

**U.S. Department of the Interior  
Bureau of Land Management**

**Colorado River Valley Field Office**

**Sutey Ranch and Haines Parcel  
Final Environmental Assessment &  
Proposed Resource Management  
Plan Amendment**

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*Prepared by:*

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Bureau of Land Management  
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# **The BLM's Mission**

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To sustain the health, diversity, and productivity of  
America's public lands for the use and enjoyment  
of present and future generations.



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# CHAPTER 1 - INTRODUCTION

This Environmental Assessment (EA) has been prepared to determine and analyze the environmental impacts of the Bureau of Land Management (BLM) Colorado River Valley Field Office (CRVFO) management decisions for the newly acquired Sutey Ranch and Haines parcels. The acquisition of these parcels by the BLM requires this Resource Management Plan Amendment (RMPA) in order to determine overall management direction for these newly acquired public lands and to potentially modify management of the adjacent Sutey Allotment.

Although there is an appeal of the land exchange in Federal court, the land exchange has been completed and the decision by the BLM is in full force and effect.

The BLM completed the Sutey Ranch Land Exchange on March 27, 2017. Under the land exchange, the public acquired:

- A. The 557-acre Sutey Ranch (named for the family who lived, ranched and farmed the parcel from 1930 through 2005).
- The Sutey Ranch parcel is located roughly two miles north of Carbondale in Garfield County, Colorado. Physical access to this parcel is from Highway 82 via Cattle Creek Road (CR 113) and Crystal Springs Mountain Road (CR 112) which crosses the northeast corner of the parcel (See **Appendix A** for a map of the area).
  - The Sutey Ranch is adjacent to the Red Hill Special Recreation Management Area (SRMA).
  - The acquired lands have been managed for agricultural use and livestock grazing. Approximately 59 acres were in hay production when the BLM acquired the ranch.
  - The old house was removed before the land was acquired. Currently there are some sheds and a small, old cabin with a small addition. Infrastructure also included irrigation (piping and ditches), fencing and dirt roads.
  - The acquisition included water rights in the form of 12 shares of the capital stock of The Park Ditch and Reservoir Company, Certificate No. 051, and 1.33 shares of the capital stock of The Park Ditch and Reservoir Company, Certificate No. 055 for approximately 2.25 cubic feet per second (cfs), decreed to the Park Ditch and Reservoir Company, and 50 acre feet of water storage rights.
  - Through Environmental Assessment #DOI-BLM-CO-N040-2017-0085-EA in the fall of 2017, the BLM constructed a parking area at the entrance road because there was no available parking along CR112.
  - The Ranch is currently open to public foot and horse travel, however, the parking lot is closed from December 1 to April 15 to protect wintering wildlife.
- B. The 112-acre Haines parcel was also acquired in the land exchange.
- The Haines parcel is located five miles southeast of Carbondale in Prince Creek in Pitkin County, Colorado and is accessed by Pitkin County Road 111 (See **Appendix A** for a map of the area).
  - The Haines parcel is adjacent to the Crown SRMA.
  - At the time of the acquisition, the parcel contained a user-created mountain biking and hiking trail network. Through Environmental Assessment # DOI-BLM-CO-N040-2017-0108-EA in 2017, the CRVFO designated mechanized routes that connect to the mountain bike trail system in the Crown SRMA.

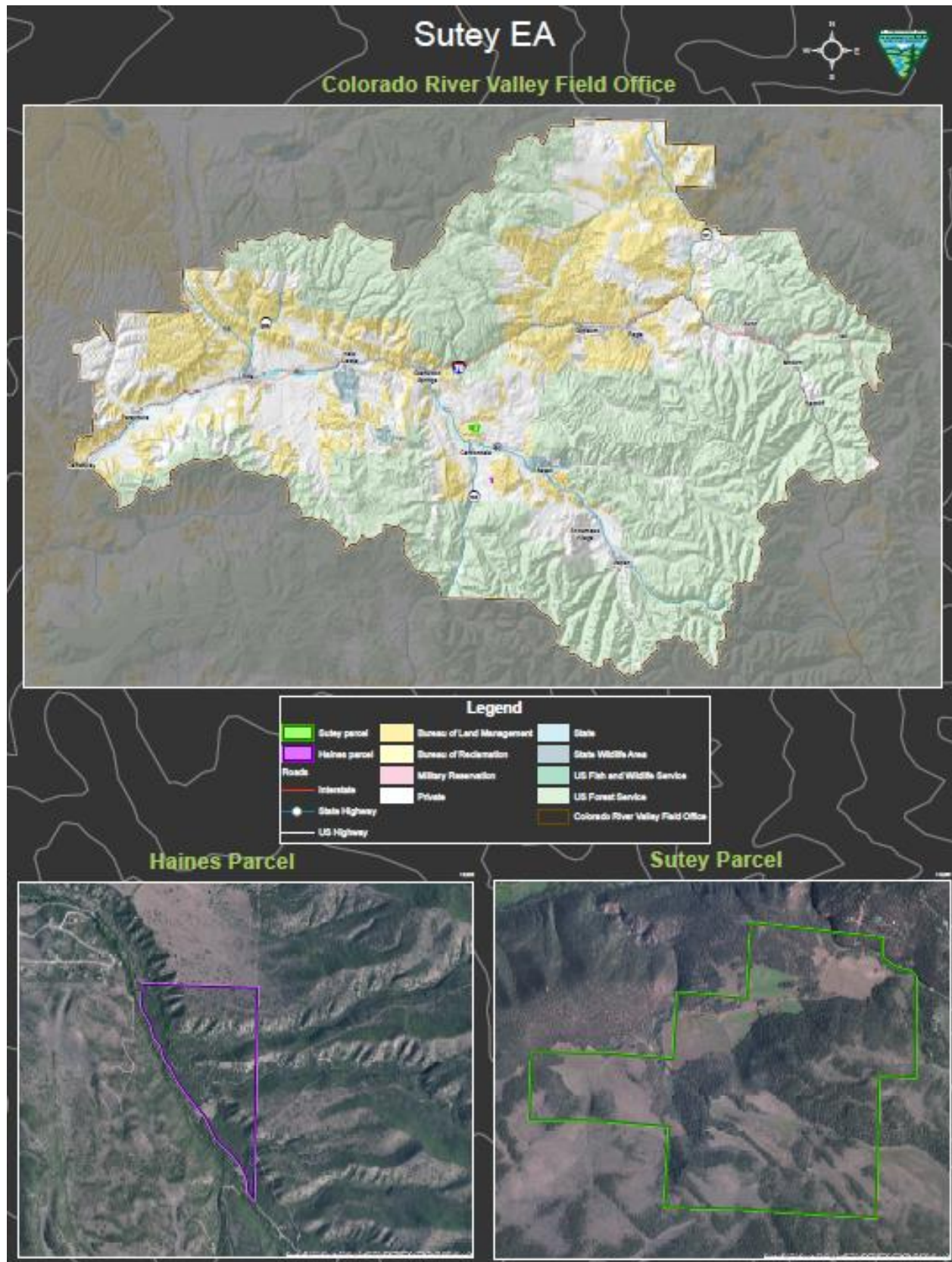
- C. BLM received a \$100,000 donation from the land exchange proponents to develop a site-specific management plan for the newly acquired land.
- D. BLM also received a \$1 million donation from the land exchange proponents for the long-term management of the newly acquired land (to be held by Aspen Valley Land Trust).

**Table 1** below denotes the legal land descriptions for the Sutey Ranch and the Haines parcel.

**TABLE 1. LEGAL DESCRIPTIONS OF THE SUTEY RANCH AND THE HAINES PARCEL.**

PARCEL	COUNTY	LEGAL DESCRIPTION	ACRES
SUTEY RANCH	GARFIELD	T. 7 S., R. 88 W., SIXTH PRINCIPAL MERIDIAN, SEC. 14, A TRACT OF LAND IN LOTS 1 AND 2 DESCRIBED BY METES AND BOUNDS; SEC. 15, LOTS 1, 2, 6 THROUGH 12, INCLUSIVE, 15, AND 16, AND SEC. 16, LOT 8 <i>PARCEL 1 INCLUDES APPROXIMATELY 2.25 CUBIC FEET PER SECOND (CFS) OF DITCH WATER RIGHTS, IN THE FORM OF 12 SHARES OF THE CAPITAL STOCK OF THE PARK DITCH AND RESERVOIR COMPANY, CERTIFICATE NO. 051, AND 1.33 SHARES OF THE CAPITAL STOCK OF THE PARK DITCH AND RESERVOIR COMPANY, CERTIFICATE NO. 055 DECREED TO THE PARK DITCH AND RESERVOIR COMPANY, AND 50 ACRE FEET OF WATER STORAGE RIGHTS.</i>	~557
HAINES PARCEL	PITKIN	T. S., R. 88 W., SIXTH PRINCIPAL MERIDIAN, SEC. 24, A PARCEL IN THE E $\frac{1}{2}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ W $\frac{1}{2}$ E $\frac{1}{4}$ , AND NE $\frac{1}{4}$ SE $\frac{1}{4}$ LYING NORTHEAST OF THE CENTERLINE OF PRINCE CREEK ROAD AS DESCRIBED BY METES AND BOUNDS	111.8
TOTAL ACREAGE			668.8







**PURPOSE AND NEED FOR THE RESOURCE MANAGEMENT PLAN AMENDMENT (RMPA).** The purpose of the action is for the BLM to determine the appropriate management for the newly acquired lands in the planning area and incorporate those management plan decisions into the 2015 CRVFO Record of Decision (ROD) and Approved Resource Management Plan (RMP) (BLM 2015a) through an RMPA. The need for the action is to begin managing the newly acquired public lands to meet the BLM's multiple use/sustained yield mission and to provide land use decisions as required by the Federal Land Policy and Management Act (FLPMA) of 1976.

**PLANNING AREA.** The planning area consists of the Sutey Ranch, Haines parcel and the Sutey Allotment. As described above, the Sutey Ranch is roughly 2 miles north of Carbondale in Garfield County. Physical access to this parcel is from Highway 82 via Cattle Creek Road (CR 113) and Crystal Springs Mountain Road (CR 112) which crosses the northeast corner of the parcel. The Haines parcel is located 5 miles southeast of Carbondale on the west side of an area known as The Crown. It is bordered by BLM lands to the east with private land to the north. Prince Creek Road (CR 111) and Two Shoes Ranch lie to the south and west. Planning area maps can be found in **Appendix A**. Photos of the planning area can be found in **Appendix B**.

**DECISIONS TO BE MADE.** The BLM will decide on the appropriate management plan for the Sutey Ranch and the Haines parcel. The decisions will predominantly consist of land use plan-level decisions (e.g., designation of an SRMA) necessary to resolve issues and provide future management guidance. Implementation decisions such as route designations, additional facility development (e.g. round pens and hitching posts), parking area development and habitat treatment areas will be considered at a site-specific level in subsequent NEPA analysis. The land use plan-level decisions will be protestable during the 30-day protest period, while any implementation decisions contained in this document will be appealable after the decision is issued. See the BLM's Land Use Planning Handbook (BLM 2005) for a more detailed description of the types of decisions in this RMPA. Best management practices can be found in Appendix K of the 2015 CRVFO Approved Resource Management Plan.

**RELATIONSHIP TO STATUTES, REGULATIONS, PLANS OR OTHER ENVIRONMENTAL ANALYSES.** The management of the newly acquired public lands would comply with all federal, state and local laws. The alternatives presented in Chapter 2 are consistent with the goals and objectives from the 2015 CRVFO Approved Resource Management Plan. This EA has been prepared following the completion of BLM-CO-040-2013-0061-EA, the Sutey Ranch Land Exchange EA that was completed on June 20, 2014.

This EA is consistent with the National Environmental Policy Act (NEPA) of 1969, as amended and the Federal Land Policy and Management Act (FLPMA) of 1976, as amended. While FLPMA directs the BLM to provide for multiple uses on public lands and resources, it is not considered a mandate to allow for all multiple uses on all acreage.

**PUBLIC SCOPING.** The formal scoping period began with publication of the Notice of Intent (NOI) in the *Federal Register* on July 6, 2018 and ended on August 5, 2018. The NOI summarized the purpose and need for the EA and detailed ways the public could provide scoping comments. A summary of the comments and issues raised during public scoping can be found in the Scoping Summary Report (**Appendix C**).

The BLM held a public scoping open house meeting on July 12, 2018 from 4-7pm at the Third Street Center in Carbondale to solicit comments from the public and relevant agencies and to provide staff to answer questions from attendees. During the public scoping period, the BLM received 234 public scoping comments from a variety of groups, agencies and individuals. The following summarizes the key issues expressed during public scoping:

#### *Recreation*

- Will the BLM manage the Sutey Ranch as part of the Red Hill SRMA and the Haines parcel as part of the Crown SRMA?

- How will the BLM manage hunting on the acquired parcels?
- How will the BLM manage the acquired parcels to provide for an array of recreational opportunities?
- How will the public access the acquired parcels?

#### *Wildlife*

- How will the BLM manage the acquired lands to minimize impacts to wildlife, especially big game?

#### *Public Health and Safety*

- How will the BLM manage the acquired lands to minimize conflicts between hunting and other recreational uses?
- How will the BLM manage the acquired lands to minimize conflicts between equestrians and other forms of recreation?

#### *Cultural Resources*

- How will the BLM manage cultural resources on the Sutey Ranch?

#### *Socioeconomics*

- How will public management of the parcels affect the local economy?

After the public scoping period, the BLM developed the Preliminary EA and released it for a 30-day public comment period on October 5, 2018. The BLM hosted an open house on the Preliminary EA to help answer questions from the public on October 25, 2018 from 4pm to 7pm at the Third Street Center in Carbondale. The public comment period ended on November 5, 2018. The BLM received 212 individual public comment letters during the public comment period. Substantive comments received during the public comment period and their associated BLM responses can be found in **Appendix J**.

## **CHAPTER 2 – ALTERNATIVES AND DECISIONS**

NEPA requires the development and consideration of a reasonable range of alternatives to analyze impacts and guide decision makers in developing and selecting the decisions to include in the RMPA. All alternatives must be viable and reasonable.

**PLANNING CRITERIA.** Planning criteria are the standards, rules, and other guidelines developed by managers and interdisciplinary teams, with public input, for use in forming judgments about plan-level decision making, analysis, and data collection. These criteria are used to establish the parameters or “ground rules” for making planning decisions and for conformance with the goals and objectives of the 2015 RMP actions. The criteria may be adjusted during RMP development based on management concerns and the results of the public scoping process. The planning criteria include the following:

1. The decisions are subject to and will be reviewed for conformance with the goals and objectives in the 2015 CRVFO ROD and Approved RMP (BLM 2015).
2. The RMPA/EA process will be in compliance with FLPMA, NEPA, and applicable laws, regulations, and policies.

The RMPA process will be governed by the planning and NEPA regulations at 43 Code of Federal Regulations (CFR) 1610 and 40 CFR 1500, the BLM Land Use Planning Handbook (H-1601-1) and the BLM NEPA Handbook (H-1790-1).

3. Lands affected by the RMPA only apply to public surface and mineral estate managed by the BLM. No decisions will be made relative to non-BLM administered lands or non-Federal minerals.
4. The BLM will maintain the water shares secured in the exchange to benefit wildlife and the public.
5. Public participation will be an integral part of the planning process.
6. The RMPA will recognize all valid existing rights.

**ALTERNATIVES DEVELOPMENT.** Four management alternatives were developed to fulfill the purpose and need, to meet the multiple use mandates of the FLPMA and to address identified planning issues. Each alternative was designed to respond to the planning issues differently, providing a range of possible management approaches that the BLM could implement.

**ALTERNATIVES CONSIDERED IN DETAIL.** The alternatives developed and analyzed during the planning process reflected a reasonable range of potential management actions. General overviews of each alternative are provided below.

#### **Management Actions Common to All Action Alternatives.**

*Sutey Ranch.* Stipulations for surface disturbing activities established in the 2015 CRVFO Approved RMP are carried forward into all alternatives and can be found in **Appendix D**. Surface-disturbing activities would be restricted through application of no-surface occupancy stipulations for priority wildlife areas or SRMAs. Motorized and mechanized use is limited to designated routes. Cross-country foot and horse travel would be allowed. Wintering big game and other wildlife species would be protected by closing the Sutey Ranch to public motorized and mechanized travel from December 1 to April 15. Irrigation and management of the ranchlands would occur under all alternatives. Management of cultural resources and historic resources would be addressed through Section 106 consultation at the implementation level and the cultural management plan for the historic property. Hunting and hiking would be allowed under all alternatives. The Sutey Ranch would be managed as a Class II Visual Resource area under all alternatives.

*Haines Parcel.* The Haines parcel is a small 111 acre parcel containing mountain bike trails that access the adjacent Crown SRMA. It has a limited range of reasonable management options. The Haines parcel would be added to the Crown SRMA and managed under the Crown SRMA Management Framework, which can be found in **Appendix E**. The Haines parcel would be managed as a Class II Visual Resource area under all alternatives. Wintering big game and other wildlife species would be protected by restricting the Haines parcel to public motorized and mechanized travel from December 1 to April 15; except routes between the South Porcupine Trail and Pitkin County Road 5 (Prince Creek Road) that would be open to mechanized travel. Grazing would be managed as a part of the Prince Creek Allotment.

#### **No Action Alternative.**

Since the BLM acquired the lands through a land exchange analyzed in the Sutey Ranch Land Exchange EA (BLM-CO-N040-2013-0061-EA) and the BLM did not manage the lands prior to the acquisition, a traditional “no action” alternative does not apply in this case. There are currently no BLM management decisions in place for the acquired lands, which is not consistent with the purpose and need for action. Proper use of the parcels would continue to be unfocused and difficult to enforce without BLM management decisions in place. The current management of the parcels is described in the affected environment section for each resource/resource use in Chapter 3 below. The no action analysis in this document

is a continuation of current trends as described by the affected environment in Chapter 3 below. The no action analysis incorporates by reference the analysis of the proposed action in the Sutey Land Exchange EA (BLM-CO-040-2013-0061-EA) See the exchange EA at Chapter 3, pages 3-3 through 3-137.

#### **Alternative 1 (Wildlife and hunting emphasis).**

*Sutey Ranch.* Alternative 1 proposes to manage the Sutey Ranch predominantly for the benefit of wildlife and wildlife-related activities such as hunting and wildlife viewing. Alternative 1 allows equestrian use (and supporting facilities such as trailer parking) and mountain biking access through the ranch to the north side of the Red Hill SRMA from June 1<sup>st</sup> to September 30<sup>th</sup>. The irrigated lands would be managed to provide forage for wildlife. There would be an emphasis on habitat treatments to improve the surrounding ranchlands for wildlife. Visitor use would be managed to avoid the irrigated fields. Mechanized, foot, and horse use would be restricted from December 1<sup>st</sup> to April 15<sup>th</sup>. The BLM would add the Sutey Ranch to stipulation CRVFO-NSO-7 - Priority Wildlife Habitat and prohibit surface occupancy and surface-disturbing activities to protect habitat for wildlife. The Sutey Ranch would be made available for livestock grazing as a reserve allotment, and management would be enhanced by combining the Sutey Ranch Allotment with the adjacent Sutey Allotment.

#### **Alternative 2 (Equestrian access emphasis).**

*Sutey Ranch.* Alternative 2 proposes to manage the Sutey Ranch with an emphasis on equestrian activities. The Sutey Ranch would be added as a separate recreation management zone (RMZ) to the Red Hill SRMA. No routes would be designated for mountain biking. The irrigated fields would be managed to benefit wildlife. Foot and horse travel would be allowed year-round. The Sutey Ranch would not be available for livestock grazing. The adjacent Sutey Allotment would not be available for grazing due to lack of access through the Sutey Ranch.

#### **Alternative 3 (Mountain bike and hiking access emphasis).**

*Sutey Ranch.* Alternative 3 proposes to manage the Sutey Ranch as part of the Red Hill SRMA and managed under the Red Hill SRMA Management Framework outlined in **Appendix E**. To benefit wildlife, mechanized use would be seasonally restricted from December 1 to April 15. Foot and horse travel would be allowed year-round. The irrigated fields would be managed to benefit wildlife and livestock grazing. The Sutey Ranch would be made available for livestock grazing and management would be enhanced by combining the Sutey Ranch Allotment with the adjacent Sutey Allotment.

#### **Alternative 4 (Proposed Plan Amendment).**

*Sutey Ranch.* Alternative 4 proposes to manage the Sutey Ranch for the benefit of wildlife especially during the critical winter season balanced with improved access for hunting, horseback riding and mountain biking, as well as agricultural use. Alternative 4 would allow seasonal equestrian use from April 16<sup>st</sup> to November 30<sup>th</sup> and mountain biking access through the ranch to the north side of the Red Hill SRMA from June 1 to September 30. The irrigated lands would be managed to provide forage for wildlife. The Sutey Ranch would be made available for livestock grazing as a reserve allotment, and management would be enhanced by combining the Sutey Ranch Allotment with the adjacent Sutey Allotment. Visitor use would be managed to avoid the irrigated fields. Subsequent implementation decisions will address development of equestrian parking facilities, designated trail locations, agricultural management as well as management of cultural resources. By designating seasons of use and a mountain bike access route to the Red Hill SRMA, Alternative 4 strives to reduce conflicts between recreation users as well as reducing impacts on concentration of winter wildlife. Alternative 4 would not add additional rules and/or regulations beyond the guidance established in the 2015 CRVFO Approved RMP.

#### **Alternative 4A.**

Alternative 4A would be the same as Alternative 4, except that Sutey Ranch and Haines Parcel would be closed to fluid mineral leasing.

**ALTERNATIVES AND DECISIONS CONSIDERED, BUT NOT ANALYZED IN DETAIL.** The following management options were considered as possible ways to manage the acquired lands but were eliminated from detailed analysis because they were unreasonable or not practical for technical, legal, or policy reasons. These include:

*ACEC Proposal:* Several public scoping comments suggested that the BLM should designate the Sutey Ranch and the Haines parcel as an Area of Critical Environmental Concern (ACEC). Consistent with the BLM’s policy, a Relevance and Importance (R and I) evaluation was completed for both of the acquired parcels by BLM specialists. The R and I evaluation found that these areas do not meet the relevance or importance criteria that would allow the BLM to analyze designation of an ACEC. The R and I evaluation completed by BLM staff can be found in **Appendix F**.

**DECISIONS BY PROGRAM.** The RMPA decisions in each alternative correspond to the decisions (e.g., goals, objectives, management actions and allowable uses) in the 2015 CRVFO Approved RMP. The document is available online at <https://eplanning.blm.gov/epl-front-office/>.

**PREFERRED ALTERNATIVE.** As required by the BLM Land Use Planning Handbook (page 22), the BLM has identified its preferred alternative as Alternative 1 for both the Sutey Ranch and Haines parcel. The BLM has crafted a proposed plan amendment (Alternative 4) that includes components from Alternatives 1, 2 and 3.

**Table 2** below describes each alternative in detail. Actions that are applicable to more than one but not all alternatives are indicated by denoting those objectives or actions as the “same as Alternative 1,” for example. In some cells, “No Similar Action” is used to indicate that there is no similar goal, objective or action to the other alternatives, or that the similar goal, objective or action is reflected in another management action in the alternative.

**TABLE 2 - MANAGEMENT ACTION ALTERNATIVES**

Alternative 1 (Wildlife and Hunting Emphasis)	Alternative 2 (Equestrian Access Emphasis)	Alternative 3 (Mountain Biking and Hiking Access Emphasis)	Alternative 4 (Proposed Plan Amendment)
<b>Water</b>			
Irrigate and maintain water rights on the Sutey Ranch.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<b>Vegetation</b>			
Maintain Sutey Ranch, including irrigated ranchlands, for wildlife habitat. Where feasible, increase the diversity of native plant species in the non-irrigated pastures.	Same as Alternative 1.	Maintain Sutey Ranch, including irrigated ranchlands, for livestock forage and wildlife habitat.	Same as Alternative 1. (L)
<b>Wildlife</b>			
Add the Sutey Ranch to Stipulation CRVFO-NSO-7 - Priority Wildlife Habitat. Prohibit surface	No similar alternative.	No similar alternative.	Same as Alternative 1. (L)

occupancy and surface-disturbing activities to protect vegetation cover and forage (557 acres).			
<p>Walk-in Hunting: To provide a quality hunting opportunity, access is restricted to foot only from April 16 to May 31 and October 1 to November 30 on the Sutey Ranch.</p>	No similar alternative.	No similar alternative.	No similar alternative. (I)
<p>Winter Wildlife Closures. <i>Sutey Ranch</i>: Protect wintering big game and other wildlife species by restricting non-motorized, motorized, and mechanized travel on the Sutey Ranch from December 1 to April 15</p> <p><i>Haines parcel</i>: Protect wintering big game and other wildlife species by closing the Haines parcel to motorized and mechanized travel from December 1 to April 15; except routes between the South Porcupine Trail and Pitkin County Road 5 (Prince Creek Road) that would be open to mechanized travel only.</p> <p>Note: Under severe winter conditions, the winter closure may be extended if requested by the CPW. Severity of the winter conditions would be determined on the basis of snow depth, snow crusting, daily mean temperatures, and whether animals are concentrated on the winter range during the winter months.</p>	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)



<b>Cultural Resources</b>			
The historic Sutey Ranch property has been determined to be an eligible site. Manage the historic Sutey Ranch property (site # 5GF5558) for public use (long-term preservation and on-site interpretation).	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<i>Note: A cultural resource management (CRM) plan will be developed subsequent to this document. Implementation-level decisions and potential mitigation will be determined in the CRM plan.</i>			
<b>Visual Resources</b>			
Manage the Sutey Ranch under VRM class II objectives to maintain the historic ranchland view shed.  Manage the Haines parcel to maintain class II SRMA objectives.	Manage the Sutey Ranch and the Haines parcel to maintain VRM class II SRMA objectives and to retain the historic ranchland view shed.	Same as Alternative 2.	Same as Alternative 1. (L)
<b>Wildland Fire Management</b>			
Designate the Sutey Ranch and Haines parcel as unacceptable for Wildland Fire Use.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<b>Forestry</b>			
Close the Sutey Ranch and the Haines parcel to timber harvest, firewood cutting and special forest product harvest.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<b>Livestock Grazing</b>			
Available for Grazing as a Reserve Common Allotment.  Allow limited livestock grazing on the Sutey Ranch through a temporary non-renewable permit.  Combine the Sutey Ranch (estimated 38 AUMs) with the Sutey Allotment (55 AUMs) to form the Sutey Ranch Allotment which	Not Available for Grazing.  The Sutey Ranch would not be available for livestock grazing. The adjacent Sutey Allotment would not be available for grazing due to lack of access through the Sutey Ranch.	Available for Grazing.  Allow livestock grazing through a term permit.  Combine the Sutey Ranch (estimated 38 AUMs) with the Sutey Allotment (55 AUMs) to form the Sutey Ranch Allotment which would be permitted for a total of 93 AUMs.	Same as Alternative 1. (L)

would be authorized for up to 93 AUMs.			
Include the Haines parcel as part of the Prince Creek Allotment.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<b>Recreation and Visitor Services</b>			
No similar alternative.	<i>Sutey Ranch.</i> Designate the Sutey Ranch as a recreation management zone (RMZ) within the Red Hill SRMA, emphasizing horseback riding. Manage the lands according to the framework found in <b>Appendix E</b> . Mechanized travel would not be allowed in the RMZ.	Expand the Red Hill SRMA to include the Sutey Ranch. Manage the lands according to the framework found in <b>Appendix E</b> .	No similar Alternative. (L)
<i>Haines parcel.</i> The Haines parcel would be added to The Crown SRMA and managed under The Crown SRMA Management Framework (see <b>Appendix E</b> ).	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<i>Camping Restrictions –</i> The Haines parcel would be included in the Prince Creek camping restriction, which states that camping and overnight use is prohibited outside of designated campsites and developed campgrounds within ¼ mile of Prince Creek Road (Pitkin County Road 7).	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (I)
The Sutey Ranch would be closed to camping and overnight use.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (I)
<i>Special Recreation Permits.</i> Do not issue SRPs on the Sutey Ranch.  On the Haines parcel SRPs would be issued as a discretionary action and the CRVFO would evaluate the need for new SRPs or new uses on existing permits every 5	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (I)

years.			
No similar alternative.	Consistent with the Red Hill and Crown SRMA designations, stipulation CRVFO-NSO-25 would apply, which prohibits surface use, occupancy and surface-disturbing activities in SRMAs.	Same as Alternative 2.	No similar alternative. (L)
<b>Comprehensive Trails and Travel Management</b>			
<p><i>Area Designations.</i> Sutey Ranch is designated as closed to motorized use (except for administrative motorized use).</p> <p>Motorized use on the Haines parcel is limited to designated routes.</p>	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<p><i>Mechanized Travel.</i> Increase access over the no action alternative by providing an additional access route for mechanized use on one single-track trail through Sutey Ranch to the north side of the Red Hill SRMA from June 1 - September 30. The route past the main parking area would be designated in the area north of route 8296F (the main ranch road).</p> <p>Mechanized travel would be limited to designated routes on the Haines parcel.</p>	<p><i>Mechanized Travel.</i> No routes would be designated for mechanized use on the Sutey Ranch.</p> <p>Mechanized travel would be limited to designated routes on the Haines parcel.</p>	<p><i>Mechanized Travel.</i> Mechanized travel would be on designated routes on Sutey Ranch and the Haines parcel.</p>	<p><i>Mechanized Travel.</i> Increase access over the no action alternative by providing an access route for mechanized use (mountain bikes) on one single-track trail through Sutey Ranch to the north side of the Red Hill SRMA from June 1 - September 30. The route past the main parking area would be designated in the area north of route 8296F (the main ranch road). (In order to address safety concerns between equestrians and mountain bikers, BLM would monitor bike use to ensure there is no more than one violation of the mountain bike travel designation on or south of route 8296F per month or four violations per season. To curb violations BLM would first implement indirect measures such as increased signing, education or staff/volunteer presence. If violations above the standard continue to occur, BLM would redirect mountain bike access to the north side of</p>

			<p>the Red Hill SRMA through the original access trail - Elk Traverse from Mushroom Rock). (I)</p> <p>Mechanized travel(mountain bikes) would be limited to designated routes on the Haines parcel. All currently designated routes would remain open to mechanized travel. (I)</p>
<p><i>Foot/Horse Travel.</i> Sutey Ranch would be managed as follows:</p> <ul style="list-style-type: none"> <li>• Foot (inc. ski) and horse access is restricted from December 1 - April 15 - to reduce disturbance to concentrations of wintering wildlife on the Sutey Ranch.</li> <li>• April 16 - May 31 - Open to cross-country foot travel for walk-in hunting during spring turkey hunting season.</li> <li>• June 1 - September 30 - Open to cross-country foot travel with horse access limited to designated routes that avoid irrigated fields.</li> <li>• October 1 - November 30 - Open to cross-country foot travel during the fall big game hunting seasons.</li> </ul>	<p>Sutey Ranch and the Haines parcel would be open to cross-country foot and horse travel year-round.</p>	<p>Same as Alternative 2.</p>	<p><i>Foot/Horse Travel.</i> Sutey Ranch would be managed as follows:</p> <ul style="list-style-type: none"> <li>• Foot (inc. ski) and horse access is restricted from December 1 - April 15 - to reduce disturbance to concentrations of wintering wildlife on the Sutey Ranch. (I)</li> <li>• April 16 - November 30 - Open to cross-country foot and horse access that avoids irrigated fields. (I)</li> <li>• Routes would not be designated and recreation would be discouraged through the irrigated fields (i.e. during active irrigation). (I)</li> </ul>
<p><i>Over-Snow Area Travel Designations.</i> Designate</p>	<p>Same as Alternative 1.</p>	<p>Same as Alternative 1.</p>	<p>Same as Alternative 1. (L)</p>

the Sutey Ranch as closed to over-the-snow travel for motorized use.			
Designate the Haines parcel closed to over-the-snow travel for motorized use.			
<i>Note: A site-specific travel network of roads and trails for public use would be subsequently analyzed to the extent practical. The final network of routes would be determined subsequent to completion of this document through RMP implementation and additional NEPA analysis.</i>			
<b>Lands and Realty</b>			
<i>Rights-of-Way.</i> Designate the Sutey Ranch and Haines parcel as right-of-way (ROW) avoidance areas (including renewable energy sites such as solar, wind, hydro, and biomass development).	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
<b>Minerals (Including Fluid Minerals)</b>			
<i>Salable Minerals/Mineral Material Disposal:</i> Per the identification of the region as a Priority Wildlife Habitat area, the Sutey Ranch and Haines parcel would be closed to salable minerals/mineral material disposal (such as moss rock, top soil, sand and gravel, scoria, fill dirt).	<i>Salable Minerals/Mineral Material Disposal:</i> Per the Red Hill and Crown SRMA designations, the Sutey Ranch and Haines parcel would be closed to salable minerals/mineral material disposal (such as moss rock, top soil, sand and gravel, scoria, fill dirt).	Same as Alternative 2.	Same as Alternative 2. (L)
<i>Locatable Minerals:</i> Consistent with Section 205 of FLPMA, the donated portion of the Sutey Ranch Parcel (235 acres) are not open to locatable minerals (See <b>Appendix A</b> for a map of this area). The remainder of the Sutey Ranch (321 acres) and the Haines parcel would be recommended for withdrawal from locatable mineral entry.	Same as Alternative 1.	Same as Alternative 1.	<i>Locatable Minerals:</i> Consistent with Section 205 of FLPMA, the donated portion of the Sutey Ranch Parcel (235 acres) are not open to locatable minerals (See <b>Appendix A</b> for a map of this area). The remainder of the Sutey Ranch (321 acres) and the Haines parcel would be open for locatable mineral entry. (L)
<i>Non-energy Solid Mineral Leasing:</i> Per the identification of the region	<i>Non-energy Solid Mineral Leasing:</i> Per the Red Hill and Crown SRMA	Same as Alternative 2.	<i>Non-energy Solid Mineral Leasing:</i> Per the identification of the region as a Priority

as a Priority Wildlife Habitat area, all Federal mineral estate within the Sutey Ranch and Haines parcel is closed to non-energy solid mineral leasing.	designations, all Federal mineral estate within the Sutey Ranch and Haines parcel is closed to non-energy solid mineral leasing.		Wildlife Habitat area, all Federal mineral estate within the Sutey Ranch and Haines parcel is closed to non-energy solid mineral leasing. (L)
<i>Fluid Mineral Leasing:</i> The Sutey Ranch and Haines Parcel would be open to fluid mineral leasing with stipulations carried forward from the CRVFO RMP.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. (L)
No similar action.	No similar action.	No similar action.	<b>Alternative 4A</b> <i>Fluid Mineral Leasing:</i> The Sutey Ranch and Haines Parcel would be closed to fluid mineral leasing. (L)

(L) - land use plan-level decision (protestable)

(I) - implementation-level decision (appealable)

## CHAPTER 3 – AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND CUMULATIVE EFFECTS

**AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES.** This section provides a description of the human and natural environmental resources that could be affected by the alternatives. The Affected Environment defines the existing conditions for a particular resource.

In addition, the section presents comparative analyses stemming from the implementation of the various alternatives and proposed actions. Effects can vary in degree, and can be direct, indirect, or cumulative in nature.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of the alternatives on environmental elements. Not all programs, resources or uses are present in the area, or if they are present, may not be affected by the alternatives. Topics not discussed include:

- **Air Quality** - While the acquired parcels are likely to experience an increase in visitation, impacts to air quality on the parcels from the alternatives are not likely to be significant.
- **Aquatic Wildlife and Fish** - There are no fish bearing streams in the planning area.
- **Areas of Critical Environmental Concern** – Not present in the planning area.
- **Prime or Unique Farmlands/Floodplains** - Not present in the planning area.
- **Forests** - While the acquired parcels are likely to experience an increase in visitation, impacts to forests on the parcels from the alternatives are not likely to be significant.
- **Geology and Minerals** - Unaffected by proposed alternatives. The Sutey Ranch and the Haines parcel are unlikely to be leased for mineral and/or energy development since they are mapped as having: 1) low potential for oil and



gas development, 2) minimal values of locatable minerals, and 3) low potential for salable minerals development. The Federal Government would continue to own the mineral estate.

- **Invasive Plants and Noxious Weeds** – The BLM will prevent the establishment of, treat existing, and reduce/slow the spread of noxious and invasive weeds under all alternatives.
- **Paleontology** - The planning area is a low potential area for paleontological resources, so impacts to these resources from the alternatives are not likely to be significant.
- **Sensitive, Threatened, & Endangered Plants** - Not present in the planning area.
- **Sensitive, Threatened, & Endangered Wildlife** - There is no critical habitat, occupied habitat, or known occurrences for any Federally listed, proposed, or candidate terrestrial wildlife. Seasonal use by some Colorado sensitive species could occur. Although sensitive bats could forage in the project area, there are no known hibernacula, maternity colonies, or bachelor colonies. Sensitive raptors may forage on the project area, but suitable nesting habitat is not available. Potential Brewer's sparrow nesting habitat on the Sutey Ranch is small and fragmented. Potential impacts to migratory birds, including this species, are analyzed in the migratory birds section.

There are no greater sage-grouse Priority Habitat Management Areas (PHMA) or General Habitat Management Areas (GHMA) in the project area. There are no mapped populations of Great Basin spadefoot toads in eastern Garfield County or Pitkin County (Hammerson, 1999, AmphibiaWeb 2018). There are no known populations of northern leopard frogs in the project area, and typical breeding habitat is not available (e.g., permanent bodies of water, beaver ponds, seasonally flooded areas associated with permanent pools or streams, fairly clear water, aquatic vegetation) (Hammerson 1999, AmphibiaWeb 2018). Any potential breeding habitat associated with Prince Creek would be adjacent to the creek and would be outside of the Haines parcel.

- **Realty Authorizations** - Unaffected by alternatives.
- **Environmental Justice** - Unaffected by alternatives.
- **Wild and Scenic Rivers** - Not present in the planning area.
- **Wilderness/WSAs/Wilderness Characteristics** - Not present in the planning area.
- **Wetlands and Riparian Zones** - Approximately 1,500 feet of the Prince Creek Ditch crosses the Haines parcel and supports a very limited amount of riparian vegetation, but would be unaffected by the proposed alternatives.
- **Noise** - While the BLM does expect some increases in noise on the parcels due to increased visitation, impacts on noise are not expected to be significant.
- **Hazardous or Solid Wastes** - While the acquired parcels are likely to experience an increase in visitation, impacts from solid wastes on the parcels from the alternatives are not likely to be significant.

Only those elements that are present and have the potential to be significantly impacted are described and brought forth for detailed analysis.

These include:

- Cultural Resources and Native American Religious Concerns
- Migratory Birds
- Surface and Ground Water Quality
- Soils
- Visual Resources

- Terrestrial Wildlife
- Vegetation
- Comprehensive Trails, Travel Management and Access
- Livestock Grazing Management
- Recreation and Visitor Services
- Social and Economic Conditions
- Water Rights
- Locatable, Salable and Non-energy Leasable Minerals

## CUMULATIVE EFFECTS.

Cumulative effects are defined in the Council on Environmental Quality (CEQ) regulations (40 CFR 1508.7) as “... the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”

**Table 3** lists the past, present, and reasonably foreseeable future actions within the area that may be affected by any Alternative; for this project, the area considered for the cumulative effects analyses is the planning area located within the geographic scope of the Roaring Fork Valley.

**TABLE 3 - PAST, PRESENT, AND REASONABLY FORESEEABLE ACTIONS IN THE PLANNING AREA**

Action Description	STATUS		
	Past	Present	Future
Livestock Grazing	X	X	X
Recreation	Minimal, as allowed by private landowners	X	X
Invasive Weed Inventory and Treatments	X	X	X
Range Improvement Projects : Water Developments Fences & Cattle guards	X	X	X
Wildfire and Emergency Stabilization and Rehabilitation			X
Oil and Gas Development: Well Pads, Access Roads, Pipelines, Gas Plants Facilities, etc.			
Power Lines	X	X	X
Seismic Exploration			
Vegetation Treatments	X	X	X
Hunting	X	X	X

Development on Adjacent Private Lands	X	X	X
Management of historic structures.	X	X	X
Irrigation of ranch lands	X	X	X
Wildlife habitat management		X	X

Since the cumulative effects analysis for this document is expected to be substantially similar to the cumulative effects analysis completed in the CRVFO's 2014 Proposed RMP and Final EIS (BLM 2014), this cumulative effects analysis is incorporated by reference in each cumulative effects analysis below. Due to the site-specific nature of this RMP Amendment, the spatial scope for each resource/resource use is the Roaring Fork Valley. The time frame used for the cumulative analysis is the same as what was used for the CRVFO 2015 Approved RMP, which is about 20 years.

The CRVFO Proposed RMP and Final EIS can be found here:

[https://eplanning.blm.gov/epl-front-office/eplanning/lup/lup\\_register.do](https://eplanning.blm.gov/epl-front-office/eplanning/lup/lup_register.do)

## NATURAL, BIOLOGICAL AND CULTURAL RESOURCES

### 1. CULTURAL RESOURCES AND NATIVE AMERICAN RELIGIOUS CONCERNS

#### AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.

The BLM manages cultural resources on public lands in accordance with the Antiquities Act of 1906, National Historic Preservation Act (NHPA) of 1966, Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, the Archaeological Resources Protection Act of 1979, and various other laws and Executive Orders (EOs). The management process is also governed by the Colorado BLM's Protocol with the State Historic Preservation Officer (SHPO), implementing BLM's National Programmatic Agreement with the Advisory Council on Historic Preservation. Section 106 of the NHPA applies to consideration of the presence of and effect to cultural resources on both public and private land in the Area of Potential Effect (APE).

- a. **Sutey Ranch.** For this planning effort, 41.3 acres were inventoried at the Class III level and intensive recordation of the historic Sutey Ranch parcel was completed (CRIR CRVFO# 1018-22) in 2018. Four new cultural resource sites were identified and recorded; the historic Sutey Ranch (5GF5558) and the historic Park Ditch (5GF3835), as well as two new segments of the Park Ditch (5GF3835.2 and 5GF3835.3).

The historic Sutey Ranch is eligible to be listed on the National Register of Historic Places (NRHP) based on its integrity of location, setting, and feeling. The ranch is a unique opportunity to view a historic homestead in the Roaring Fork Valley that has had very little disturbance or modification from its original construction and setting. A total of 26 features are associated with the historic Sutey Ranch. These features vary in significance and many of them are contributing to the overall eligibility of the site.

The Park Ditch is also eligible for the NRHP based on its significance of diverting water from Cattle Creek through multiple ranches leading to the Sutey Ranch. The ditch played a major role in the establishment of the Sutey Homestead and the potential to irrigate the fields for crops. Segment 2 of the Park Ditch is not eligible for the NRHP as it is deteriorated and obscure in spots with very little integrity remaining. Segment 3 of the Park Ditch is contributing to the overall eligibility of the Park Ditch as it retains aspects of setting, location and feeling.

The historic homestead site and the associated Park Ditch are currently being managed to retain their historic integrity.

- b. Haines Parcel.** A total of 59.3 acres were inventoried around existing routes within the Haines parcel in 2017. Two historic properties, a ditch and a road, (5GF.5461/5PT.1389/5PT.1389.1 and 5PT.1390) and one historic trash scatter isolated find (5PT.1391) were documented during this inventory. These properties are not considered eligible for listing on the NRHP.

## **ENVIRONMENTAL CONSEQUENCES.**

To date, there are five known cultural resources within the Sutey Ranch and Haines parcel. These resources are predominately historic and related to ranching and livestock grazing. The historic Sutey Ranch has been determined an eligible site to the NRHP and therefore stipulation CRVFO-NSO-21 - Historic Properties, would limit surface occupancy and surface-disturbing activities within 100 meters of historic properties. Prehistoric cultural resources are likely present but have not been located within inventoried areas. A cultural resource management (CRM) plan will be developed for the Sutey Ranch and Haines parcel subsequent to this document. Implementation-level decisions and potential mitigation will be determined in the CRM plan. Sources of impacts to cultural resources may be surface-disturbing activities or alterations to the visual setting of historic resources.

### **Impacts Common to All Action Alternatives.**

**Sutey Ranch.** Cross-country travel of any type and mode has a greater potential to impact cultural resources. Access to the Sutey Ranch parcel by foot would have the least potential for direct ground disturbing impacts to cultural resources but may increase disturbance to the standing historic structures if vandalism or looting occurs. Cross-country use by horseback riders may have impacts from trampling and artifact breakage if they travel through areas where cultural resources occur. Limiting horseback travel to designated routes would have negligible impacts to cultural resources because designated routes would be surveyed for cultural resources before designation.

Closing the parcel to motorized use would help minimize potential impacts to cultural resources because it typically reduces potential vandalism. Potential ground disturbing impacts by motorized vehicles would not occur, such as artifact breakage through crushing or displacement of artifacts.

Impacts to cultural resources from livestock grazing can include trampling and breakage of artifacts, ground disturbance from livestock concentration areas, and leaning or rubbing on historic structures.

Irrigation and management of the ranch lands of the Sutey Ranch parcel would maintain these resources to their original purpose and function. Use and maintenance of these resources would not impact cultural resources as long as the historic footprint of the ditches, irrigations controls, and pasture lands are maintained.

**Sutey Ranch and Haines Parcel.** Designating the Sutey Ranch and Haines parcel as ROW avoidance areas, closed to saleable and non-energy solid mineral leasing would be beneficial to cultural resources because it limits potential ground disturbing actions that may have adverse impacts to cultural resources. Applying No Surface Occupancy (NSO) stipulations for surface-disturbing activities would also limit ground disturbing impacts to cultural resources from development.

Closing the parcels to overnight use and camping would be beneficial to cultural resources because it would help protect the standing historic structures on the parcel from being used as shelter or potentially vandalized from use over time.

**Haines Parcel.** Issuing SRPs and adding the parcel to the Crown SRMA would have little impact to cultural resources within the Haines parcel because use would be limited to designated routes and all of the designated routes within the parcel have been inventoried and no historic properties would be impacted.

## **Impacts Relating to Specific Alternatives**

### **Alternative 1**

**Sutey Ranch.** When there is public use in close proximity to historic structures, there is a potential for vandalism and unintentional damage to the structures. Managing with an emphasis on the protection of wildlife habitat would have the potential to have the least impacts of all the alternatives to cultural resources due to the anticipated lower amount of visitor use. However, managing the Sutey Allotment as a reserve allotment has potential for some continued impacts to cultural resources from livestock trampling and potential disturbance to the standing historic structures from leaning or rubbing on them. Livestock grazing would be temporarily authorized, therefore lessening the impact of overall grazing as compared to Alternative 3, which would authorize annual grazing.

Habitat treatment projects would be inventoried at the implementation level and cultural resources would be avoided and protected through the NHPA Section 106 process. Habitat treatment in the historic Sutey Ranch would reduce fuels within the parcel, potentially benefiting cultural resources, because if a fire occurs in the area it is less likely to burn through the historic structures at the site and cause impacts. Habitat treatment may help reduce fuel load and protect sensitive Native American sites from potential threats caused by wildfire as well.

Allowing one mechanized trail would have minimal impacts to cultural resources because it would be inventoried at the implementation level and mitigation would be determined if necessary.

### **Alternative 2**

**Sutey Ranch.** Designating the parcel as a RMZ within the Red Hill SRMA for horseback riding would have slightly more impact than Alternative 1, 4, and 4A to cultural resources due to the increase in public use. Cross-country horseback riding has the potential to impact cultural resources by trampling artifacts if travel occurs through sites.

Not identifying the land as available for livestock grazing is beneficial for cultural resources because impacts from grazing, such as trampling or rubbing on historic structures, would not occur.

### **Alternative 3**

**Sutey Ranch.** Managing the Sutey Ranch parcel for mountain biking, hiking, and horseback riding access would have the greatest impact to cultural resources out of the all action alternatives due to Alternative 3 having the most estimated use. Designating the parcel as an expansion of the Red Hill SRMA would increase visitor use to the parcel specifically for recreation. The proximity and amount of access routes has the potential to increase vandalism to cultural resource (Hedquist 2014). In addition, the promoted SRMA designation would increase visitor use and may deter some vandalism increased public presence.

Mechanized travel would be limited to designated routes that would be inventoried at the implementation level. Developing these routes within the historic Sutey Ranch property could warrant mitigation, but would be determined through the CRM plan and the NHPA Section 106 process.

Managing the Sutey Ranch parcel for livestock grazing would have potential impacts to cultural resources from trampling and breakage of artifacts, ground disturbance from livestock concentration areas, and leaning or rubbing on historic structures. This alternative would have the greatest impact from grazing because livestock would be in the parcel regularly as part of an annual grazing permit.

#### **Alternative 4 and 4A**

- a. Sutey Ranch.** Under Alternatives 4 and 4A there would be additional visitation by equestrians during the spring and fall months but the difference in impacts to cultural resources would be negligible.
- b. Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on cultural resources and Native American religious concerns from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained in the 2014 CRVFO Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.2.8 Cultural Resources, pages 4-353 through 4-380 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

For other resources and resource uses, the impacts to cultural resources would be similar to those described for Alternative 1, except there would be additional horseback riding in the spring and fall that would result in an increase in public visitation to the site. As a result, there would be an increase in potential for accidental trampling, vandalism, and unintentional damage to the structures.

#### **CUMULATIVE EFFECTS**

The cumulative effects on cultural resources for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2015 Proposed RMP and Final EIS. See pages 4-378 to 4-380. That analysis is incorporated here by reference.

For many years, private use of the Sutey Ranch and Haines parcel have been subject to a variety of uses and events that have affected cultural resources to various degrees. Historic livestock grazing and the associated water developments, roads, as well as the homestead and built structures for the Sutey Ranch facility may have had an impact on prehistoric cultural resources. Livestock that grazed the Sutey Ranch and Haines parcel have caused ground disturbance around water sources, such as livestock ponds, and areas where livestock loaf and concentrate. Prehistoric sites within these areas prior to historic settlement and uses are unknown but may have likely been related to isolated hunting events or short-term habitation near reliable water sources. Prehistoric artifact collection likely occurred during historic habitation of the parcels.

Vegetation treatment activities, such as hand thinning of pinyon and juniper, may have had an impact to prehistoric sites if there was the presence of aboriginal wooden structures. These types of sites are vulnerable to vegetation treatment as they may be cut down or the poles from these structures may be reused historically for fence posts.

Since the passage of FLPMA, NEPA, and the NHPA, the impacts to cultural resources from livestock development, route construction, and vegetation treatment projects have been greatly reduced or mitigated by using the Section 106 process to



avoid impacts to sites. The 2015 CRVFO Resource Management Plan provided even more protections for cultural resources. Factors such as decreased livestock use of the area and protections by federal law through federal land acquisition have resulted in more stable archaeological site surface in recent years.

Based on anticipated use of the Sutey Ranch and Haines parcel by the public for activities such as hiking, horseback riding, and mountain biking, cumulative impacts to these areas are likely to gradually increase. Access into these areas that were previously private land, as well as connections of these parcels to adjacent public land recreation, may result in long-term impacts. These impacts can include soil erosion from trails and cross-country travel if new user-created routes start occurring. Artifact collection may increase since access to these areas would increase.

Under Alternatives 1, 2, 3, 4, and 4A cumulative impacts to cultural resources in the cumulative impacts analysis area from disturbances to known and unknown cultural resources from actions within the Sutey Ranch and Haines parcels would be long-term, negligible to minor impacts.

## 2. MIGRATORY BIRDS

### AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.

The term “migratory birds” applies generally to native bird species protected by the Migratory Bird Treaty Act (MBTA). This includes passerines (songbirds) as well as birds of prey and most other native species. For most migrant and native resident species, nesting habitat is of special importance because it is critical for supporting reproduction in terms of both nesting sites and food. Among the wide variety of species protected by the MBTA, special concern is usually given to the following four groups:

- Species that migrate across long distances, particularly Neotropical migrant passerines.
- Raptors (e.g. eagles, hawks, falcons, owls), which require large areas of suitable habitat for finding sufficient prey.
- Species that have narrow habitat tolerances and hence are vulnerable to extirpation from an area as a result of a relatively minor habitat loss.
- Species that nest colonially and hence are vulnerable to extirpation from an area as a result of minor habitat loss.

Because of the many species that fall within one or more of these groups, the BLM focuses on species identified by the United States Fish and Wildlife Service (USFWS) as Birds of Conservation Concern (BCC). The current BCC list (USFWS 2008) for Region 16 (Southern Rockies/Colorado Plateau) includes eight species potentially present in or near the planning area: bald eagle, golden eagle, peregrine falcon, flammulated owl, gray vireo, pinyon jay, juniper titmouse, and Brewer’s sparrow. Of these species, the bald eagle, peregrine falcon, and Brewer’s sparrow are also on the Colorado BLM State Director’s Sensitive Species List (BLM 2015b).

There is no critical habitat, suitable habitat, or known occurrences for any Federally listed, proposed, or candidate migratory bird species in the project area.

- a. Sutey Ranch.** Pinyon-juniper woodlands, sagebrush shrublands, and Gambel oak shrublands provide food, cover, and nest sites for a variety of migratory birds. Species that commonly breed in pinyon-juniper woodlands include common nighthawks, common poorwills, black-chinned hummingbirds, gray and ash-throated flycatchers, gray and plumbeous vireos, pinyon jays (BCC), Western scrub-jays, juniper titmice (BCC), bushtits, Bewick’s wrens, blue-gray gnatcatchers, mountain bluebirds, black-throated gray warblers, and chipping sparrows. Sagebrush obligate or semi-obligate species potentially occurring in the project area include sage thrashers; green-tailed towhees; and

Brewer's (BCC), vesper, and sagebrush sparrows. Gambel oak shrublands often support dusky flycatchers, Western scrub-jays, blue-gray gnatcatchers, Virginia's warblers, green-tailed and spotted towhees, and black-headed grosbeaks (Wickersham 2016). Raptors may migrate through the project area or nest at suitable sites. Because most raptors forage over large areas, even if suitable nesting sites are not available or selected, they may still fly over the project area searching for food. Common species in the general area include red-tailed hawks, golden eagles, American kestrels, great horned owls, Cooper's hawks, and sharp-shinned hawks.

- b. Haines Parcel.** Comparable plant communities on the Haines parcel to those found on Sutey Ranch and described immediately above would be expected to support similar migratory bird species.

Management of migratory birds on the parcels is currently passive. The BLM cannot complete comprehensive inventories of migratory birds or apply stipulations without a management plan in place.

## **ENVIRONMENTAL CONSEQUENCES.**

Non-motorized recreation can disturb birds, modify habitat (e.g., trampling vegetation, litter and soil compaction, erosion, spreading weeds), fragment habitat, increase edge effects, increase nutrient loading (i.e., feces and urine), and increase trash (Jordan 2000). Impacts can cause changes in bird physiology, immediate behavior, abundance, and species composition (Steven et al. 2011). Research near Boulder, Colorado suggested that generalist species were more abundant near trails, whereas specialist species were less common near trails. Results also indicated that nest predation was greater near trails and that birds were less likely to nest near trails (Miller et al. 1998).

Horses can cause more flattening of vegetation and compaction of the underlying soil than hikers (Dawson et al. 1974, Whittaker 1978, Jordan 2000). A quantitative assessment of the effects of human and horse trampling in Waterton Lakes National Park showed that horses destroyed eight times as much cover and created an order of magnitude of more bare ground than hikers (Nagy and Scotter 1974). The gouging action of horse's hooves can tear up plants by the roots rather than flattening plants, as typically occurs by hikers (Whittaker 1978).

Movements of recreationists can have at least temporary effects on bird behavior and movements. Direct approaches caused greater disturbance than tangential approaches, rapid movements by joggers caused greater disturbance than slower hikers, and passing or stopping vehicles caused less disturbance than human foot traffic. Horses and riders did not appear to disturb birds (Jordan 2000).

Livestock grazing can alter vegetation structure, composition, and function. Effects on migratory birds are dependent on the species of interest and may be adverse or beneficial depending on grazing timing, frequency, and intensity. Aerial, bark and canopy insectivores may be less influenced by grazing than species feeding on nectar, insects, or seeds in the understory or on the ground. Birds may be displaced as a result of grazing. Trampling of nests, eggs, or young could occur. Losses or decreases in vegetation from overgrazing can decrease rodent prey species and affect local raptors. Areas lacking vegetative structure and complexity would be expected to be lacking bird species richness. This is especially important in riparian areas, which provide habitat for many species in the arid and semiarid west, including upland birds, waders, shorebirds, raptors, neotropical migrants and passerines (Knopf 1996). Migratory birds could be temporarily displaced by humans, vehicles, or dogs during infrastructure maintenance or livestock tending. However, as long as acceptable utilization levels are maintained and land health standards are achieved, any negative impacts to migratory birds from livestock grazing are expected to be minimal and isolated, and should not influence migratory bird populations on a landscape level.

## **Impacts Relating to Specific Alternatives**

### **Alternative 1**

- a. **Sutey Ranch.** This alternative would result in the least amount of habitat alteration and human disturbance to migratory birds. There would be no motorized, mechanized, foot, or horse access from December 1 through April 15. Although migratory birds would be absent during most of this time period, there would essentially be no human activity on the ranch until April 16. There would be no horse use or mechanized travel from April 16 to May 31, which overlaps with the nesting season for the majority of migratory birds using the project area, including Birds of Conservation Concern (i.e., May 15 to July 15). Foot access and administrative use would be allowed from April 16 to May 31, but these uses would create less disturbance from April 16 to May 31 than the uses allowed under other alternatives. From June 1 to September 30, foot and horse traffic would only be along designated routes, and the only mechanized use would be along one route. Year-round cross-country foot and horse travel, which could result in the trampling of nests, disturbance of nesting birds, and habitat alteration, would not be allowed. Migratory birds could be negatively affected by the construction and use of one new mechanized trail on the north side of Sutey Ranch. However, moving mechanized use to the trail and away from the irrigated fields would help mitigate potential disturbance of birds from mountain biking across the property. The fall walk-in hunting period would not be expected to affect most migratory birds because most species would be absent.

There would be more opportunities to rest and recover understory vegetation as a reserve common allotment (Alternatives 1 and 4) than as an allotment with a term permit (Alternative 3), likely improving conditions for a variety of migratory birds.

- b. **Haines Parcel.** This area would be managed for recreation, grazing, and wildlife under all alternatives. There would be no motorized and mechanized travel from December 1 to April 15, except for specific mechanized routes. Foot and horse travel would not be limited during this closure. No additional mechanized routes would be constructed. The parcel would be combined with the Prince Creek Allotment, so cattle grazing would occur. Any impacts to migratory birds would be the same under all alternatives.

## Alternative 2

- a. **Sutey Ranch.** Alternatives 2 and 3 would allow year-round cross-country foot and horse travel, which could result in the trampling of nests, disturbance of nesting birds, and habitat alteration. Because no mechanized routes would be designated, there would be no additional disturbance from mountain bike use or trail development.

The Sutey Ranch would not be available for livestock grazing, so there would be no potential for negative impacts from livestock grazing (e.g., alteration of vegetation structure, composition, and/or function; displacement of birds; trampling of nests, eggs, and/or young).

- b. **Haines Parcel.** Impacts would be expected to be the same as those described for Alternative 1.

## Alternative 3

- a. **Sutey Ranch.** Migratory birds could be negatively affected by the construction and use of new mechanized trails. There would be fewer opportunities to rest and recover understory vegetation with livestock grazing permitted through a term permit. Rest and recovery of understory vegetation could improve vegetation structure, composition, and/or function, which would be expected to improve conditions for a variety of migratory birds. There would be a risk that livestock could displace birds and trample nests every year. Due to the estimated amount of use and development, this alternative would have the most impacts to migratory birds.

- b. **Haines Parcel.** Impacts would be expected to be the same as those described for Alternative 1.

## Alternative 4 and 4A

- a. **Sutey Ranch.** Impacts from Alternative 4 would be expected to be similar to those that were described for Alternative 1. The addition of spring horseback riding from April 16 to May 31 could disturb species that nest during that time period, potentially causing them to nest elsewhere on Red Hill.
- b. **Sutey Ranch and Haines Parcel.** The analysis of impacts from oil and gas development on migratory birds would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.2.6 Fish and Wildlife, pages 4-157 through 4-239 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

### **CUMULATIVE EFFECTS**

The cumulative effects on migratory birds for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in 2014 CRVFO Proposed RMP and Final EIS. See pages 4-237 to 4-239. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the Roaring Fork Valley that have affected and will likely continue to affect migratory birds are mineral exploration and development, residential and industrial development (including power lines and other ROWs), grazing, recreation, road construction, water diversion and withdrawals, weed invasion and spread, prescribed and wildland fires, land planning efforts, habitat improvement projects, insects and disease, and drought.

Many of the activities described above can change habitat conditions, which then cause or favor other habitat changes. For example, high intensity, catastrophic wildland fire temporarily removes vegetation, and affected areas are more susceptible to weed invasion, soil erosion, and sedimentation of waterways, all of which degrade migratory bird habitat.

In general, resource use activities have cumulatively caused habitat removal, fragmentation, noise, increased human presence, and weed spread. Land planning efforts and vegetation, habitat, and weed treatments have offset some of these effects by improving habitat connectivity, productivity, diversity, and health.

The Planning Area only comprises a small portion of the overall landscape used by some migratory bird species in the Roaring Fork Valley. Many other land use activities (e.g., recreation, residential development, and livestock grazing) occur within the Roaring Fork Valley. All of these activities have altered the amount of suitable habitat for migratory birds. Cumulatively, many of the future actions planned on private and other lands may have some undetermined effect on migratory birds, but all of the alternatives in this plan would provide site specific management for both the Sutey Ranch and Haines parcel and would be expected to provide for increased management to maintain quality for migratory birds.

## **3. SURFACE AND GROUND WATER QUALITY**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

- a. **Sutey Ranch. Surface Water.** The Sutey Ranch parcel is located within the Cattle Creek Watershed (1401000410 10<sup>th</sup> HUC). Cattle Creek is a perennial system (segment COUCRF03d) that is a tributary to the Roaring Fork River. The Colorado Department of Public Health and Environment (CDPHE) establishes water quality standards for water networks around the state of Colorado based on existing or potential beneficial uses. Cattle Creek supports beneficial uses such as Agriculture, Aquatic Life Cole 1, Recreation E, and Water supply. **Table 4** below describes each state-designated use and its corresponding description.

**TABLE 4 - CDPHE BENEFICIAL WATER USE CATEGORIES FOR SEGMENT COUCRF03D (CDPHE, 2016)**

<b>State-Designated Use</b>	<b>State-Designated Use Description</b>
<b>Agriculture</b>	These surface waters are suitable or intended to become suitable for irrigation of crops usually grown in Colorado and which are not hazardous as drinking water for livestock.
<b>Aquatic Life Cold Water-Class 1</b>	These are waters that (1) currently are capable of sustaining a wide variety of cold water biota, including sensitive species, or (2) could sustain such biota but for correctable water quality conditions. Waters shall be considered capable of sustaining such biota where physical habitat, water flows or levels, and water quality conditions result in no substantial impairment of the abundance and diversity of species.
<b>Recreation Primary Contact E</b>	These surface waters are suitable or intended to become suitable for recreational activities in or on the water when the ingestion of small quantities of water is likely to occur. Such waters include but are not limited to those used for swimming, rafting, kayaking and water-skiing. Recreation class E refers to waters in which primary contact recreation is presumed to be present
<b>Domestic Water Source</b>	These surface waters are suitable or intended to become suitable for potable water supplies. After receiving standard treatment (defined as coagulation, flocculation, sedimentation, filtration, and disinfection with chlorine or its equivalent) these waters will meet Colorado drinking water regulations and any revisions, amendments, or supplements thereto.

Cattle Creek was listed by the CDPHE Regulation 93 (303d) list of impaired waters due to impacts to aquatic macroinvertebrate communities (CDPHE 2016). The Sutey Ranch parcel also contains numerous ephemeral stream systems, one of which is located in a roadside ditch that parallels County Road 112. There are 1.1 miles of irrigation ditches and diversion structures within the Sutey Ranch parcel, which have historically been used for livestock watering and irrigation. See **Appendix A** for a map of the parcels. In addition, there are three stock ponds, which are currently used for wildlife and in the past were used for livestock watering. The maximum water surface of these three stock ponds is estimated to cover approximately 0.16 acres.

- b. **Haines Parcel. Surface Water.** The Haines parcel is within the Middle Roaring Fork watershed (1401000410 10<sup>th</sup> HUC). This area receives a modest amount of precipitation annually with an average of 11.64” at the Crown Mountain Remote Automated Weather Station (RAWS). Several unnamed intermittent and ephemeral stream channels exist, but typically only flow in response to snowmelt or convective storm events. Prince Creek is the one perennial creek that exists adjacent to the Haines parcel. Prince Creek is a B4 stream type characterized by series of rapids with irregular spaced scour pools. The beneficial use ratings for this stream are Agriculture, Aquatic Life Cold 1, Recreation E, and Water Supply (CDPHE, 2016).

## ENVIRONMENTAL CONSEQUENCES.

**Impacts Common to All Action Alternatives.** Under all action alternatives, recreational use has the potential to impact surface water quality if not implemented appropriately. Currently, the Haines parcel has a trail system that is designated for mechanized use. These trails have already been constructed and are being used. New construction and vegetation removal causing surface disturbance would not occur under any of the alternatives in this plan on the Haines Parcel. Trail use combined with the limited area they cover would not impact surface waters.

### Impacts Relating to Specific Alternatives

#### Alternative 1

##### a. Sutey Ranch.

*Surface water.* Although impacts to water resources are expected to be minimal under all alternatives, Alternative 1 would have greater potential impacts compared to Alternative 2, but less impacts than Alternative 3. Under Alternative 1 the Sutey Parcel would be managed primarily for wildlife habitat and would have less impacts than the alternatives that propose to accommodate more visitor use. The surface water that exists on the Sutey Ranch parcel is in the form of irrigation ditches and livestock ponds. Wildlife would be able to take advantage of open ditches and livestock ponds for watering and utilize the irrigated fields for forage. Alternative 1 would allow limited livestock grazing through a temporary non-renewable permit. The amount of grazing that would occur under this alternative would have minimal impacts to surface water resources. Cattle tend to congregate in areas where there is available water and on the Sutey Ranch parcel, water exists in irrigation ditches and livestock ponds. Given these known water sources, the limited numbers and duration of cattle grazing that would occur under Alternative 1 would not produce any measurable impacts.

Recreational use is the other activity under Alternative 1 that has the potential to impact surface water quality depending on the location and mileage of trails. The recreational uses that would be managed under Alternative 1 would be to add a connector trail for mechanized travel linking to the Red Hill SRMA and managing for foot and horse travel during specific times of the year. Seasonal limited access combined with the limited spatial extent of use would not impact surface or groundwater resources.

*Groundwater.* Under Alternative 1 groundwater resources would receive negligible impacts.

##### b. Haines Parcel.

*Surface water.* Under Alternative 1, the Haines parcel would be managed for a variety of uses such as recreation, grazing and wildlife. Prince Creek is the one perennial stream that runs near the border of the Haines Allotment where ephemeral drainages terminate. Under all alternatives, livestock grazing would continue as it has in the past before the Haines parcel was acquired by the BLM. Recreational trails that were designated last year help mitigate issues concerning water resources. Since water quality standards are currently being met in Prince Creek, and the proposed use is similar to what has been occurring, water quality standards would likely continue to be met.

*Groundwater.* Uses managed under Alternative 1 at the Haines parcel are not expected to impact groundwater.

#### Alternative 2

- a. **Sutey Ranch.** *Surface water.* Under Alternative 2 the Sutey Ranch parcel would be managed primarily for recreational uses with an emphasis on horseback riding. Alternative 2 would have the least impacts to water resources. Compared to the other alternatives, Alternative 2 has the least estimated surface disturbance due to the



lands not being available for livestock grazing and lower estimated recreational use. Horse and cross-country foot travel would induce limited erosion to the landscape, therefore having very little, to no impact to water resources on the Sutey Ranch parcel.

*Groundwater.* Under Alternative 2 groundwater resources would not be impacted.

- b. Haines Parcel.** Impacts to surface water and groundwater would be expected to be the same as those described for Alternative 1.

### Alternative 3

- a. Sutey Ranch. Surface water.** Under Alternative 3, the Sutey Ranch parcel would be managed with an emphasis on mountain biking through the expansion of the Red Hill SRMA. In addition lands would be available for annual livestock grazing, other recreational uses would be allowed and wildlife still utilize the area. Although, the expected impact will likely be minimal this alternative would have higher impacts to water resources than Alternative 1 or 2. The scale of impacts would depend on the timing, duration, and amount of various uses that would be managed under this alternative.

The timing and duration of livestock grazing on this allotment will help mitigate any potential impacts to surface water. Cattle tend to congregate in areas where there is available water. On the Sutey Ranch parcel, water exists in irrigation ditches and livestock ponds. Cattle have the potential to cause bank erosion and failure to these ditches. Ditch banks may be at a slight risk of mechanically induced collapsing, thereby increasing maintenance that may be needed to maintain adequate flow. The ditches run into livestock ponds before any water is delivered as return flow to Cattle Creek. This helps remove sediment from the surface flow. Increases in *Escherichia coli* (E. coli) in waterways has been observed as a result of cattle grazing in other areas. There is a slight potential for increased E. coli levels in surface water that is being returned to Cattle Creek, however, it would be expected to be minimal and remain well within state standards.

Alternative 3 would also add the Sutey Ranch parcel to the Red Hill SRMA and mechanized trails would be emphasized. Construction of mountain bike trails would cause disturbance, erosion, and vegetation removal, which would increase surface runoff and could result in surface water impacts depending on the location of the trails. Supplemental environmental assessments that analyze proper trail placement and design would minimize site-specific erosion and impacts to surface water.

*Groundwater.* Under Alternative 2 groundwater resources would not be impacted.

- b. Haines Parcel.** Impacts to surface water and groundwater would be expected to be the same as those described for Alternative 1.

### Alternative 4 and 4A

- a. Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on surface and ground water quality from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.2.4 Water Resources, pages 4-80 through 4-109 of the Proposed RMP. For other resources and resource uses the impacts to surface water and groundwater would be expected to be the same as those described for Alternative 1.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be

expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

For other resources and resource uses, the impacts to surface water and groundwater quality would be similar to those described for Alternative 1, except there would be additional horseback riding in the spring and fall that would be expected to result in no additional impacts. Limited access combined with the limited spatial extent of use would not impact surface or groundwater resources.

## **CUMULATIVE EFFECTS**

The cumulative effects on water resources for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-108 to 4-109. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely continue to affect water resources in the Roaring Fork Valley are mineral development, livestock grazing, infrastructure and private land development, vegetation treatments, wildfires, recreation, and travel and transportation activities.

All forms of recreational activities can increase potential for erosion, sedimentation, gully creation, biologic soil crust damage, and riparian and upland vegetation damage. Recreation activities may also directly and indirectly impact water quality due to erosion and sediment production potential. However, the significance of such impacts varies with the nature and degree of disturbance as well as site specific environmental conditions. Typically, larger disturbances represent greater potential to damage soils and vegetation, degrade water quality, and impair overall watershed function and condition than smaller disturbances.

Potential cumulative impacts on water resources in the planning area would result from alteration of functional vegetative communities and could lead to increased runoff and sediment/contaminant delivery. Activities with impacts on water resources include management actions attributed to the alteration of natural vegetative communities (e.g., pinyon-juniper invasion and cheat grass infestation), historic grazing practices, surface-disturbing actions in areas of low reclamation potential, conversion of native rangelands to irrigated agricultural lands (on non- BLM-managed lands), improper maintenance of transportation facilities, spills/leaks of substances used to develop mineral resources, and recreational use. These activities cause surface disturbances by removing vegetation cover, displacing and compacting soils, and altering soil structure and chemistry. The result is exposed surfaces that increase the potential for runoff and erosion, which delivers sediment and contaminants to nearby waterways. Sedimentation in waterways can cause changes in water chemistry as well as geomorphic adjustments that could have negative effects on stream function.

Cumulative impacts to surface water include water quality impacts to Cattle Creek resulting from increased levels of *E. Coli*. However, filtering over the distance water needs to travel as return flow to Cattle Creek would allow water quality impacts to be negligible.

## **4. SOILS**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

- a. **Sutey Ranch.** Soils within the parcels vary greatly in soil texture, rockiness, thickness, and parent material. The information on soil resources presented below was summarized from data included in the *Soil Survey of Aspen-Gypsum Area, Colorado: Parts of Eagle, Garfield, and Pitkin Counties (NRCS 1992)*.

The Sutey Ranch parcel contains a substantial amount of *Deep Loamy Farmland Soils*, some of which were utilized as pastures under irrigation in the past. These soils are considered to be either prime farmland if irrigated or farmland of statewide importance. The dominant soil is *Deep Loamy Shrub Land Soils*. These soils currently occur in the eastern and southern portions of the parcel. *Shallow Rocky Woodland Soils* occur in the western and northern portions of the parcel. *Deep Rocky Shrub Land Soils* make up the remaining portion of the parcel. Erosion potential for the soils within the Sutey Ranch parcel are generally low to moderate and are well drained.

- b. **Haines Parcel.** The Haines parcel is composed of *Deep Rocky Shrub Land Soils*, which make up the majority of the parcel. These soils are deep, well drained and have moderate permeability and erosion potential. These soil types are suited for grasses, shrubs, and wildlife habitat. The remaining portions of the parcel are made up of *Deep Loamy Shrub Land Soils* and *Shallow Rocky Woodland Soils*. These soils have high rock content and support grasses, shrubs, pinyon pine and juniper trees. These soils have moderate erosion potential and are well drained.

## ENVIRONMENTAL CONSEQUENCES.

### Impacts Relating to Specific Alternatives

#### Alternative 1

- a. **Sutey Ranch.** Across all alternatives livestock grazing, agricultural use and recreational use has the potential to impact soils from soil compaction and a reduction in vegetative cover. Although impacts to soil resources are expected to be minimal under all alternatives. Under Alternatives 1 and 4 the Sutey Ranch would be managed primarily for wildlife habitat and would have less impacts than Alternatives 2 and 3 that propose to accommodate more visitor use.

Alternative 1 would authorize temporary livestock grazing use through a RCA. Temporarily livestock grazing in a RCA has less potential to cause impacts to vegetation, soil health and soil stability due to longer periods of rest and recovery as opposed to annual grazing. The amount of grazing that would occur under this alternative would have minimal impacts to soil resources. The impacts would be minimal because the landscape would have time to recover from grazing impacts, such as soil detachment and compaction.

Recreational use is the other activity under Alternative 1 that has the potential to impact soil resources depending on the amount of use, season of use, amount of trails and facilities constructed. Construction of a single, seasonal mountain bike trail and equestrian parking facilities would cause initial surface disturbance and vegetation removal. There would be direct impacts causing soil erosion and compaction. However, impacts from the trail and facility construction can easily be mitigated through proper design and placement. Seasonal cross-country use by horseback riders, hikers and hunters would cause some isolated reduction in vegetation cover.

The overall impact to soil resources under Alternative 1 is expected to be negligible over the long term due to limiting recreational use seasonally and authorizing temporary livestock grazing use through a RCA.

- b. **Haines Parcel.** Under all alternatives, the Haines parcel would be managed for a variety of uses such as recreation, grazing and wildlife.

Under all action alternatives, livestock grazing and recreational use would continue as it has in the past before the Haines parcel was acquired by the BLM. Soil conditions are currently meeting standards and with the same use

levels moving forward there are not any additional concerns regarding soil degradation. Management of trails and grazing will likely improve soil conditions. Since soil resource standards are currently being met, and the proposed use is similar to what has been occurring, soil quality standards would likely continue to be met.

## **Alternative 2**

- a. Sutey Ranch.** Under Alternative 2 the Sutey Ranch parcel would be managed primarily for recreational uses of hiking and horseback riding. Alternative 2 would have the least impacts to soil resources based on the level of anticipated use. Compared to the other alternatives, Alternative 2 has the least estimated surface disturbance due to the lands not being available for livestock grazing and lower estimated recreational use. Horseback riding and cross-country foot travel would induce limited erosion and compaction to the landscape, therefore having very little, to no impact to soil resources on the Sutey Ranch parcel.
- b. Haines Parcel.** Impacts to soils would be expected to be the same as those described for Alternative 1.

## **Alternative 3**

- a. Sutey Ranch.** Under Alternative 3, the Sutey Ranch parcel would be managed with an emphasis on mountain biking through the expansion of the Red Hill SRMA. Hiking and horseback riding would also be allowed. In addition, lands would be available for annual livestock grazing. This alternative would have higher impacts to soil resources than the other alternatives. However, the scale of impacts would depend on the timing, duration, and amount of various uses that would be managed under this alternative.

Under Alternative 3, the annual grazing of livestock has the highest potential to cause impacts to soil health and stability. Livestock grazing has the potential to impact the physical properties of soil structure, such as soil compaction, erosion and a reduction in water infiltration. Cattle grazing can remove vegetative cover from soil surfaces, which reduces root density, and as a result, reduces soil stability. Typically these impacts are isolated and only found where livestock concentrate. Livestock grazing must also conform to Standards for Public Land Health (Standard 1- Soils) and guidelines for livestock grazing. Based on the low number of AUMs that would be authorized and the adherence to guidelines for livestock grazing and utilization standards the overall impacts to soil resources from livestock grazing are expected to be minor.

Alternative 3 would also add the Sutey Ranch parcel into the Red Hill SRMA and mountain bike riding would be emphasized. In addition horseback riding and hiking would also take place. Construction of mountain bike trails would cause initial surface disturbance and vegetation removal. Depending on the placement and the number of trails, there would be direct impacts causing soil erosion and compaction, however, impacts from trail construction can be mitigated through proper trail design and placement and are therefore expected to be negligible over the long term. Cross country travel by horseback riding and hiking will also likely cause some isolated reduction in vegetative cover, soil erosion and channelize runoff.

- b. Haines Parcel.** Impacts to soils would be expected to be the same as those described for Alternative 1.

## **Alternative 4 and 4A**

- a. Sutey Ranch and Haines Parcel.** The analysis of impacts from oil and gas development on soils would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.2.3 Soils, pages 4-59 through 4-79 of the Proposed RMP. For other resources and resource uses the impacts to soil resources would be expected to be the same as those described for Alternative 1.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

Impacts from other resources and resource uses to soils would be expected to be the same as those described for Alternative 1.

## **CUMULATIVE EFFECTS**

The cumulative effects on soils for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-78 to 4-79. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the Roaring Fork Valley that have affected and would likely continue to affect soil resources are mineral development, livestock grazing, infrastructure and private land development, vegetation treatments, wildfires, recreation, and travel and transportation activities.

An important trend in the planning area is rapidly increasing recreational use. This growth in recreation on public lands is due to local population growth, as well as the area's reputation as a national and international recreation destination. All forms of recreational activities can increase potential for erosion, sedimentation, gully creation, and biologic soil crust damage.

Potential cumulative impacts on soil resources in the Roaring Fork Valley would result from alteration of functional vegetative communities and could lead to increased runoff and sediment/contaminant delivery. These activities cause surface disturbances by removing vegetation cover, displacing and compacting soils, and altering soil structure and chemistry. The result is exposed surfaces that increase the potential for runoff and erosion, which delivers sediment and contaminants to nearby waterways.

Cumulative impacts to soils under the alternatives that would allow grazing would depend on the timing and amount of cattle grazing. Soil compaction, erosion, and vegetation root disturbance would be greatest during irrigation season. If cattle are allowed to graze the saturated fields, soils would experience the greatest impacts. If timing and management of cattle grazing allows saturated soils to dry out, cumulative impacts would be minimal.

## **5. VISUAL RESOURCE MANAGEMENT**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

A visual resource management (VRM) class designation must be made because the newly acquired lands currently have no VRM designations. VRM class designations provide the standards for planning, designing, and evaluating future management projects. VRM classes are assigned to BLM lands based on scenic quality, sensitivity level, and distance zones. Each class has an objective which prescribes the amount of change allowed in the characteristic landscape. There are four classes: 1) VRM Class I - Preserve landscape character, 2) VRM Class II - Retain existing landscape character, 3) VRM Class III - Partially retain existing landscape character, 4) VRM Class IV - The level of change to the characteristic landscape can be high.

Ahead of the planning process, the BLM inventories visual resources and assigns them to inventory classes using the BLM's visual resource inventory (VRI) process according to BLM handbook H-8410-1, Visual Resource Inventory. This inventory is merely an inventory of existing conditions and does not necessarily relate to how the unit would be managed. VRI forms completed for the planning area can be found in **Appendix G**.

- a. **Sutey Ranch.** The visual resource inventory (VRI) for the Sutey Ranch resulted in a scenic quality rating of C and a visual sensitivity level of moderate. This translates to a Class IV Visual Resource Management Class barring other inventory area considerations.
- b. **Haines Parcel.** The visual resource inventory (VRI) for the Haines parcel resulted in a scenic quality rating of B and a visual sensitivity rating level of high. This translates to a Class II Visual Resource Management Class barring other inventory area considerations.

## **ENVIRONMENTAL CONSEQUENCES.**

### **Impacts Common to All Alternatives**

Under all action alternatives, the Sutey Ranch and the Haines parcel would be managed as VRM Class II areas to meet either 1) Special Recreation Management Area goals and objectives, 2) wildlife habitat goals and objectives 3) and/or preserve historic landscapes. Managing areas as VRM Class II would require BLM to retain the existing character of the landscape. The level of change to the characteristic landscape should remain low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Future project proposals would undergo separate NEPA analysis to disclose impacts to visual resources.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

## **CUMULATIVE EFFECTS**

The cumulative effects on visual resources for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See page 4-401. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely continue to affect visual resources in the Roaring Fork Valley are wildland fires, fuels reduction projects, residential and commercial development along the wildland/urban interface that are affecting visual landscapes. Due to the interspersed nature of public and private lands and the demands on BLM lands in the Roaring Fork Valley managing for VRM Class II on a landscape scale will continue to be challenging for the BLM.

## **6. TERRESTRIAL WILDLIFE**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

Diverse plant communities across the CRVFO support a variety of terrestrial wildlife. Wildlife need to move across the landscape for food, cover and in response to seasonal conditions. Human development and activities have fragmented habitat, and in some cases, created barriers to wildlife movement. Factors contributing to wildlife displacement or degradation and fragmentation of habitat include power lines, pipelines, fences, public recreation use, residential and commercial development, vegetation treatments, livestock and wild ungulate grazing, oil and gas development, fire suppression, roads and trails.

This analysis focuses on mule deer (*Odocoileus hemionus*) and Rocky Mountain elk (*Cervus elaphus nelsonii*) due to the high social and economic values of these species. Mule deer and elk offer general indicators of habitat condition, and the health and size of their populations are regularly assessed by Colorado Parks and Wildlife (CPW).

Mule deer and elk typically occupy higher elevation, forested areas during summer and migrate to lower elevation sagebrush-dominated ridges and south-facing slopes during winter. CPW maintains habitat maps for big game and other wildlife species. The planning area overlaps with mule deer and elk winter range, elk severe winter range, an elk winter concentration area, an elk production area, and mule deer summer range. Severe winter range is defined as that part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. A winter concentration area is defined as that part of the winter range of elk where densities are at least 200% greater than the surrounding winter range density during the average five winters out of ten from the first heavy snowfall to spring green-up, or during a site specific period of winter as defined for each Data Analysis Unit (CPW 2017).

As discussed in Chapter 2, wildlife specific stipulations (e.g., bald eagle roosting, migratory bird nesting) from the 2015 CRVFO Approved RMP would be applied to projects on the Sutey Ranch and the Haines parcel if site specific surveys warrant application. To address other wildlife concerns, the CRVFO is considering the application of several area specific stipulations on the acquired lands established in the 2015 CRVFO Approved RMP.

- Stipulation FWL-MA-16 protects wintering big game and other wildlife species by establishing a restriction to motorized and mechanized travel from December 1 to April 15. Winter range is often considered the most limiting habitat type for mule deer and elk, so effective management of these areas is particularly important to the health of mule deer and elk populations. The CRVFO has sixteen areas (131,600 acres total) across the CRVFO that are closed to motorized and mechanized travel from December 1 to April 15.
  - Stipulation FWL-MA-5 specifically protects priority big game habitat by prohibiting surface occupancy and surface disturbing activities on state wildlife areas and BLM lands with high big game and overlying values. Priority wildlife habitat areas in the Roaring Fork Valley total 28,000 acres (61% of subsurface federal mineral estate and 34% of BLM surface lands). Areas include the Basalt State Wildlife Area (12,900 acres), Arbaney-Kittle (2,400 acres), Fisher Creek (4,900 acres), Light Hill (3,800 acres), and Thompson Creek-Holgate Mesa (3,400 acres).
- a. Sutey Ranch.** The Sutey Ranch offers a unique wildlife management opportunity because the irrigated fields could be managed to benefit wildlife and hunting. This was a one of the major reasons that the public supported the land exchange, and it was consistently noted in public comments throughout the planning process. Managing the Sutey Ranch to benefit wildlife and offer a quality hunting opportunity would require ensuring that seasonal public use is appropriately managed and balanced with the need to reduce disturbance to wildlife.

The entire Sutey Ranch is currently mapped as mule deer and elk winter range, elk severe winter range, and mule deer summer range. A portion of the area overlaps with an elk production area (350 acres). The ranch includes approximately 60 acres of irrigated pastures. These pastures are currently used by deer and elk during the winter and early spring. The CPW District Wildlife Manager (DWM) has counted up to 40-50 deer on the pastures closest

to the parking area and a total of 25-60 elk using the area during early spring. As the weather warms and humans start using the area, the animals disperse, typically by early April. The DWM believes that numerous deer fawns are born in the area, typically in early to mid-June (CPW 2018). The irrigated fields provide abundant forage that is not available in drier areas.

- b. Haines Parcel.** The entire Haines parcel is currently mapped as mule deer and elk winter range and mule deer summer range. Approximately 40 acres of the parcel overlap with an elk winter concentration area. No elk production areas are mapped in the parcel.

Management of wildlife on the parcels is currently passive. The BLM cannot complete comprehensive inventories of wildlife species or apply stipulations without a management plan in place.

## **ENVIRONMENTAL CONSEQUENCES.**

Outdoor recreation has the potential to negatively impact big game and other wildlife. Impacts can include behavioral responses such as increased flight and vigilance; changes in spatial and temporal habitat use; declines in abundance, occupancy, or density; physiological stress; reduced reproductive success; and altered species richness and community composition. Many species respond to recreationists the same as predators, with a trade-off between risk avoidance and essential activities such as foraging or caring for young (Larson et al. 2016). Recreation can also affect an animal's food supply and availability as well as shelter and living space by impacting soils (e.g., loss of surface organic horizons, compaction, reduced porosity and infiltration, increased erosion) and vegetation (e.g., crushing, uprooting, reduced vigor, reduced density and cover, altered species composition) (Cole and Landres 1995).

Potential impacts from wildlife viewing, hiking/running, dog walking, horseback riding, cycling, and nordic skiing/snowshoeing have been studied (Larson et al. 2016). Research that examined how recreationists perceive their effects on wildlife found that in general, survey respondents perceived it was acceptable to approach wildlife more closely than the empirical data indicated wildlife would allow, and recreationists tended to blame other user groups for stress to wildlife rather than holding themselves responsible (Taylor and Knight 2003). Common management recommendations to reduce negative impacts include restricting recreation during specific times and in specific areas, prohibiting motorized use, capping visitation, making physical improvements (e.g., restoring habitat, fencing sensitive areas), increasing visitor education, adding or changing rules, and enforcing rules (Larson et al. 2016).

Based on research comparing on-trail and off-trail recreation, wildlife appear to flush or become alert more readily in response to off-trail use. This may be because there is more predictability with on-trail activities. It has also been suggested that some animals may experience some level of habituation to on-trail recreation (Miller et al. 2001, Taylor and Knight 2003). Research near Boulder, Colorado suggested that mule deer became alert and flushed more readily when people were walking dogs than when they did not have dogs. The effects were greatest when the leashed dogs and pedestrians were off trail (Miller et al. 2001). Miller et al. (2001 and 2003) recommended restricting recreation use to trails to help minimize disturbance to wildlife.

Studies have been designed to measure the levels of response by big game species to various forms of non-motorized recreation. Taylor and Knight (2003) found that mule deer did not respond differently to mountain biking versus hiking, and Wisdom et al. (2004) found that movement rates of mule deer were similar for mountain biking, hiking, and horseback riding. They suggested that deer might respond to recreation with changes in habitat use such as seeking dense cover rather than running from disturbance. Elk had a greater response to mountain biking than hiking, and little or no evidence of response from horseback riding (Naylor et al. 2009).

During winter, deer and elk are seasonally confined to restricted geographic areas with limited forage. Available forage is less nutritious this time of year, and animals typically lose weight. To minimize the effects of winter, big game species demonstrate behavioral adaptations related to energy conservation such as reducing activity levels, bedding in protected



sites, and walking slowly. Disturbance from winter recreation can result in high energy costs. Even when animals do not flee, increased heart rates can result in relatively high energy expenditures. Disturbance from winter recreation can also cause displacement to less desirable areas (Canfield, et al. 1999). Activities occurring in unexpected places or at unexpected times, such as skiing on lightly used trails or off-trail skiing, have been shown to cause elk to flee and use valuable energy reserves (Olliff and Kaeding 1999).

Livestock grazing can impact the quality and extent of wildlife habitats (Krausman et al. 2009). Livestock can compete with mule deer and elk for herbaceous forage, although moderate levels of grazing can also help promote shrub growth by limiting grasses. Conversely, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or creating the more palatable leaves for deer or elk to graze later in the season. In some situations the timing and intensity of livestock grazing can be managed to improve mule deer forage quality and/or availability (Peek and Krausman 1996). As long as acceptable utilization levels are maintained and land health standards are achieved, particularly on winter range, any negative impacts to big game and other terrestrial wildlife from livestock grazing would be expected to be minimal and isolated, and should not influence populations on a landscape level.

## **Impacts Relating to Specific Alternatives**

### **Alternative 1**

- a. **Sutey Ranch.** Alternative 1 would emphasize the management of wildlife and hunting by minimizing other recreation use and habitat fragmentation from recreational trails. No foot (including ski) or horse access would be allowed from December 1 to April 15. This would be in addition to the motorized and mechanized travel closure during the same time period under all alternatives. From April 16 to May 31 and October 1 to November 30, the ranch would only be open to cross-country foot travel for walk-in hunting. From June 1 to September 30, horse access would only be allowed on designated routes that avoid the irrigated fields and mechanized use would be allowed on one route through the ranch to access the Red Hill SRMA. Hiking and hunting from April 16 to May 31 would cause some diurnal disturbance to terrestrial wildlife outside the critical winter months.

The seasonal recreation use restriction from December 1 to April 15 would be the most effective management approach to reduce disturbance and displacement of wintering wildlife. Big game concentrate on the Sutey Ranch irrigated fields as they do on adjacent private ranches and local state wildlife areas. Local state wildlife areas are closed to human entry during winter to minimize human disturbances to concentrations of wildlife. Colorado Parks and Wildlife estimates that even low levels of continuous human use could significantly reduce winter wildlife use of the Sutey Ranch (CPW 2018).

The BLM considered managing recreational access on this small parcel of land by gating the parking lot from December 1 to April 15 to reduce recreation use on wintering big game habitat. But the potential would remain for people to come from and through adjacent private lands (Cattle Creek to the north and County Road 113 to the east). This estimated current and future human use, including dogs, would likely cause sufficient disturbance to displace wintering wildlife, particularly big game concentrating on the irrigated fields. Winter restrictions to foot and horse access were broadly supported in public comments received during scoping and on the Preliminary Draft EA. Comparable winter restrictions are successfully implemented on state and county lands in the local area.

Limited livestock grazing would be allowed through a temporary, non-renewable permit (Alternatives 1 and 4), providing more opportunities for the rest and recovery of understory vegetation than with a term livestock grazing permit (Alternative 3). Greater rest and recovery would likely result in additional forage for wildlife.

- b. Haines Parcel.** The parcel would be managed for recreation, grazing, and wildlife under all alternatives. A winter closure would be implemented from December 1 to April 15 for motorized and mechanized travel, except for designated mechanized routes. Foot and horse travel would not be limited during the closure. No additional mechanized routes would be constructed. The parcel would be combined with the Prince Creek Allotment, so cattle grazing would occur. Any impacts to big game and other wildlife would be the same under all alternatives.

## Alternative 2

- a. Sutey Ranch.** This alternative would allow year-round cross-country foot and horse travel, which would likely disturb and displace big game and other wildlife as well as alter habitat. There would be no walk-in only periods before and after the winter closure. No mechanized routes would be designated, so there would be no potential impacts from mountain bikes or by the construction of new mechanized trails and their use.

The Sutey Ranch would not be available for livestock grazing, so there would be no potential for competition between livestock and big game for forage.

- b. Haines Parcel.** Impacts to terrestrial wildlife would be expected to be the same as those described for Alternative 1.

## Alternative 3

- a. Sutey Ranch.** This alternative would likely result in the greatest amount of human disturbance and habitat fragmentation. Additional mechanized trails would be developed, and year-round cross-country foot and horse travel would be allowed. There would be no walk-in only periods before and after the winter closure. Livestock grazing would be expected to have the greatest potential for negative impacts to big game and other wildlife under this alternative. Livestock grazing would be managed as a permitted allotment rather than a reserve allotment.
- b. Haines Parcel.** Impacts to terrestrial wildlife would be expected to be the same as those described for Alternative 1.

## Alternative 4 and 4A

- a. Sutey Ranch.** Managing the agriculture fields for the benefit of wildlife will likely concentrate big game. Alternative 4, as opposed to the other alternatives, would ensure that winter concentrations of big game would be protected by the decision to restrict recreation use from December 1 to April 15. This the same management applied to protect concentrations of wintering big game on local State Wildlife Areas (CPW 2018).

Outside the winter months the impacts to terrestrial wildlife would be expected to be similar to those described for Alternative 1. The addition of spring horseback riding from April 16 to May 31 would cause some diurnal disturbance of terrestrial wildlife, but due to the expected low number of participants the difference in impacts between Alternative 1 and Alternative 4 would be negligible. Mountain biking use on the access route to the Red Hill SRMA would not be allowed until June 1, which would prevent disturbance from this highly popular recreation activity during the critical spring months leading up to mule deer fawning and elk calving. Mountain biking access would end September 30 and horseback riding would continue until November 30, however, fall is not as critical as the winter months for wildlife. Likely the greatest impact to wildlife on the Sutey Ranch in the fall would be disturbance caused by big game hunting.
- b. Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on terrestrial wildlife from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained

in the CRVFO 2014 Proposed RMP and Final EIS. The analysis of impacts from oil and gas development on terrestrial wildlife would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.2.6 Fish and Wildlife, pages 4-157 through 4-239 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

## CUMULATIVE EFFECTS

The cumulative effects on terrestrial wildlife for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-237 to 4-239. That analysis is incorporated here by reference.

Past, present and reasonably foreseeable projects on both public and private lands that have affected and would continue to affect mule deer and elk in the Roaring Fork Valley include: mineral exploration and development, residential and industrial development, wildland fires, prescribed burns, habitat improvement projects, weed treatments, grazing, recreation, road construction, wildlife exclusion, fencing, water diversions, and withdrawals, insects and disease, and drought.

Many of the activities described above can change habitat conditions, which then cause or favor other habitat changes. For example, catastrophic, high intensity wildland fire temporarily removes habitat, and affected areas are more susceptible to weed invasion, soil erosion, and sedimentation of waterways, all of which degrade habitats.

In general, resource use activities have cumulatively caused habitat removal, fragmentation, noise, increased human presence, and weed spread. Land planning efforts and vegetation, habitat, and weed treatments have offset some of these effects by improving habitat connectivity, productivity, diversity, and health.

All of the alternatives would be expected to maintain adequate forage for mule deer and elk through the management of the Sutey Ranch and Haines parcel.

## 7. VEGETATION

### AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.

- a. **Sutey Ranch.** The Sutey Ranch is currently dominated by pinyon pine (*Pinus edulis*)- Utah juniper (*Juniperus osteosperma*) woodlands, which cover approximately 55 percent of the parcel. Wyoming and mountain big sagebrush (*Artemisia tridentata* ssp. *wyomingensis* and *A. t.* ssp. *vaseyana*) shrublands are also common. Many of the sagebrush parks have been cleared of sagebrush and seeded to non-native grasses to create pastures. Over time, some sagebrush has reestablished in most of the dryland pasture areas, resulting in sagebrush shrublands with a non-native understory dominated by crested wheatgrass (*Agropyron cristatum*) and smooth brome (*Bromus inermis*). The actively irrigated pastures in the northern portion of the parcel currently lack sagebrush and are dominated by smooth brome. Disturbed habitats on the parcel include areas surrounding existing ranch buildings in the north-central part of

the parcel. Gambel oak (*Quercus gambelii*) shrublands occur near the southern parcel boundary, and there is one paved roadway, Garfield County Road 112, which crosses the parcel in the northeast. Currently, noxious weeds are relatively minimal in the overall parcel, being confined primarily to disturbed areas adjacent to the roads, ditches, and irrigated fields.

**Table 5** below displays the vegetation types on the Sutey Ranch parcel.

**TABLE 5 - SUTEY RANCH VEGETATION TYPES**

<b>Vegetation Type</b>	<b>Acres</b>
Pinyon-Juniper woodlands	308.5
Sagebrush shrublands	91.3
Dryland Pasture with sagebrush encroachment	88.6
Irrigated pasture	59.5
Disturbed Areas	4.5
Gambel oak shrublands	2.9
Paved roadway	0.9
Riparian/Wetland habitats	0.2
Aquatic habitats (3 stock ponds)	0.2
<b>TOTAL</b>	<b>~557</b>

- b. Haines Parcel.** Plant communities on the Haines parcel are currently composed of pinyon-juniper woodlands at lower elevations and south-facing slopes, transitioning to a mosaic of oakbrush/mesic mountain shrubs and rocky sagebrush shrubland at upper elevations and north-facing slopes. Overstory vegetation consists primarily of Utah juniper, Gambel oak, and Wyoming and mountain big sagebrush. Other common shrubs include green rabbitbrush (*Chrysothamnus viscidiflorus*), snowberry (*Symphoricarpos rotundifolius*), and serviceberry (*Amelanchier alnifolia*). Common grasses include squirreltail (*Elymus elymoides*), junegrass (*Koeleria macrantha*), and needle-and-thread grass (*Hesperostipa comata*). Some of the more common forbs include: arrowleaf balsamroot (*Balsamorhiza saggitata*), Douglas dustymaiden (*Chaenactis douglasii*), yellow Indian paintbrush (*Castilleja flava*), and lobeleaf groundsel (*Packera multilobata*).

**Table 6** below displays the vegetation types on the Haines parcel.

**TABLE 6 – HAINES PARCEL VEGETATION TYPES**

<b>Vegetation Type</b>	<b>Acres</b>
Gambel oak shrublands	71.5
Sagebrush shrublands	20.9
Pinyon-Juniper woodlands	17.2
Disturbed	1.6
Riparian/wetland habitats	0.6
<b>TOTAL</b>	<b>111.8</b>

Management of vegetation on the parcels is currently passive. The BLM cannot complete comprehensive inventories of vegetation, complete vegetation treatments or apply stipulations without a management plan in place.

## ENVIRONMENTAL CONSEQUENCES.

### Impacts Relating to Specific Alternatives

## Alternative 1

- a. **Sutey Ranch.** Under Alternative 1, the Sutey Ranch would be managed primarily for the maintenance of wildlife habitat. Existing wildlife habitat may be improved with vegetation treatments such as interseeding the non-irrigated pastures and sagebrush shrublands to increase the diversity of native plant species.

Under Alternative 1, the Sutey Ranch would allowed limited livestock grazing under a temporary non-renewable permit. Under Alternative 1, the Sutey Ranch would be utilized as a reserve allotment to be grazed on an intermittent basis at the authorized officer's discretion. Livestock grazing would be used to help meet resource objectives on the parcel. Research indicates that at least two growing seasons of rest is recommended following treatment to allow seedlings and resprouting vegetation to adequately recover and withstand grazing impacts (Eveblen, et. al. 2015). This alternative would provide an opportunity not currently available for permittees impacted by treatments. Under this alternative, grazing the Sutey reserve allotment could improve vegetative health on the Sutey Ranch parcel or improve vegetative recovery and health on another allotment.

Impacts to vegetation would depend on the type and number of livestock and the timing of grazing. Grazing the irrigated pastures while the fields are being irrigated could result in shearing of vegetation roots and compaction of soils. The irrigated pastures are fenced separately from the rest of the Sutey Ranch and could be deferred from grazing until irrigation is completed for the year. Most of the forage in the non-irrigated pastures consists of crested wheatgrass and smooth brome. These species are most palatable and nutritious in spring before they produce seed. Heavy grazing or an extended period of grazing may prevent plants from producing seed and may result in insufficient residual vegetation to maintain plant health. Grazing has the potential to result in a decline in palatable vegetation, which would impact plant communities and overall land health.

Grazing can remove dead and dried seed heads and stems from forage plants, which can stimulate new growth and improve photosynthetic activity (Loeser et al 2004). If the Sutey Ranch is used as a reserve allotment and is not used every year, then vegetation would have a chance to replenish carbohydrate reserves and maintain healthy root systems. Thus, impacts should be minimal since vegetation would have time to recover and maintain plant health.

In keeping with an emphasis on wildlife habitat, mechanized trails would be limited to one route to connect the Sutey Ranch parcel with the Red Hill SRMA trail system. Foot and horse traffic limitations would result in very limited new disturbance and vegetation loss.

- b. **Haines Parcel.** Under all alternatives the Haines parcel would be managed for multiple uses, including recreation, grazing and wildlife. The Haines parcel would be combined with the Prince Creek Allotment and grazed on an annual basis. Cattle grazing has the potential to reduce plant vigor and cause plant mortality; however, by including the Haines parcel with the Prince Creek Allotment, cattle would be distributed over a larger area, thereby reducing overall grazing intensity and minimizing localized impacts.

The Haines parcel already has a single-track mechanized trail system. Under all alternatives, mechanized travel would be limited to the designated routes. New construction would not occur under any of the alternatives in this plan and no additional vegetation removal would result.

## Alternative 2

- a. **Sutey Ranch.** There would be no livestock grazing on the Sutey Ranch or Sutey Allotment and there would be no direct or indirect impacts to vegetation from livestock use. Herbaceous vegetation, in particular, may become somewhat decadent and less productive over time as dead stems from previous growing seasons may build up and reduce the photosynthetic activity of live plant tissue. However, the parcel would continue to be grazed by wild ungulates, particularly in the spring and fall, which may help maintain productive vegetative growth. Without

livestock grazing on the Sutey Ranch, there would be fewer vectors for the introduction and transport of noxious weeds and as a result, fewer noxious weeds would be expected to occur.

No routes would be designated for mechanized use in this alternative, but new trails for foot and horse traffic could be constructed. New disturbance and vegetation loss would be expected to be negligible.

- b. Haines Parcel.** Impacts to vegetation would be expected to be the same as those described for Alternative 1.

### Alternative 3

- a. Sutey Ranch.** Under Alternative 3, the Sutey Ranch would be managed for a more intensive mix of uses such as recreation, grazing and wildlife habitat.

The Sutey Ranch would be combined with the adjacent Sutey Allotment and grazed on an annual basis. Impacts to vegetation from livestock are similar to Alternative 1. However, there could be a greater impact because the allotment would be grazed annually under this alternative, as opposed to, the intermittent livestock grazing in Alternative 2. If the timing, duration or intensity of grazing does not allow adequate recovery and regrowth periods between grazing events, grazing may reduce plant vigor or cause plant mortality by depleting root reserves and change the species' composition in favor of less palatable plant species or increased bare ground. Livestock grazing may also serve as a vector for the invasion and expansion of noxious weeds (Bartuszevige and Endress 2008). Permitting grazing on an annual basis may increase the rate of introduction and spread of noxious weeds on the Sutey Ranch.

Under Alternative 3, the Sutey Ranch would be incorporated into the Red Hill SRMA with an emphasis on creating additional mechanized trails. Construction of single-track trails would involve removal of vegetation and soil disturbance. The degree of impacts to vegetation would depend on the placement and the number of trails. Loss of vegetation can be mitigated to some degree by siting new trails in areas with less existing vegetation. New routes can also become vectors for the transport of weed seeds and expansion of weed infestations.

- b. Haines Parcel.** Impacts to vegetation would be expected to be the same as those described for Alternative 1.

### Alternative 4 and 4A

- a. Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on vegetation from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis of impacts from oil and gas development on vegetation would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.2.5 Vegetation, pages 4-110 through 4-156 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

For other resources and resource uses, the impacts to vegetation would be expected to be the same as those described for Alternative 1.

## **CUMULATIVE EFFECTS**

The cumulative effects on vegetation for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-139 to 4-141. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely continue to affect vegetation in the Roaring Fork Valley are mineral exploration and development, livestock grazing, recreation, road construction, ROWs (including large transmission lines or pipelines), weed invasion and spread, prescribed and wildland fires, land planning efforts, vegetation treatments, habitat improvement projects, insects and disease, and drought. Many of these create conditions that cause or favor other vegetation changes. Wildland fire temporarily removes vegetation, which makes affected areas more susceptible to weed invasion and soil erosion; however, over the long term ground cover may increase over pre-burn conditions and reduce soil erosion.

Drought conditions reduce vegetative health, which makes vegetation prone to insect infestation or disease. In general, resource use activities have cumulatively caused vegetation removal, fragmentation, weed spread, soil compaction, and erosion, whereas land planning efforts and vegetation and weed treatments have countered some of these effects by improving vegetative connectivity, productivity, diversity, and health.

Under all of the action alternatives, mechanized travel would be limited to existing routes, which would minimize impacts to vegetation. Foot and horse travel off existing routes and trails would create minor and localized impacts to vegetation.

## **8. COMPREHENSIVE TRAILS, TRAVEL MANAGEMENT AND ACCESS**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

BLM lands in the CRVFO are generally classified as limited to designated routes. All modes and types of over-land public travel, except foot and horse travel is currently limited to designated routes outside of the Hubbard Mesa Open OHV Area. For areas classified as limited to designated routes, the BLM may also limit the type or mode of travel; time or season of use; or make routes available to BLM administrative use only. The final network and location of designated routes is determined through RMP implementation and site-specific environmental analysis.

Over-snow travel is typically restricted by winter wildlife closures and in special management areas. Winter closures do not typically apply to foot and horse use but do restrict mechanized and motorized uses. The BLM has the authority to apply emergency closures to all human and dog use to specific areas for the protection of wintering wildlife. The 2015 CRVFO Approved RMP decision FWL-MA-15 states that: "At the request of CPW, with concurrence by the BLM authorized officer, the CRVFO would close specific areas to human activity and dogs during severe winter weather conditions as defined by a combination of factors including snow depth, snow crusting, daily mean temperatures (long periods of cold temperatures), and concentrations of animals."

- a. Access in the Roaring Fork Valley.** The BLM currently manages approximately 165 miles of public roads and trails in the Roaring Fork Valley. All 165 miles are currently open to equestrian and foot use, 140 miles are open to Mechanized use, 52 miles are open to motorcycle and E-Bikes (considered motorized under BLM rules), and 42 are open to all modes of travel including full sized vehicles. These routes traverse some of the 51,080 acres of BLM lands within the Roaring Fork Valley. BLM manages 30,710 acres of that land with winter closures for wildlife

from December 1 to April 15. Equestrian and foot use is not restricted from cross country travel or restricted from winter closure areas. All other uses must remain on designated routes and are restricted from winter closure areas.

- b. Sutey Ranch.** The Sutey Ranch can currently be accessed through the entrance road off Garfield County Road 112 and from the northside of the Red Hill SRMA by foot and horse use only. Prior to the land exchange that brought the Sutey Ranch into BLM ownership the Sutey Ranch was not open to the public. To maintain safe driving conditions along Garfield County Road 112 and reduce impacts to neighbors, Garfield County closed County Road 112 to parking. In the fall of 2017, BLM constructed a small parking area at the entrance to Sutey Ranch (Environmental Assessment # DOI-BLM-CO-N040-2017-0085-EA) for visitor parking. The Sutey Ranch is currently open to public foot and horse travel; however the parking lot is closed from December 1 to April 15 to reduce disturbance of wintering wildlife. The adjacent Red Hill SRMA is classified as closed to motorized vehicle use, and limited to designated routes for mountain bikes. The northside of the Red Hill SRMA is closed to mechanized travel from December 1 to April 15 to protect wintering big game. Approximately 12.27 miles of routes within the southside of the Red Hill SRMA are open to mechanized travel year round. Over-the-snow motorized and mechanized travel is prohibited.
- c. Haines Parcel.** The Haines parcel is currently accessed from Pitkin County Road 5 and Garfield County Road 111. At the time of the acquisition in 2017, the 112-acre Haines parcel in Prince Creek contained a user-created trail network that was previously in trespass. The trails connected to the mountain bike trail system in the Crown SRMA. Environmental assessment # DOI-BLM-CO-N040-2017-0108-EA designated approximately 1 mile of motorcycle trails and 8 miles of mountain bike trails. The adjacent Crown SRMA is classified as limited to designated routes. All modes and types of over-land public travel, except foot and horse travel, is limited to designated routes. The Crown SRMA is closed to motorized and mechanized travel from December 1 to April 15 to protect wintering big game except for mountain bike trails along the Prince Creek Road many of which are within the Haines Parcel. Over-the-snow motorized travel is prohibited. Over-the-snow mechanized travel is restricted to designated routes.

## ENVIRONMENTAL CONSEQUENCES.

### Impacts Relating to Specific Alternatives

#### Alternative 1

- a. Sutey Ranch.** Alternative 1 would increase access over the no action alternative (the properties were private land) by providing limited, seasonal access for all types of travel except public motorized use. The Sutey Ranch would be limited to public motorized use except for administrative motorized use in all alternatives. The Sutey Ranch would be limited to over-the-snow travel for motorized and mechanized uses in all alternatives. Horse use would be limited to designated routes in the summer from June 1st through September 30th. Cross-country foot travel would be permitted from April 16th through November 30th.

Mechanized access would be increased through the designation of one mountain bike trail for summer access from June 1 through September 30 to the north side of the Red Hill SRMA. This would provide a long desired access point to the northernmost trails in the Red Hill SRMA for mountain biking. These northern trails are currently difficult to access from the Highway 82 trailhead near Carbondale.

- b. Haines Parcel.** No change in current amount or type of access would occur under any alternative however all action alternatives increase access as compared to the no action alternative. Motorized and mechanized travel would be limited to motorized over-the-snow travel and limited to designated routes for mechanized over-the-snow travel. Mechanized use would be restricted to designated routes between the South Porcupine Trail and Pitkin County Road 5 (Prince Creek Road) from Dec 1 through April 15.



## Alternative 2

- a. **Sutey Ranch.** Alternative 2 would increase access as compared to the no action alternative. The Sutey Ranch would be limited to all motorized use except for administrative motorized use. Whereas Alternative 1 would limit mountain bike access to one trail, Alternative 2 does not provide mountain bike access on the Sutey Ranch or an access trail to the existing mountain bike trails in the Red Hill SRMA. Alternative 2 would be the most restrictive for mountain bike access. The Sutey Ranch would be open to year-round cross-country foot and horseback travel in Alternative 2. Foot and horseback riders have increased access the foot and mountain bike trails on the northside of the Red Hill SRMA through the Sutey Ranch. The Sutey Ranch would be limited to over-the-snow travel for motorized and mechanized use.
- b. **Haines Parcel.** Environmental consequences would be the same as those described for Alternative 1.

## Alternative 3

- a. **Sutey Ranch.** Alternative 3 increases access as compared to the no action alternative. The Sutey Ranch would be limited to all motorized use except for administrative motorized use. Alternative 3 proposes the broadest access for mountain biking because access would be emphasized throughout the Sutey Ranch on a system of designated routes. Just as proposed in Alternative 2, the Sutey Ranch would be open year-round to cross-country foot and horseback riding but in Alternative 3, intermingled with a mountain bike trail system. The Sutey Ranch would be limited to over-the-snow travel for motorized and mechanized use.
- b. **Haines Parcel.** Environmental consequences would be the same as those described for Alternative 1.

## Alternative 4 and 4A

- a. **Sutey Ranch.** Alternatives 4 and 4A both both increase access as compared to the no action alternative. Alternatives 4 and 4A differ from Alternative 1 only in that they allow equestrian access (and trailer parking facilities) from April 16 to November 30 and mountain biking access to the north side of the Red Hill SRMA from June 1 to September 30. The extended season of use equestrian use would benefit equestrians by allowing horse access in the spring and fall when high elevation trails are inaccessible due to snow.

Due to the difficult access trails from the Mushroom Rock area, the northside of the Red Hill SRMA currently experiences much less mountain bike use. Some mountain bikers prefer that BLM maintain the more remote nature of the north side of the Red Hill SRMA. Alternative 4 and 4A would offer easier access from June 1 to September 30 through Sutey Ranch. In the spring and fall mountain bike access would be only from the Mushroom Rock area, thereby maintaining the existing more remote, less crowded recreation setting on a seasonal basis.

- b. **Haines Parcel.** Environmental consequences would be the same as those described for Alternative 1.
- c. **Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on travel management from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained in the 2014 CRVFO Proposed RMP and Final EIS. The analysis of impacts from oil and gas development on trails and travel management would be substantially similar to the analysis contained in the 2014 CRVFO Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.3.4 Comprehensive Trails and Travel Management, pages 4-538 through 4-553 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be

expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

For other resources and resource uses, the impacts to transportation and access would be similar to those described for Alternative 1, except there would be additional horseback riding in the spring and fall that would increase access for equestrian users.

## **CUMULATIVE EFFECTS**

The cumulative effects on trails and travel management for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See page 4-553. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely to continue to affect trails and travel management are increased visitation (especially from residents within the Roaring Fork Valley and those from the surrounding region), urbanization of communities in the Roaring Fork Valley, advances in outdoor recreation equipment, and management in existing recreation management areas.

Reasonably foreseeable trends that would result in cumulative impacts on recreation, travel and transportation include continued growth patterns in demand for all recreation experiences, increased demand for close-to-home recreation opportunities for local residents, continued and increased visitation from a growing regional population, and increased popularity of adjacent public lands.

The BLM has an ongoing collaborative relationship with partners to cumulatively manage and maintain travel routes in the Roaring Fork Valley.

## **9. LIVESTOCK GRAZING**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

The BLM must identify lands available or not available for livestock grazing (see BLM Land Use Planning Handbook at Appendix C, page 14), considering the following factors:

1. Other uses for the land;
2. Terrain characteristics;
3. Soil, vegetation, and watershed characteristics;
4. The presence of undesirable vegetation, including significant invasive weed infestations; and
5. The presence of other resources that may require special management or protection, such as special status species, SRMAs, or areas of critical environmental concern.

For lands available for livestock grazing, the BLM must identify both the amount of existing forage available for livestock (animal unit months) and the future anticipated amount of forage available for livestock while maintaining a thriving

natural ecological balance and multiple-use relationships. This planning process will determine if the BLM will allow livestock grazing on the Sutey Ranch and Haines parcel.

For multiple use and sustained yield, the BLM authorizes livestock grazing on BLM land under the authority of the Taylor Grazing Act of June 28, 1934, as amended, and the FLPMA of 1976, as amended by the Public Rangelands Improvement Act of 1978. The BLM manages grazing lands in conformance with current law, regulation, and policy.

The Standards for Public Land Health and Guidelines for Livestock Grazing Management in Colorado are directed at improving resource conditions for soils, riparian systems, upland vegetation, wildlife habitat, threatened and endangered species, and water quality (BLM 1997a). Standards for Public Land Health and Guidelines for Livestock Grazing Management in Colorado are implemented through LHAs, monitoring, evaluation and determination documents, environmental assessments (EAs), permit renewals, and other permit changes. These standards not only pertain to impacts associated with livestock grazing but also to other rangeland impacts from such activities as recreation, development activities, wildlife grazing, and wild horse management. Sustainable livestock grazing and desired rangeland condition require the collective management of forage, water, soil, and livestock by the BLM and by the livestock owners and operators. An interdisciplinary approach with utilization standards ensures effective management of the multiple resource values and uses.

- a. **Sutey Ranch.** The fenced 557-acre Sutey Ranch currently contains a system of irrigation ditches and laterals. Six pastures can be irrigated, are fenced, and were seeded for hay production and grazing. A cross fence on the ranch currently divides approximately 496 acres into two dry-land pastures. The dryland pastures are composed of sagebrush shrubland, pinyon-juniper woodlands, and Gambel oak shrubland. The irrigated and dry-land pasture system at Sutey Ranch includes three strategically built livestock ponds that were maintained (rebuilt, relined with bentonite) under non-federal ownership. Other range improvements on the ranch include a well with a 500-gallon storage tank, five barns/agricultural buildings, and corrals. Under private ownership, grazing occurred under a rotational system and the potential to utilize pastures was dependent upon the amount of precipitation and potential to grow hay. The Sutey Ranch held the grazing preference and permit for the Federally managed Sutey Allotment and was permitted for 55 AUMs.
- b. **Haines Parcel.** The 112-acre Haines parcel is located along Upper Prince Creek Road (CR 111) and is bordered by the BLM Prince Creek Grazing Allotment to the east and private lands to the north and west of the parcel. There are some old, unmaintained, intermittent sections of fence on the parcel, but no actual boundary fence exists between the parcel and the Prince Creek Allotment. Topographic features discourage cattle from drifting onto the parcel from the Prince Creek Allotment, however, recreation trails provide a corridor for cattle to travel down to the parcel. Vegetation includes sagebrush shrublands, Pinyon-juniper woodlands, and Gambel oak shrublands. An irrigation ditch diverts water from Prince Creek across the Haines parcel, however, the ditch does not provide irrigation for the parcel. There are no range improvements on the parcel. The Prince Creek Allotment is permitted for 336 AUMs, 237 cow/calf pair, and the grazing season is May 16th until June 28th.

Livestock grazing is currently not allowed on either of the two acquired parcels. The BLM cannot apply management prescriptions for livestock grazing without a management plan in place.

## ENVIRONMENTAL CONSEQUENCES.

### Impacts Relating to Specific Alternatives

#### Alternative 1

- a. **Sutey Ranch.** The 971-acre Sutey Allotment and the 557-acre Sutey Ranch would be combined and limited livestock grazing through a temporary non-renewable permit (reserve common allotment) would be authorized.

Livestock grazing (timing, duration, frequency, livestock type, and stocking rate) would be authorized as a tool to benefit wildlife forage or to provide rest to another allotment where the range needs to be rested from grazing due to wildfire or vegetation treatments.

A “Reserve Common Allotment” (RCA) is a grazing unit on public lands that the BLM has set aside for temporary livestock grazing use. To be eligible to use an RCA, an applicant must be participating in public land restoration or recovery effort that uses grazing “rest” of their preference-based allotments, or of other lands in which they have a legal interest (private, state lease, other federal agency lease), as a land treatment to achieve resource objectives. Such objectives may include accelerating riparian recovery, enhancing wildlife habitat or watershed conditions, restoring vegetation after wildfire or prescribed fire, recovering from drought, or establishing grazing infrastructure. RCAs may be used by approved applicants in sequence or in combination as a substitute forage source. The use of RCAs is intended to facilitate rangeland restoration, recovery and/or management objectives over broad areas within the jurisdiction of the administering office by providing increased flexibility and management options for the BLM and those grazing operators who could practicably make use of the RCA.

Following the completion of use by any one operator (or a set of operators), the RCA would then become available for use by another operator. The duration of any one operator’s use in an RCA must be limited to what has been agreed upon by the operator and the BLM before use is initiated. It may occur that the operator’s entire need for substitute forage while treating their preference-based allotment with rest cannot be met by the RCA. However, other operator’s needs for substitute forage must be recognized at the outset and basic fairness requires that no one operator can “dominate” the use of an RCA over time. The BLM would authorize use in an RCA only on a temporary and nonrenewable basis and no preference is assigned to this use. In other words, an operator’s use in an RCA would give that operator a priority as against other applicants to use it in the future.

The ranch’s existing fences, ponds, ditches, corrals, and agricultural buildings would be managed to meet wildlife objectives and would be maintained or removed by the BLM. Following the selection of this alternative, subsequent site-specific analysis and management plans would be necessary to guide implementation and authorization of livestock grazing.

Additional detail on how the Sutey Ranch would be managed as a reserve allotment can be found in **Appendix H**. During years when livestock are authorized, site-specific, active management would likely be necessary to avoid conflicts between livestock and recreation use.

- b. Haines Parcel.** The Haines parcel would become part of the Prince Creek Allotment and be managed under the current grazing permit. Grazing may occur along the roadside in the bottom portion of the parcel during livestock trailing.

## **Alternative 2**

- a. Sutey Ranch.** The 557-acre Sutey Ranch and the 971-acre Sutey Allotment would be not available for livestock grazing. Under this alternative, 55 AUMs and 1,527 acres on the Sutey Allotment would be unavailable for grazing. Range improvements (ditches, ponds, fences) would be managed by the BLM for the benefit of wildlife.
- b. Haines Parcel.** Impacts to livestock grazing would be expected to be the same as those described for Alternative 1.

## **Alternative 3**

- a. Sutey Ranch.** The 557-acre Sutey Ranch and the 971-acre Sutey Allotment would be combined and managed as one allotment called the Sutey Ranch Allotment. The Sutey Ranch Allotment would consist of approximately 60 acres of irrigated pasture and 1,412 acres of dryland pasture. The Sutey Ranch allotment would be permitted for up

to 93 AUMS. The season of use would be 30 - 61 days during the spring/early summer. It would be categorized as an intensively managed allotment. Range improvements (irrigation ditches, ponds, fences, corrals, well and storage tanks) would be assigned to the grazing permittee through a cooperative agreement and managed to meet grazing regulations as well as meeting objectives as part as the Red Hill SRMA. Site-specific, active management would likely be necessary to avoid conflicts between livestock and recreation use.

- b. Haines Parcel.** Impacts to livestock grazing would be expected to be the same as those described for Alternative 1.

#### **Alternative 4 and 4A**

- a. Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on livestock grazing from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis of impacts from oil and gas development on livestock grazing would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.3.2 Livestock Grazing, pages 4-472 through 4-483 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

For other resources and resource uses, the impacts to livestock grazing would be similar to those described for Alternative 1.

#### **CUMULATIVE EFFECTS**

The cumulative effects on livestock grazing for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-482 to 4-483. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely continue to affect range management are wildfires, surface-disturbing activities, the presence and abundance of grazing wildlife, increased recreational demands, and protections for sensitive resources.

The cumulative impact analysis area used to analyze cumulative impacts on range management includes allotments located entirely or partially within the planning area. Past actions that have affected livestock grazing include human-caused surface disturbances (mineral development, recreation, prescribed burning, mechanical vegetation treatments and historic grazing practices) and wildland fires that have contributed to current ecological conditions.

Cumulative projects that increase human disturbance in grazing areas could also indirectly impact grazing by increasing weeds and invasive species. Weed invasion can reduce preferred livestock and wildlife forage and increase the chance of weeds being dispersed by roaming cattle. Cumulative projects that increase human disturbance in grazing areas could directly impact grazing by displacing, injuring, or killing animals.

## 10. RECREATION

### AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.

Recreation resources and the appropriate location for recreation activities are allocated through the land use planning process. To help effectively manage recreation and visitor services, the BLM designates recreation management areas (RMAs). RMAs are classified as either a special recreation management area (SRMA) or an extensive recreation management area (ERMA). An SRMA is an administrative unit where existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance, and/or distinctiveness, especially as compared to other areas used for recreation. An ERMA is an administrative unit that requires specific management consideration in order to address recreation use, demand, or Recreation and Visitor Services program investments. There is no requirement to designate all lands as RMAs. BLM-managed lands that are not designated as RMAs (undesignated lands) are managed to meet basic recreation use and resource stewardship needs. This planning process will determine whether to designate the acquired lands as an RMA or leave them as undesignated lands.

- a. **Recreation in the Roaring Fork Valley.** The Roaring Fork Valley is known for providing a wide variety of outdoor recreation opportunities to people visiting the world-class destination resorts of Aspen-Snowmass. Carbondale, a gateway community that supports the destination resorts, promotes itself as a base camp for recreation enthusiasts coming to the Roaring Fork Valley. Due to increases in tourism and growing numbers of residents that seek an outdoor-oriented lifestyle, the CRVFO is experiencing large increases in the recreational use of BLM lands. There is a strong demand for recreational trails, especially mountain bike trails, on public lands in the Roaring Fork Valley. The Crown Mountain and Red Hill SRMAs are within close proximity to Carbondale and provide close to home access to local mountain biking trails for residents.

The BLM manages approximately 51,080 acres in the Roaring Fork Valley (between Aspen and Glenwood Spring). The Sutey Ranch added approximately 557 acres and the Haines parcel added approximately 112 acres to BLM lands in the Roaring Fork Valley. Two SRMAs, the Crown and Red Hill SRMAs totaling approximately 12,170 acres, are designated on BLM lands. Both are currently managed with an emphasis for participation in mountain biking and hiking. The Sutey Ranch is adjacent to the Red Hill SRMA and the Haines parcel is adjacent to the Crown SRMA.

The BLM has also designated one ERMA, the Thompson Creek ERMA totaling 9,500 acres. Within the Thompson Creek ERMA the recreation and visitor services focus is to maintain a naturally appearing landscape that supports participation in a variety of existing recreation activities (e.g., mountain biking, sport climbing, hiking, horseback riding and hunting) while commensurately protecting wilderness characteristics, wildlife values and the Thompson Creek ACEC values.

The remaining 29,410 acres of BLM lands within the Roaring Fork Valley are undesignated for recreation management. These lands are custodially managed for a multiple of dispersed recreation activities (e.g., camping, OHV riding and driving, hunting, horseback riding, rafting, fishing, sightseeing, target shooting).

Increasing recreation use in the Roaring Fork Valley has led to the need for more intensive recreation management. In most areas overlapping recreation activities occur with few conflicts. However, recently recreation groups have commented to BLM that some level of separation of recreation activities is needed to achieve RMA objectives, maintain desired recreation setting characteristics, reduce user conflicts in high-use areas, provide activity-specific facilities, and to provide for safety. RMP-level strategic recreation planning and implementation-level route designations are commonly how BLM creates a framework for long-term management.

- b. Sutey Ranch.** There was an immediate interest in recreational use of the Sutey Ranch when it came into public ownership. To address parking issues BLM built a small parking lot at the Sutey Ranch entrance along Garfield County Road 112. BLM closed the parking area from December 1, 2017 to April 15, 2018 to reduce disturbance of wintering wildlife. The remainder of the year visitors participate in non-mechanized and non-motorized activities such as hiking, hunting and horseback riding.

The Sutey Ranch is adjacent to the Red Hill SRMA, which is managed with a recreation emphasis for the activities of mountain biking and hiking. The Red Hill SRMA receives more than 65,000 visits annually and approximately two-thirds of the use on Red Hill is hiking and one-third is biking. Most visitors stay in the Mushroom Rock area near Carbondale. No recreation management designation has been applied to the Sutey Ranch but there is community interest in adding the Sutey Ranch to the Red Hill SRMA and managing it with an emphasis on biking as well as an opposing community interest in managing it as a separate RMZ with an emphasis solely on horseback riding.

The topography on the Sutey Ranch is characterized by low rolling hills, irrigated fields, sagebrush parks and open pinyon-juniper woodlands. This topography allows for ease of access and a freedom of movement for visitors not found on other BLM lands in the Roaring Fork Valley. Even the adjacent Red Hill SRMA is characterized by steep rocky terrain.

- c. Haines Parcel.** At the time of the acquisition in 2017, the 112-acre Haines parcel in Prince Creek contained a user-created trail network that was previously in trespass. The trails connected to the popular mountain bike trail system in the Crown SRMA. When BLM designated the Crown SRMA in the 2015 CRVFO Approved RMP, mountain biking and hiking use in Prince Creek (including the adjacent Haines parcel) was already increasing rapidly. Current traffic counter data estimates that 60,000 visitors passed by the counter west of the Haines parcel between November 2017 and August 2018. BLM has been working closely with the Roaring Fork Mountain Bike Association, Pitkin County Open Space and Trails, Pitkin County Road and Bridge and private landowners to address increasing recreation use in Prince Creek.

Environmental assessment # DOI-BLM-CO-N040-2017-0108-EA addressed the immediate recreation management concern by designating motorcycle and mountain bike routes. However the Haines parcel lacks overall recreation management direction through a RMA designation. There is strong community interest in maintaining a recreation emphasis on the Haines parcel by incorporating it into the adjacent Crown SRMA.

## ENVIRONMENTAL CONSEQUENCES.

**Impacts Common to All Alternatives.** This analysis is tiered to the recreation and visitor services analysis in the CRVFO's 2014 Proposed RMP and Final EIS. This analysis also considers the description of the proposed SRMA management frameworks found in **Appendix E**.

- a. Sutey Ranch. Recreation Management.** The Sutey Ranch would be closed to camping and overnight use due to its proximity to residences and the proposed management emphasis in each alternative. The BLM would not issue SRPs on the Sutey Ranch in order to 1) reduce human disturbance to wildlife 2) reduce potential conflicts with neighboring landowners and 3) maintain the existing, desired social recreation setting characteristics (RSCs) such as amount of contacts, group size and evidence of use.
- b. Haines Parcel.** The environmental consequences of all alternatives would be the same for the Haines parcel.

*Recreation Management.* All alternatives would expand the Crown SRMA to include the Haines parcel. Including the Haines parcel in the Crown SRMA will help recognize and meet increasing recreation demand for mountain biking and hiking opportunities in the Roaring Fork Valley. Specifically the Haines parcel provides the

critical link between the Prince Creek and Crown SRMA trail systems and the newly constructed Pitkin County Open Space and Trails trailhead in lower Prince Creek. The Crown SRMA objectives define the specific recreation activities, recreation experiences and benefits that are the focus for recreation management.

*Activities.* All alternatives would emphasize participation in mountain biking and maintaining the existing infrastructure for mountain biking. Other recreation activities that are consistent with recreation objectives would continue to occur.

*Recreation Outcomes.* All alternatives would support participation in mountain biking and the realization of the targeted experiences and benefits described in Appendix E - the Crown SRMA.

*Recreation Setting Characteristics.* The physical RSCs would remain the same as current conditions. The social RSCs would likely trend towards slightly larger group sizes, increases in the number of contacts and a reduction in the evidence of use through rehabilitation of unplanned human disturbances. From an operational standpoint the BLM and partners would likely increase management presence, on-site visitor information and improve signage through implementation efforts.

## Impacts Relating to Specific Alternatives

### Alternative 1

- a. **Sutey Ranch. Recreation Management.** The Sutey Ranch would not be designated as a RMA in Alternative 1.

On BLM lands that are not designated as RMAs the recreation and visitors services program focus is to custodially manage to protect visitor health and safety, support resource stewardship and reduce use conflicts. Recreation would not be emphasized on these lands; however, recreation activities would occur, except when closed to public use. Visitors would be limited seasonally to participate in recreation activities that are not in conflict with the wildlife emphasis of Alternative 1. Trailhead facilities would be adapted to better accommodate equestrian parking.

*Activities.* Alternative 1 would emphasize participation in turkey hunting in the spring and big game hunting in the fall but also be available for hiking, horseback riding and mountain biking. From December 1 to April 15 the ranch would be closed to all human uses to protect wintering wildlife. Based on the seasonal limitations and the limited activity-specific recreation improvements Alternative 1 would likely have the lowest level of visitation of the three alternatives.

*Recreation Outcomes.* Sutey Ranch would not be managed for specific recreation experiences and benefits as in Alternatives 2 and 3 which would designate the Sutey Ranch as an SRMA. Dispersed recreation activity participants would still realize a variety of undefined recreation experiences and benefits. The wildlife emphasis would directly benefit hunters however the quality of the recreation experience for other visitors will vary without specific recreation management considerations.

*Recreation Setting Characteristics.* Sutey Ranch would not be managed to maintain desired recreation setting characteristics (RSCs) for specific recreation activities or recreation outcomes as in Alternatives 2 and 3. Restrictive regulations and seasonal closures would be implemented to reduce disturbance to wildlife from recreation use under Alternative 1.

### Alternative 2

- a. **Sutey Ranch. Recreation Management.** Alternative 2 would designate the Sutey Ranch as a recreation management zone (RMZ) within the Red Hill SRMA, emphasizing horseback riding. Scoping comments indicated that local



equestrians strongly desire expanded low elevation, equestrian specific recreation opportunities and this alternative would strive to provide that recreation opportunity.

*Activities.* Since the Sutey Ranch came into public ownership equestrian use has become increasingly popular. While 165 miles of mixed use routes exist on BLM in the Roaring Fork Valley, Sutey Ranch would join a smaller group of lower elevation equestrian-specific riding areas. Similar horseback riding opportunities also occur on the Glassier Open Space and Sky Mountain Park. With increased amenities, equestrian use on the Sutey Ranch would likely increase. Alternative 2, by not allowing mountain biking, would create an area to horseback ride without encountering mountain bikers. This would alleviate equestrian safety concerns about mixed trail use. Other recreation activities that are consistent the RMZ objectives such as hiking and hunting would also occur. Alternative 2 would likely increase non-mechanized recreation use of the north side of the Red Hill SRMA.

*Recreation Outcomes.* Alternative 2 would support participation in equestrian activities and the realization of the targeted experiences and benefits described in Appendix E - Red Hill SRMA - Sutey RMZ. By managing to produce the targeted outcomes for equestrians, Alternative 2 does not offer the desired recreation opportunities and outcomes for mountain bikers found in Alternative 3.

*Recreation Setting Characteristics.* Under Alternative 2 the Sutey Ranch would likely see modest changes to accommodate equestrian use. The existing, but varied, level of naturalness and remoteness would be maintained but there would be an expansion of trailhead parking for horse trailers and the signing and development of equestrian trails and interpretive displays.

The social RSCs would likely trend towards slightly larger group sizes, increases in the number of contacts and more evidence of visitor use.

Operationally the Sutey Ranch would be managed for foot and horse access. The BLM and partners would likely increase management presence, on-site visitor information and install signage through implementation efforts. Regulations, restrictions, and seasonal closures would be implemented to achieve the recreation objectives and benefit wintering wildlife.

### Alternative 3

- a. **Sutey Ranch. Recreation Management.** Alternative 3 would expand the Red Hill SRMA to include the Sutey Ranch. Alternative 3 would bring forward the existing management framework for the Red Hill SRMA. Under Alternative 3 the Sutey Ranch would likely see the development of mountain bike trails some of which could be restricted to other types and modes of travel. Cross-country travel for foot and equestrian use would be allowed.

*Activities.* Alternative 3 would emphasize mountain biking and hiking. While mountain biking is currently not permitted on the Sutey Ranch, there is a strong desire for access to the Sutey Ranch and to the north side of the Red Hill SRMA. Unlike Alternative 2, Alternative 3 does not exclude other recreation activities provided they are consistent with recreation objectives of the Red Hill SRMA. Due to the popularity of both mountain biking and hiking Alternative 3 would likely encourage the highest overall recreation use of the Sutey Ranch.

*Recreation Outcomes.* Alternative 3 would support participation in mountain biking and the realization of the targeted experiences and benefits described in Appendix E - Red Hill SRMA. By managing to produce the targeted outcomes for mountain biking, Alternative 3 does not offer the desired recreation opportunities and outcomes for equestrians found in Alternative 2.

*Recreation Setting Characteristics.* The existing, but varied, level of naturalness and remoteness would generally be maintained. The Sutey Ranch would likely have marked and maintained mountain bike trails along with basic facilities such as restrooms, trailheads, and interpretive displays.

With expected increases in visitation the social RSCs would likely trend towards slightly larger group sizes, increases in the number of contacts and more evidence of visitor use on the Sutey Ranch and on the north side of the Red Hill SRMA.

Mountain bike use would be predominant but all use would be non-motorized. Additional visitor information would be available and an increased on-site staff presence would occur. Regulations, restrictions, and seasonal closures would be implemented to achieve the recreation objectives and benefit wintering wildlife.

#### **Alternative 4 and 4A**

- a. **Sutey Ranch.** Within the recreation and visitor services program the impacts to recreation visitation would be the similar as those described for Alternative 1. The BLM would not manage or monitor for specific recreation outcomes for visitors as in Alternatives 2 and 3 where it is designated an SRMA. Visitors and the community still would realize recreation outcomes but management will not strive to achieve specific recreation experiences or benefits.

*Activities.* Alternative 4 and 4A is different from Alternative 1 in that it would allow equestrian access from April 16 to November 30 and mountain biking access to the north side of the Red Hill SRMA from June 1 to September 30. The extended season of use would benefit equestrians because it allows horseback riding in the spring and fall without any potential interaction with mountain bikers. In addition, the BLM is proposing a monitoring standard on the designated mountain bike route to reduce potential conflicts between mountain bikers and equestrians. Hiking use would occur from April 16 through November 30. Hunting would occur within the various hunting seasons. The recreation management approach would offer seasonal recreation opportunities for various users within the context of sustaining wildlife habitat.

*Recreation Outcomes.* Sutey Ranch would not be managed for specific recreation experiences and benefits as in Alternatives 2 and 3 which would designate the Sutey Ranch as an SRMA. Recreation activity participants would still realize a variety of undefined recreation experiences and benefits.

*Recreation Setting Characteristics.* Sutey Ranch would not be managed to maintain desired recreation setting characteristics (RSCs) for specific recreation activities or recreation outcomes as in Alternatives 2 and 3. There would be a few changes in the physical setting due to changes at the trailhead and the development of some designated trails. The social recreation setting characteristics (i.e., contacts with others, group size and evidence of visitor use) would be higher based on the increased numbers of people visiting the Sutey Ranch in the spring, summer and fall. Visitor use regulations and seasonal closures would be implemented to reduce recreation conflicts and disturbance to wintering wildlife from recreation.

- b. **Sutey Ranch and Haines Parcel.** For fluid minerals, the analysis of impacts from oil and gas development on recreation from Alternative 4 and Alternative 4A would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis of impacts from oil and gas development on recreation would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.3.3 Recreation and Visitor Services, pages 4-484 through 4-537 of the Proposed RMP.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be

expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

For other resources and resource uses, the impacts to recreation would be the same as those described for Alternative 1.

## CUMULATIVE EFFECTS

The cumulative effects on recreation for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-534 to 4-537. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely continue to affect recreation are increased visitation (especially from residents within the Roaring Fork Valley and those from the surrounding region), urbanization of communities in the Roaring Fork Valley, advances in outdoor recreation equipment, management in existing Recreation Management Areas, and energy development.

Reasonably foreseeable trends that would result in cumulative impacts on recreation include continued demand for all recreation opportunities currently available on BLM lands, especially an increased demand for close-to-home recreation opportunities for local residents. Increases in visitation is assumed due to a growing regional population, the outdoor-oriented lifestyle of Colorado residents, increases in tourism due to promotion and increased popularity of adjacent BLM and Forest Service lands.

## 11. SOCIAL AND ECONOMIC CONDITIONS

### AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.

- a. **Sutey Ranch.** The Sutey Ranch parcel (557 acres) is located in Garfield County, which has a land area of 2,958 square miles. The county seat is Glenwood Springs; other municipalities include Carbondale (which is also the closest population center to the parcel), New Castle, Silt and Parachute.

Population estimates for 2017 indicate that Garfield County has 59,118 residents and the town of Carbondale has 6,820 residents (U.S. Census Bureau 2018).

Garfield County's economy in 2016 was largely supported by jobs in government, construction, retail trade, and accommodations/ food service industries, which together comprised over 45 percent of total employment in the County (Bureau of Economic Analysis (BEA) 2017). The population and development is concentrated in the Roaring Fork and Colorado River valleys, in part due to the expanse of public lands, which comprise 60 percent of the County.

- b. **Haines Parcel.** The Haines parcel (112 acres) is located in Pitkin County, which has a land area of 973 square miles and 17,890 residents in 2017 (U.S. Census Bureau 2018). The county seat is Aspen; other municipalities include

Basalt, Redstone and Woody Creek. Although the Haines parcel is located in Pitkin County, the town of Carbondale in Garfield County is the closest population center to the parcel.

Pitkin County's economy in 2016 was largely supported by jobs in the accommodations/food service, real estate, and arts, entertainment and recreation industries, which together comprised over 45 percent of total employment in the County (BEA 2017).

## **ENVIRONMENTAL CONSEQUENCES.**

BLM management of public lands of the Roaring Fork Valley contributes impacts to local communities and economies. However, the specific economic contributions of these small parcels are unquantifiable within the overall outdoor recreation-based economies in the Roaring Fork Valley. The BLM does expect an increase in local use on the parcels, which could provide social value that increases the quality of life; such as increased opportunities to outdoor recreation, enhanced outdoor-oriented lifestyle, and desirability to live in the area for local residents.

Alternative 4A proposes to close the Sutey Ranch to fluid mineral leasing, while under the other alternatives, the Sutey Ranch would be open to fluid mineral leasing. However, the impacts from fluid mineral leasing would be expected to be the same across all alternatives. The rationale for this conclusion is that 1) it would be virtually impossible to find a surface location for development that would meet the exception criteria for all the proposed no-surface occupancy and controlled surface use stipulations and applicable stipulations from the 2015 CRVFO Approved RMP (i.e., CRVFO-NSO-7 - Priority Wildlife Habitat, CRVFO-NSO-25: Special Recreation Management Areas) and 2) the area is identified as low potential in the CRVFO Reasonably Foreseeable Development Scenario (BLM CRVFO RFD 2008) and development is highly unlikely.

Alternative 4A. The analysis of impacts from oil and gas development on social and economic conditions would be substantially similar to the analysis contained in the CRVFO 2014 Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.6.2 Social and Economic Conditions, pages 4-763 through 4-789 of the Proposed RMP.

## **CUMULATIVE EFFECTS**

The cumulative effects on social and economic conditions for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-781 to 4-783. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the Roaring Fork Valley that have affected and will likely continue to affect social and economic conditions are chiefly mining and mineral exploration and development, lands, realty, transportation, ROWs, renewable energy development, recreation, and livestock grazing.

Changes to social and economic conditions result when individuals, businesses, governments, and other organizations initiate actions. Millions of decisions will be made by thousands of state residents and others, over the next several decades that will affect trends in employment, income, housing, and property in the Roaring Fork Valley. Projections published by the State Demography Office within the Colorado Department of Local Affairs account for these individual decisions in the aggregate, and provide a baseline for comparing effects of alternatives in the future.

## **12. WATER RIGHTS**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

The water policy of the BLM is that the states have the primary authority and responsibility for the allocation and management of water resources within their own boundaries, except as otherwise specified by Congress. The objectives of the BLM water rights program are to:

1. Cooperate with State Governments – Cooperate with state governments under the umbrella of state law to protect all water uses identified for public land management purposes.
2. Conform to Applicable State Water Rights Laws – Conform to applicable state water laws and administrative claims procedures in managing and administering all BLM programs and projects, except as otherwise specifically mandated by Congress.
3. Protect Water Rights – Protect the existing federal reserved water rights and State appropriative water rights of the United States.
4. Acquire and/or Perfect Water Rights – Acquire and perfect the water rights necessary to carry out public land management purposes through state law and administrative claims procedures unless a federal reserved water right is otherwise available, and a determination is made that the primary purpose of the reservation can be served more effectively through assertion of the available federal reserved water right.

Well 19895-MH is linked to an insulated storage tank inside the historic cabin on the Sutey Ranch. The storage tank is attached to a water spigot. The water spigot would need to be signed as non-potable if it is used. If not, the well should be plugged and abandoned per Colorado Division of Water Resources form number GWS-09.

- a. Sutey Ranch.** The acquisition included water rights in the form of 12 shares of the capital stock of The Park Ditch and Reservoir Company, Certificate No. 051, and 1.33 shares of capital stock in The Park Ditch and Reservoir Company, Certificate No. 055 for approximately 2.25 cubic feet per second (cfs), decreed to the Park Ditch and Reservoir Company, and 51 acre feet of water storage rights in Consolidated Reservoir. Park Ditch was adjudicated on 6/26/1913 and is junior to the West Highline Ditch adjudicated on 5/11/1889 on West Coulter Creek below the Consolidated Reservoir and Ralston Ditch #1 adjudicated on 4/18/1890. C&M Ditch is the senior water rights holder on Cattle Creek adjudicated on 5/11/1889 located on Upper Cattle Creek.

The Sutey Ranch currently has a water well located within the boundaries. The permit number is 19895-MH located in the SW Quarter of the NE Quarter Section 15 Township 7S Range 88W in which the BLM was deeded the permit during the land exchange. This well is currently permitted for domestic use not to exceed 15 gallons per minute (gpm) and is drilled 320ft in depth.

- b. Haines Parcel.** There are no water rights associated with the Haines parcel.

The BLM is currently not managing the water rights on the Sutey parcel. The BLM requires that an approved management plan be in place in order to begin actively administering the water rights.

## ENVIRONMENTAL CONSEQUENCES.

### Impacts Relating to Specific Alternatives

#### Alternative 1

**Sutey Ranch.** Under all alternatives water rights would be managed for the beneficial uses for which they were adjudicated, such as livestock and wildlife watering and irrigation. The surface water that exists on the Sutey Ranch

parcel is in the form of irrigation ditches and livestock ponds. Wildlife would be able to take advantage of open ditches and livestock ponds for watering and also utilize the irrigated fields for forage. The nature in which wildlife moves through the landscape shows they do not typically loaf in streambeds. Therefore, the herds are less likely to cause bank alteration and erosion of the irrigation ditches as they do not typically congregate for long periods of time.

Depending on livestock grazing numbers and duration, livestock may induce mechanical erosion such as bank fracture and slumping. This would increase maintenance labor and time on ditches to achieve efficient water delivery and maintain water rights associated with this parcel. Proper stocking rates and distribution of cattle would be important in order to maintain ditch stability and water delivery efficiency.

## **Alternative 2**

**Sutey Ranch.** Impacts would be expected to be similar as those described for Alternative 1.

## **Alternative 3**

**Sutey Ranch.** Impacts would be expected to be the same as those described for Alternative 1.

## **Alternative 4**

**Sutey Ranch.** Impacts would be expected to be the same as those described for Alternative 1.

## **Alternative 4A**

**Sutey Ranch.** Oil and gas development would not be expected to impact the BLM's water rights for the Sutey Ranch.

## **CUMULATIVE EFFECTS**

Cumulative impacts to water rights include mechanically induced erosion to ditch banks from cattle and wildlife. This will increase the time that will need to be spent performing maintenance on ditches in order to apply water rights to beneficial use. Additionally, applying these water rights, which divert from Cattle Creek, could contribute to dewatering Cattle Creek, potentially resulting in impacts to water quality in the creek. Irrigation efficiency and appropriate management of cattle grazing would minimize these cumulative impacts.

## **13. LOCATABLE MINERALS, SALABLE MINERALS AND NON-ENERGY LEASABLE MINERALS**

### **AFFECTED ENVIRONMENT AND DESCRIPTION OF THE NO ACTION ALTERNATIVE.**

**Sutey Ranch and Haines Parcel.** Locatable minerals are those valuable minerals authorized under the US mining laws, generally referred to as the General Mining Act of 1872, as amended. All BLM lands are open to mineral entry and development (locatable minerals) under the General Mining Act of 1872 unless already segregated. No claims have been located and no mining has occurred or is occurring on the Sutey Ranch or the Haines Parcel.

Salable mineral activities involve small sales for commercial and residential uses of common variety minerals that primarily include moss rock, flagstone, basalt boulders, and sand and gravel. Salable minerals are subject to disposal under the Materials Act of July 31, 1947. BLM's policy is to make mineral materials available unless detrimental to the public interest, to protect public land resources and the environment, and to minimize damage to public health and safety. Through land use planning, the BLM may designate public land as open or closed to disposals, and the open areas may be

designated with special conditions. There is potential for salable minerals however the local demand is low. No mineral material/salable mineral operations have occurred in the past or are occurring on the parcels.

Consistent with Section 205 of FLPMA, the donated portion of the Sutey Ranch Parcel (235 acres) would be closed to locatable minerals (See Appendix A for a map of this area). The remainder of the Sutey Ranch (321 acres) and the Haines parcel would be open to locatable mineral entry.

## **ENVIRONMENTAL CONSEQUENCES.**

### **Impacts Relating to Specific Alternatives**

#### **Alternative 1**

**Sutey Ranch and Haines Parcel.** For locatable minerals, salable minerals, and non-energy leasable minerals, the analysis would be substantially similar to the analysis contained in the 2014 CRVFO Proposed RMP and Final EIS. The analysis in the Final EIS is therefore incorporated here by reference. See Section 4.3.6.3 Locatable Minerals, Salable Minerals, and Non-Energy Leasable Minerals, pages 4-595 through 4-611 of the Proposed RMP. Proposed recommendations for withdrawals on locatable minerals and restrictions on salable minerals/mineral material disposals would impact areas where development activities and sales could occur.

#### **Alternative 2**

**Sutey Ranch and Haines Parcel.** Impacts to locatable minerals, salable minerals, and non-energy leasable minerals would be expected to be the same as those described for Alternative 1.

#### **Alternative 3**

**Sutey Ranch and Haines Parcel.** Impacts to locatable minerals, salable minerals, and non-energy leasable minerals would be expected to be the same as those described for Alternative 1.

#### **Alternative 4 and 4A**

**Sutey Ranch and Haines Parcel.** Impacts to locatable minerals, salable minerals, and non-energy leasable minerals would be expected to be the same as those described for Alternative 1.

## **CUMULATIVE EFFECTS**

The cumulative effects on locatable, salable and non-energy leasable minerals for all action alternatives in conjunction with past, present and reasonably foreseeable actions in the planning area are expected to be substantially similar to the cumulative effects described in CRVFO's 2014 Proposed RMP and Final EIS. See pages 4-610 to 4-611. That analysis is incorporated here by reference.

Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and will likely continue to affect locatable, salable and non-energy leasable minerals are: urbanization of communities in the Roaring Fork Valley, travel management, housing developments, and energy development.

Reasonably foreseeable trends that would result in cumulative impacts on locatable, salable and non-energy minerals include continued demand for mineral materials, low commodity prices, increased demand due to increases in development and tax prices.

## CHAPTER 4 – COORDINATION AND CONSULTATION

**COORDINATION.** Regulations require the BLM to coordinate and consult with federal, state, and local agencies about the potential of the proposed project and alternatives to affect sensitive resources. The coordination and consultation must occur in a timely manner and are required before any final decisions are made.

Issues related to agency consultation may include biological resources and cultural resources. Since no species listed under the Endangered Species Act occur in the planning area, no consultation with U.S. Fish and Wildlife Service is required. Cultural resource consultations apply to the potential for impacts to important cultural or archaeological sites, and since the Sutey Ranch contains historic structures, the BLM will consult with the State Historic Preservation Officer, as well as any appropriate tribal governments. These consultation processes were initiated during the public scoping process.

**TRIBAL CONSULTATION.** Section 106 of the National Historic Preservation Act (NHPA) (16 United States Code [U.S.C.] 470) requires federal agencies to take into account the effects that their approvals and federally funded activities and programs have on historic properties and traditional cultural properties. “Historic properties” include those properties included in, or eligible for, the National Register of Historic Places (NRHP) (36 CFR 800.16(1)(1)).

The BLM has begun Tribal Consultation with the Northern Ute Tribe, Southern Ute Tribe, the Ute Mountain Ute Tribe and the Colorado State Historic Preservation Officer (SHPO) and will continue through the life of the RMPA/EA, including implementation.

**BLM INTERDISCIPLINARY TEAM AUTHORS AND REVIEWERS.** The BLM interdisciplinary team that prepared this EA is shown in the table below:

**TABLE 7 – LIST OF PREPARERS AND REVIEWERS**

Name	Title	Areas of Participation
Gloria Tibbetts	Acting Field Manager	Management Oversight
Brian Hopkins	Assistant Field Manager	NEPA Compliance
Kristy Wallner	Rangeland Management Specialist	Livestock Grazing
Carla DeYoung	Ecologist	Vegetation
Chad Mickschl	Hydrologist	Soil, Water, Water Rights
Erin Leifeld	Archaeologist	Cultural Resources and Native American Religious Concerns
Hilary Boyd	Wildlife Biologist	Terrestrial Wildlife, Migratory Birds
Miles Gurtler	Outdoor Recreation Planner	Recreation, Travel and Access and VRM



Justin Jones	Park Ranger	Recreation
Faith Dziedzic	GIS Specialist	GIS calculations, map production
Wendy Huber	Planning and Environmental Coordinator	NEPA Compliance/Project Manager
Erin Jones	Planning and Environmental Coordinator	NEPA Compliance/Project Manager

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