of the native water sources should decrease and distribution throughout the pasture should improve as has been shown in the fall in South Park on other allotments.

Cumulative Impacts: Most of the BLM land in South Park is grazed. Grazing this BLM is cumulative to other grazing. Grazing under a managed scenario with developed water however is preferable to unauthorized and unmanaged grazing that was the scenario prior to the BLM exchange that allowed these lands to be managed.

Other Alternative

Direct and Indirect Impacts: The no grazing alternative would be a new alternative to these lands as they were grazed prior to the discussed land exchange and in the time prior to this action when RGFO could not undertake a management plan. Without grazing, riparian areas would receive the most rest and the fastest recovery from substandard conditions. Livestock in neighboring areas would need continual checking to see they did not enter excluded land as no operator with an investment in the lands would be monitoring allotment use and conditions in addition to BLM personnel. Trespass grazing on this land has occurred when unallotted.

Protective/Mitigation Measures: Would require checking for unauthorized grazing.

Cumulative Impacts: None.

Finding on the Public Land Health Standard for Riparian Systems: Riparian areas are in poor condition at present. The managed grazing of the proposed action or not grazing as in the alternative will both allow for improved riparian resources.

3.3.5 WILDLIFE AQUATIC (includes a finding on standard 3)

Affected Environment: The East Bald Hill allotment has two wetland areas with surface water available that were rapidly evaluated in 2011 while exploring options to permit this public land for future grazing. The first is an isolated playa that was modified many years ago when in private ownership. The playa was at one time fenced and deepened. Exclusionary fencing is in disrepair and the banks of the ponded water area are trampled. Water has held in the playa in spite of no recent rainfall when checked suggesting ground water supplements erratic filling from rainwater and overland flow. Tiger salamanders were readily observed in the pond. A water sample was collected to aid in determination of this playa as a livestock or wildlife water supply, the sample showed no reason that livestock could not drink. The condition of this pond/wetland was not formally assessed by an Interdisciplinary Team, but upon rapid evaluation the area has not been rested even though the land has been unallotted and going to a managed grazing scenario was recommended. The second area is a <0.25 mile reach of Sevenmile Gulch. This gulch had interrupted surface water and the stream may be reacting to drought where it may be more perennial in higher precipitation years, but the drainage was mostly dry. Again indications of high grazing use in the past prevailed even though it was unallotted. There were some scarped pools with interrupted water flow holding surface water that are available for livestock use. The area was informally assessed to be in a substandard condition, not meeting the BLM riparian land health standard. No aquatic wildlife was observed in the pools on a rapid evaluation. The general region is arid and water sources are lacking, so wet areas will receive disproportionate use without forced rotation, season of use restriction, or the development of other water sources.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: This allotment has not been rested and the condition at the two wetland areas is below desirable levels. The proposed action which describes fixed livestock grazing dates and utilization levels and limits grazing to begin no earlier than September 1 while providing two new water sources should allow for recovery of the wetland areas. The proposed range improvements would help to improve livestock distribution across the East Bald Hill Allotment and to help improve conditions in the James Mark Jones SWA improving landscape level range and habitat conditions. If riparian recovers, aquatic habitat will benefit and hopefully populations of herpetofauna would also benefit. If livestock still concentrate at the natural water sources and set back the summer rest period, then adaptive management will be needed, but recovery is anticipated.

Protective/Mitigation Measures: This allotment will need evaluation during the time period livestock are in the pasture with natural/native water. If indicators reveal no positive change with a fall (essentially dormant season) grazing plan, then an adaptive management scenario of protective fencing may be necessary. However, livestock use of the water sources should decrease and distribution of cattle away from water sources has been shown to be better in the fall in South Park on other allotments.

Cumulative Impacts: Most of the BLM land in South Park is grazed. Grazing this BLM is cumulative to other grazing. Grazing under a managed scenario with developed water however is preferable to unauthorized and unmanaged grazing that was the scenario prior to the BLM exchange that allowed these lands to be managed.

Other Alternative

Direct and Indirect Impacts: The no grazing alternative would be a new alternative to these lands as they were grazed prior to the discussed land exchange and in the time prior to this action when RGFO could not undertake a management plan. Without grazing, riparian areas would receive the most rest and the fastest recovery from substandard conditions at present. Livestock in neighboring areas would need continual checking to see they did not enter excluded land as no operator with an investment in the lands would be monitoring allotment use and conditions in addition to BLM personnel. Trespass grazing on this land has occurred when unallotted.

Protective/Mitigation Measures: Would require checking for unauthorized grazing.

Cumulative Impacts: None.

Finding on the Public Land Health Standard for Plant and Animal Communities: Riparian areas are in poor condition at present; associated aquatic habitat is in similar poor condition. The managed grazing of the proposed action or not grazing as in the alternative will both allow for improved riparian resources and improved aquatic habitat benefitting aquatic wildlife.

3.3.6 WILDLIFE TERRESTRIAL (includes a finding on standard 3)

Affected Environment: The action area is located along the eastern edge of James Mark Jones State Wildlife Area. The habitat type is high elevation short grass prairie. Large animals that inhabit the allotment include elk and pronghorn. Pronghorn are common in the flat, open habitat during all times of the year. Elk use of the project area is most likely to occur in winter, but animals may be found year-round. Reinecker Ridge provides important winter range for elk after heavy snows force them from the surrounding timbered mountains. It is not unusual in South Park for large numbers of elk to use open flat habitat miles from the timbered ridges.

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.

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 reduces the available forage base for wild ungulates 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 generalists 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.

The proposed grazing schedule is not anticipated to have any direct influence on raptor nesting activities. Reductions in vegetation height and litter 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 raptors.

Protective/Mitigation Measures: Monitoring is of greatest importance. Ensure over-utilization does not occur to maintain an adequate forage base for wintering elk herd and protective litter cover for small mammal species.

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. Oil and gas wells have been drilled within the allotment in the last three years increasing human presence, and road densities and road traffic. 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 (i.e. shrews, voles). The most noticeable improvements would be in mid-seral communities. Additionally, removing grazing will increase forage base for resident and wintering big game animals.

Protective/Mitigation Measures: None.

Finding on the Public Land Health Standard for Plant and Animal Communities:

The proposed action will have no effects on the public land health standard for plant and animal communities if grazing is managed in a sustainable manner that maintains the necessary forage base to support resident and wintering mega-fauna and plant cover (vegetative structure and ground litter) for micro-fauna.

3.3.7 MIGRATORY BIRDS

Affected Environment: South Park is the largest contiguous occurrence of montane grassland in the Southern Rocky Mountains eco-region. This ecological system typically occurs between 7,200 and 10,000 feet on gentle to steep slopes, parks, or on lower side slopes. In general, characteristics of migratory bird habitat in South Park are consistent with those found on the eastern Colorado Plains. Blue grama and buffalo grass are mostly replaced by slimstem muhly and Arizona fescue, although both blue grama and buffalo grass occur in South Park. Overall structure of grassland communities is similar to that found on the plains, but with more bare ground throughout.

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. Nests are placed on cliffs and sometimes in trees in rugged areas, and breeding birds range widely over surrounding habitats.
- 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.
- Mountain Plover occur primarily on level areas with very short grass, avoiding taller grasses and hillsides. Suitable areas occur where grazing is intensive. Monitoring completed in 2012 identified occurrences of mountain plover within the allotment boundaries.
- Burrowing owls occur within grasslands and semi-desert shrublands, usually in or near prairie dog colonies. The allotments have the elements necessary to support prairie dogs and burrowing owls, but this area is currently unoccupied.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Research measuring the impacts of grazing on migratory birds is mixed based on the life history requirements necessary for an individual species. 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 (i.e. grasshopper sparrow), it is beneficial to another (i.e. mountain plover). Bock et al. (1993) conducted a literature review on avian responses to grazing in a multitude of habitats and found that bird species generally had a negative response when their habitats were grazed. Reasons for a negative response include, but are not limited to a reduction in nesting cover, reduction in vegetation structure, reduction in insect quantity and diversity, and disturbance or destruction of nests by cattle (Fondell and Ball 2004, Kruess and Tschardtke 2002).

Allowing dormant season utilization of 80% annual production on grass species and 60% of annual production on shrub species may be a detriment to migratory birds by removing residual cover prior to the nesting season. Furthermore, high utilization of dormant vegetation over time will diminish ground cover, litter, and residual material needed for the protection of nests of ground nesting species.

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 the quality of cover and nesting habitat for migratory birds.

No Grazing Alternative

Direct and Indirect Impacts: This alternative would remove grazing from a shortgrass prairie system on public land which in the short-term may result in an initial increase in plant vigor and litter production benefiting migratory bird habitat. Explanations for a positive response to the no grazing alternative include, but are not limited to an increase in nesting cover, vegetation structure, and insect quantity and diversity (Kruess and Tschardtke 2002). While 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.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 CULTURAL RESOURCES

Affected Environment: Pursuant to BLM Instruction Memorandum Number CO-2002-029, RGFO cultural resources staff conducted a literature review of previous inventories conducted (16.8 % of the total public land acreage; see CR-RG-14-68 R, and CR-RG-14-047 N) and sites recorded on the public land in the allotment area. After consulting with the range staff to

identify concentrations of livestock and potential damage, it was determined that no historic properties might potentially be impacted by the proposed undertaking.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: No concerns.

Cumulative Impacts: None.

Mitigation/Residual Effects: None.

No Action

Direct and Indirect Impacts: Same as Proposed Action.

Cumulative Impacts: Same as Proposed Action.

Mitigation/Residual Effects: Same as Proposed Action.

No Grazing Alternative

Direct and Indirect Impacts: None.

3.4.2 TRIBAL AND NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: The literature review indicated that aboriginal sites have been recorded within the allotment boundaries. However, site distribution is low in density and not coincident with livestock concentration areas. Consultation with interested tribes also did not reveal any areas of concern. Therefore, it is unlikely that any traditional cultural properties or other sites of concern to the tribes will be affected by grazing.

Environmental Effects: BLM consulted with 17 tribes regarding the proposed grazing permit renewal. Included were the Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Lakota Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Oglala Sioux Tribe, Pawnee Nation of Oklahoma, Rosebud Sioux Tribe, Eastern Shoshone Tribe, Southern Ute Tribe, Standing Rock Sioux Tribe, Ute Tribe, and the Ute Mountain Ute Tribe. BLM received no comments.

Proposed Action

Direct and Indirect Impacts: None.

Cumulative Impacts: None.

Mitigation/Residual Effects: None.

No Action

Direct and Indirect Impacts: Same as Proposed Action.

Cumulative Impacts: Same as Proposed Action.

Mitigation/Residual Effects: Same as Proposed Action.

No Grazing Alternative

Direct and Indirect Impacts: None.

3.4.3 PALEONTOLOGICAL RESOURCES

Affected Environment: The proposed project area is located in the Cretaceous Pierre Shale that is classified as a Class 3 geologic formation according to the BLM Potential Fossil Yield Classification System (PFYC) (WO IM2008-009). Class 3 is a fossiliferous sedimentary geologic unit where fossil content varies in abundance. The Pierre Shale can be further classified as Class 3a because the formation is known to contain vertebrate fossils but the occurrences are widely scattered. The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Impacts to fossil resources are not likely because the formations in the project area are not likely to contain significant fossil resources.

Direct impacts to or destruction of fossils would occur from unmitigated activities conducted on formations with high potential for important scientific fossil resources. Indirect impacts would involve damage or loss of fossil resources due to the unauthorized collection of scientifically important fossils by workers or the public due to increased access to fossil localities in the Project Area. Adverse impacts to important fossil resources would be long-term and significant since fossils removed or destroyed would be lost to science.

Cumulative Impacts: Although the project area does not contain any known fossil resources, there is a possibility that ground disturbing work in the area may uncover fossil resources. Adverse significant impacts to paleontological resources can be reduced to a negligible level through mitigation of ground disturbing activities. It is possible that the proposed project would have the beneficial impact that ground disturbance activities might result in the discovery of important fossil resources.

Mitigation/Residual Effects: In order to prevent potential impacts to paleontologic resources, a stipulation will be attached to the permit that directs the holder to notify the BLM RGFO immediately if any vertebrate fossils or their traces are discovered during operations within this permit area. Operations may continue as long as the fossil specimen would not be damaged or destroyed by the activity. Within 5 working days of notification, the BLM RGFO shall evaluate or have evaluated such discoveries and shall notify the operator what action shall be taken with respect to such discoveries.

No Grazing Alternative

Direct and Indirect Impacts: none

Protective/Mitigation Measures: none

3.4.4 WASTES, HAZARDOUS OR SOLID

Affected Environment: It is assumed that conditions associated with the proposed project site are currently clean and that no contamination is evident. No hazardous material, as defined by 42 U.S.C. 9601 (which includes materials regulated under CERCLA, RCRA and the Atomic Energy Act, but does not include petroleum or natural gas), will be used, produced, transported or stored during project implementation.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: None

Cumulative Impacts: None

Mitigation/Residual Effects: Since this project involves some type of oil or fuel use, transfer and/or storage, an adequate spill kit is required to be onsite. The project proponent will be responsible for adhering to all applicable local, State and Federal regulations in the event of a spill, which includes following the proper notification procedures in BLM's Spill Contingency Plan.

No Grazing Alternative

Direct and Indirect Impacts: None.

Protective/Mitigation Measures: None.

3.5 LAND RESOURCES

3.5.1 RANGE MANAGEMENT

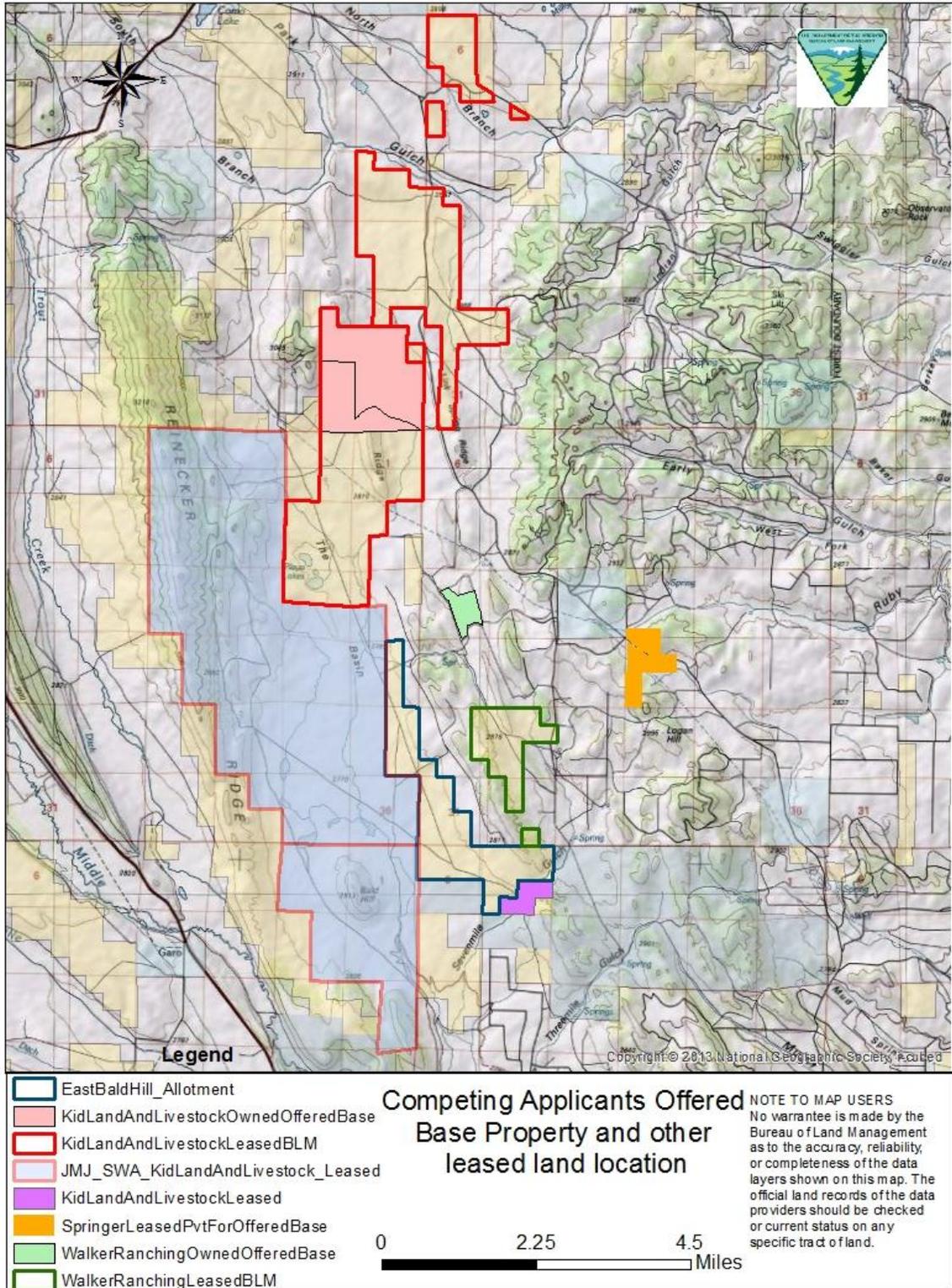
Affected Environment: The allotments encompass 2,535 acres of BLM lands and consist of highly productive rangelands. Existing range improvements are limited to boundary fences surrounding East Bald Hill. The grazing schedule and estimated carrying capacity of the public land in each of the allotments is described under the "Introduction and Background" portion of this analysis. The proposed action includes a utilization standard that is desirable in order to assure sufficient residual vegetation to protect soil from wind and water erosion and allow adequate seed dissemination and seedling establishment. Even when annual forage production may vary on a year to year basis, the utilization standards provide a visual and practical way of limiting grazing use to a desirable level.

BLM has received three applications for grazing preference for the East Bald Hill allotment from Kid Land & Livestock, Inc., Theresa and Dennis Springer, and Walker Ranching Enterprises, LLC (see map below.) All three of the applicants applied for grazing use in the fall/winter months. Kid Land & Livestock, Inc. offered their owned property as Base Property consisting of 1,400 acres. Theresa and Dennis Springer offered their leased property as Base Property consisting of 321 acres. Walker Ranching Enterprises, LLC., offered their owned property as Base Property consisting of 140 acres.

Kid Land & Livestock also control contiguous land that is capable of being used in conjunction with their livestock operation. They have existing BLM leases adjacent to their Base Property.

They also have the lease for the James Mark Jones State Wildlife Area (SWA) consisting of 11,800 acres (see map below.)

Map 7



Environmental Effects

Proposed Action

Direct and Indirect Impacts: The proposed action as scheduled for the allotments meets the Standards for Public Land Health and Guidelines for Livestock Grazing in Colorado. The proposed action includes specific utilization standards for forage species for the allotment that would ensure for adequate vegetative cover, recovery from grazing and adaptation to climatic conditions. Implementing the new range improvements on the East Bald Hill allotment will promote even and dispersed livestock use on the allotment and open new areas to grazing that typically would not be grazed. Additional stipulations addressing cultural and paleontological resources will be added to the permit. Adaptive management gives the BLM and lessee 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.

Leasing the East Bald Hill allotment to Kid Land & Livestock would be beneficial to the rangeland resources, vegetation management, and wildlife habitat by giving the BLM and lessee more flexibility with pasture rotation, management across administrative boundaries, livestock egress and ingress from and to the allotment. The added ability to adapt the livestock grazing rotation or vegetation use to drought conditions, occurrence of wildfires, or prescribed fire/vegetation treatments with flexibility in pasture use across allotments as well as, utilizing SWA lands will continue to improve allotment conditions and rangeland resources within the area. James Mark Jones SWA (Reinecker Ridge) is an important winter concentration area for deer, elk, and pronghorn and CPW has focused on treatments to improve wildlife habitat and grazing conditions within the SWA. In addition to water resources on the SWA, private land owned by Kid Land and Livestock, and the Playa Lakes and Park Gulch allotments (controlled by Kid Land and Livestock), two new livestock water wells will be developed on the East Bald Hill allotment benefiting the rangeland resources as well as the wildlife use of the BLM and SWA habitat.

Leasing the East Bald Hill allotment to the Mr. and Mrs. Springer or Walker Ranching Enterprises is less beneficial to the management of rangeland resources in the area because of the reduced flexibility to manage public lands resources, maintain or improve wildlife habitat conditions, and inability to apply a grazing rotation with the other adjacent BLM allotments and SWA that are not under control of the same lessee.

Protective/Mitigation Measures: Monitor for livestock trespass.

Cumulative Impacts: Beginning in the 1850s, most of the arable land in and around the project area was being actively cultivated. Other land that was accessible to livestock was subjected to high stocking rates and season long grazing that had negative impacts on vegetative species composition and soil stability. Overall stocking rates are now lower due to the unsustainability of the early rates and many ranchers use modern grazing management techniques to promote healthy and resilient rangelands. Exurban development of lands that have been historically a part of family ranches near the project area has dramatically increased fencing and has frequently had negative impacts to plant species composition, soil stability and big game movement. The terms

and conditions for any grazing permit that would be issued would limit utilization to 40% - 60% on grass forage species during the growing season and 80% of previous growth during the dormant season. Utilization on woody riparian species such as cottonwoods, aspen and willows will be limited to 40% of the current year's growth. Grazing use that exceeds these levels would not be authorized. Livestock utilization of public land in the project area will be less than private land in the area. Cumulative impacts are expected to be minor.

No Grazing Alternative

Direct and Indirect Impacts: Under this alternative, grazing use would not be authorized on the allotments. The impacts would occur for both the lessees and the BLM in the long term. The lessees would have to find alternatives for the loss of potential forage from the allotments. Not authorizing grazing use as prescribed by this alternative would remove utilization on vegetation on the public land. This in turn would result in an initial increase in plant vigor and litter production. Precipitation on the allotments 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. Livestock hooves also tend 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 allotments 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. Lastly, 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.

Protective/Mitigation Measures: Monitor for livestock trespass.

3.6 CUMULATIVE IMPACTS SUMMARY

The geographic scope of cumulative impacts is the area described as the South Park Eco-Sub-region in the Royal Gorge Resource Area Resource Management Plan. Within this area, BLM manages approximately 57,794 acres of public land. The area also consists of approximately 179,255 acres of private and 77,534 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.

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. Continually monitored grazing keeps grasses shorter, providing better habitat for the Mountain Plover, a BLM sensitive species. Public land grazing also provides an affordable grazing option to ranchers who might otherwise sell their property and contribute to the subdivision fragmentation of the landscape. Finally, the adherence to the Public Land Health Standards assures BLM is managing the land, in this proposed action, to the betterment of all resources.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 LIST OF PREPARERS AND PARTICIPANTS

Please see Interdisciplinary Team Review list for BLM Participants on page 18

4.2 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

Colorado Parks and Wildlife

CHAPTER 5 - REFERENCES

- Bock, C. E., V. A. Saab, T. D. Rich, and D. S. Dobkin. 1993. Effects of livestock grazing on neotropical migratory landbirds in western North America. In: Finch, D. M., P. W. Stangel (eds.). Status and management of neotropical migratory birds: September 21-25, 1992, Estes Park, Colorado. Gen. Tech. Rep. RM-229. Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, U.S. Dept. of Agriculture, Forest Service: 296-309.
- Bureau of Land Management (BLM). 1993. Draft Resource Management Plan and Environmental Impact Statement. Royal Gorge Field Office. Canon City, Colorado.
- Bureau of Land Management. 1996. Royal Gorge Resource Area Resource Management Plan and Record of Decision. Royal Gorge Field Office. Canon City, Colorado.
- Bureau of Land Management. 2008. H-1790-1 National Environmental Policy Handbook. Washington, D.C.
- Bureau of Land Management. 2011 & 2013. Public Land Health Assessment.
- Federal Register. 1999. Proposed threatened status for the mountain plover. Federal Register Volume 64, Number 30, February 16, 1999, 7587-7601.
- Fondell, T. F. and I. J. Ball. 2004. Density and success of bird nests relative to grazing on western Montana grasslands. *Biological Conservation*. 117: 203-213.
- Grunau, L. and M. Wunder. 2001. Conservation assessment for mountain plover (*Charadrius montanus*) in South Park, Colorado. Colorado Natural Heritage Program.
- Jones, A. 2000. Effects of cattle grazing on North American arid ecosystems: A quantitative review. *Western North American naturalist* 60: 155-164.
- Kruess, A. and T. Tschardtke. 2002. Contrasting response of plant and insect diversity to variation in grazing intensity. *Biological Conservation* 106: 293-302.
- 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.
- Uresk, D. W., J. G. MacCracken, and A. J. Bjurgstad. 1981. Prairie dog density and cattle grazing relationships. Great Plains Wildlife Damage Control Workshop Proceedings. Paper 145.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

DOI-BLM-CO-F02-2014-009 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 three allotments: East Bald Hill, Santa Maria and Mexican Ridge South Allotments and issues a lease for ten years. Adaptive Management measures are included to help mitigate potential future impacts.

The allotments are located in Park County Colorado at an elevation of 9,000-9,500 feet and consist of large open grassland parks and some scattered conifers. The allotments are important to the lessee's livestock operation and economic wellbeing.

Intensity:

Impacts that may be beneficial and adverse:

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. In addition, conditions created by livestock grazing has been shown to improve habitat for mountain plover. The allotments will be managed to maximize health and vigor of both upland and riparian environments.

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. Sediment production, from a water quality standpoint is not a concern due to the dry, upland nature of the allotments. 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 allotments in the analysis area are surrounded by private 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, allowing 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 (16.8 % of the total public land acreage; see CR-RG-14-68 R, and CR-RG-14-047 N) and sites recorded on the public land in the allotment area. After consulting with the range staff to identify concentrations of livestock and potential damage, it was determined that no historic properties might potentially be impacted by the proposed undertaking.

Threatened and endangered species and their critical habitat:

There are no threatened or endangered species or their habitat expected to occur within the project area. Mountain plover and Gunnison's prairie dog are Bureau of Land Management

sensitive species that either occur or have potential habitat located within the allotment boundaries.

Mountain plover and its habitat are expected to occur within the project area. The Colorado Natural Heritage Program inventoried mountain plover habitat in all South Park in 2001 in project spearheaded by the Bureau of Land Management (Grunau and Wunder 2001). The results of the inventory revealed that plover habitat does exist throughout the allotments in the proposed action. Additionally, in 2012, a Bureau of Land Management biologist and technicians recorded observations of mountain plover within the allotment boundaries.

Preferred habitat attributes for Gunnison's prairie dog are generally similar to that of mountain plover. Gunnison's prairie dogs were once abundant throughout South Park; however, past control measures (i.e. shooting, poisoning) have nearly extirpated prairie dogs from the region. Although the project area is not occupied, the allotments do contain habitat that is adequate to support colonies of Gunnison's prairie dog.

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: Christine Cloninger

SUPERVISORY REVIEW: Melissa K.S. Garcia

NAME OF ENVIRONMENTAL COORDINATOR: /s/ Martin Weimer

DATE: 4/27/14

SIGNATURE OF AUTHORIZED OFFICIAL:

Melissa KS Garcia
for Keith E. Berger, Field Manager

DATE SIGNED: 4/28/14