

**U.S. Department of the Interior  
Bureau of Land Management  
Royal Gorge Field Office  
3028 E. Main Street  
Canon City, CO 81212**

## **ENVIRONMENTAL ASSESSMENT**

NUMBER: CO-200-2005-0025 EA

CASEFILE/PROJECT NUMBER (optional):

PROJECT NAME: Planning – South Park Land Tenure Adjustment Plan and Royal Gorge Resource Management Plan Amendment

PLANNING UNIT: South Park, #4

LEGAL DESCRIPTION: Park County, 6th Principal Meridian; All BLM administered public lands in South Park. Public lands considered include approximately 63,600 acres in 152 distinct parcels ranging from 2 acres to 4534 acres.

APPLICANT: BLM

ISSUES AND CONCERNS: Mountain plovers, wetlands, open space, visual resources, and cultural resources, National Heritage Area designation

NEED FOR THE ACTION: In 2004, Park County Commissioners requested BLM reconsideration of land tenure decisions defined in the 1996 Royal Gorge Field Office Resource Management Plan (RMP), specifically decisions concerning public lands identified for disposal in South Park. The need for a change in previous land tenure decisions is based on new resource information gained since RMP completion including mountain plover habitat location and importance, wetlands, open space, cultural resources, and goals set forth in the Park County Master Plan.

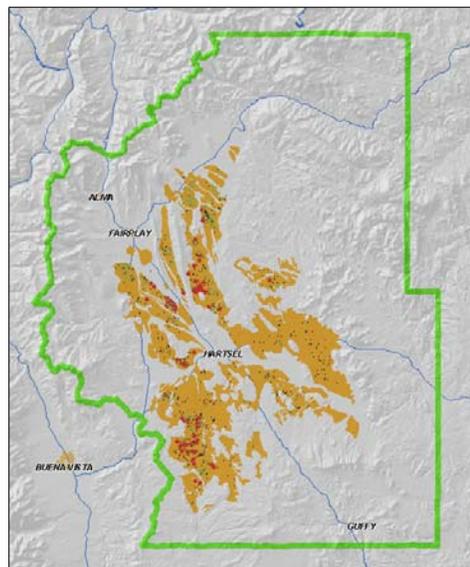
DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction:

### *Resources*

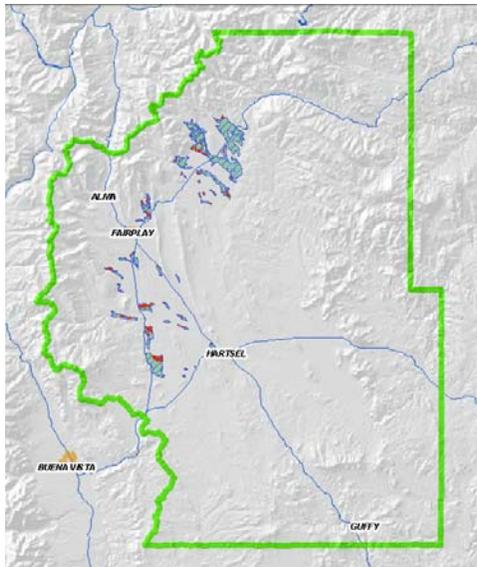
Since completion of the Bureau of Land Management Royal Gorge Field Office (BLM RGFO) RMP in 1996, knowledge of important resource values in Park County, Colorado has increased markedly. Information describing cultural, visual, recreation, ecological and biological resources, including sensitive species habitat, as well as private lands conservation efforts in South Park is

more thoroughly cataloged than previously. Notably, BLM has compiled additional information on a variety of these resource values in close cooperation with such partners as Park County, Colorado Open Lands, and Colorado Natural Heritage Program (CNHP). BLM funded a multi-year CNHP research effort in South Park to determine species status, ecology, potential and occupied habitat, and management opportunities of mountain plover (*Charadrius montanus*) on public lands in South Park (Figure 1; Grunau and Wunder, 2001). Specific CNHP recommendations and strategies relevant to BLM land tenure planning and conservation of mountain plover populations and breeding habitat in South Park that resulted from that public-private collaboration are summarized in Appendix 1.



**Figure 1.** Mountain plover (*Charadrius montanus*) potential habitat (orange polygons), nest sites (red circles), mountain plover observations (black dots), in Park County, CO (CNHP-1999)

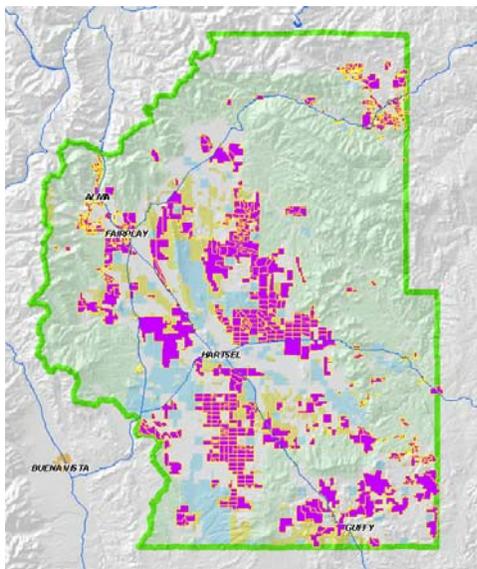
From 2001-2004, BLM also contracted ecological mapping of unique mire and fen wetlands in South Park (Figure 2: Johnson and Gerhardt, 2002; Culver, 2004). Survey, characterization, and evaluation of the condition of these and other wetlands resulted in 31 BLM parcels with wetland/riparian habitat totaling 781 acres in the South Park study area. Three globally vulnerable plant associations and six common plant associations were documented on public lands.



**Figure 2.** Fen wetlands (red polygons) and mire organic soils (blue polygons) in Park County, CO, (CNHP, 2004)

### *County Planning*

Concurrent BLM participation in the South Park Wetlands Focus Area Committee has also clarified both landscape-scale trends in private subdivisions (Figure 3) and private-public conservation opportunities afforded by open space initiatives on private lands adjacent to BLM parcels. Cooperative conservation efforts completed since 1996 by private property owners in South Park jointly with the Colorado Cattlemen’s Land Trust, Colorado Open Lands and the Nature Conservancy occur in proximity to public lands (Figure 4).



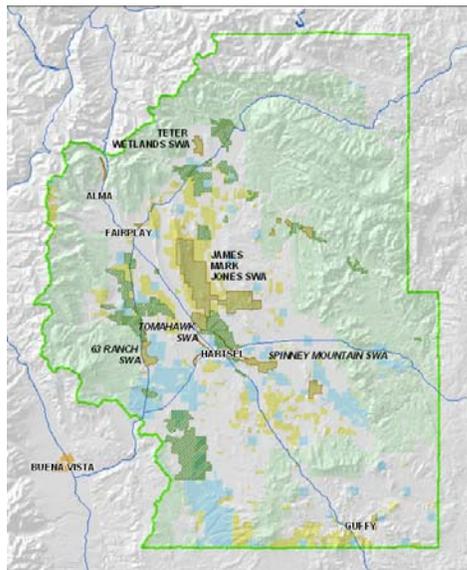
**Figure 3** Private land subdivisions (purple), BLM land (gold), State Land (blue), and Forest Service lands (green) in Park County, CO. (Park County GIS)

Since BLM RMP completion in 1996, Park County completed a community-based Land Use Master Plan defining visual corridors, recreation priorities, and cultural features among other resources key to the county's future. Park County government also completed a feasibility study for a South Park National Heritage Area (NHA) federal designation that recognized the rich prehistoric, historic, and natural heritage of South Park, Colorado. The South Park NHA designation is supported by local government and Park County citizens with the proposed federal designation presently before the US Congress. The South Park NHA would recognize the region’s mining, ranching, and tourism economy as well as the region’s rich wildlife and ecological features. BLM public lands are considered key to the NHA designation

## *Lands*

The current pattern of BLM land ownership in South Park is largely a relic of the 1872 Mining Law, the 1862 Homestead Act, historic mining and ranching activity, and land settlement history. Existing BLM public lands in South Park are defined by variable parcel size, scattered and/or isolated parcel locations, adjacency to the James Mark Jones State Wildlife Area, but largely discontinuous from US Forest Service lands in the Mosquito and Tarryall mountain ranges (Figure 4).

BLM is governed by and administers public lands, realty actions and land tenure under a series of laws and executive orders outlined in Appendix 2. BLM most recently considered land tenure decisions in South Park with the BLM Royal Gorge Resource Management Plan (RMP) in 1996.



**Figure 4** Private land open space initiatives (green hatch), State Wildlife Areas (olive), BLM lands (gold), other State Lands (blue), Forest Service Lands (green) in Park County, CO

As defined in the RMP, BLM realty disposition and land tenure in the South Park Sub-region favors long-term public lands consolidation including the disposal and/or exchange of difficult-to-manage and isolated parcels. The planning objective prioritized streamlining the efficiency of public land management in South Park via consolidation of larger tracts and favoring federal ownership of parcels with legal public access. In 1996, the approximately 64,000 acres of BLM administered public lands in South Park were placed into three land tenure categories:

- Disposal
- Exchange - restricted
- Disposal.

Since approval of the RMP, BLM has acquired lands in three areas through land exchanges. Those acquisitions were in the Rye Slough, Round Hill and Playa Lakes areas.

### *Public Scoping*

In 2003 BLM responded to public requests for the agency to reconsider the 1996 RMP land tenure decisions and evaluate retention of more BLM administered public lands in South Park. This federal action would be in support of county land use planning efforts, private-lands protection of open space, and conservation of biological, ecological, and cultural features not included in the agencies current management document. The BLM continues to recognize taxpayer costs associated with managing a large number of small parcels in the planning area. However, the agency also recognizes that new information about mountain plovers, wetlands, open space, Park County's Master Plan, and the proposed National Heritage Area designation should be incorporated into an amended BLM Royal Gorge RMP.

Therefore the BLM is proposing to amend land tenure decisions defined in the 1996 Royal Gorge Resource Management Plan in South Park as a federal action under the auspices of the National Environmental Policy Act (NEPA). A BLM public scoping timeline for this federal action is detailed in [Appendix 3](#). As a preliminary NEPA step, BLM compiled a Geographic Information System (GIS) database of the South Park planning area from public and private sources including data on biological, ecological, cultural resources, parcel specific information, and public comment. Employing the latter, BLM completed a parcel-based exercise to rank individual and cumulative resource values by parcel ([Appendix 4](#)). Information from early public scoping and the latter parcel ranking exercise were used to develop a range of reasonable alternatives for comparison, as required by the NEPA.

Three draft alternatives for South Park Land Tenure (Alternatives A, B, and C) were developed and presented to the public for review and comment in late 2006 and early 2007. Public comment on the draft alternatives largely concerned the levels and location of proposed retention and disposal lands as well as impacts to public recreation, declining open space, cultural features, ranch economics and heritage, wildlife habitat, and designation of the South Park National Heritage Area should the acreage for disposal in Alternatives A, B, and C ever be fully realized.

In response to public comments on the three draft alternatives (Alternatives A, B, and C), BLM Royal Gorge Field Office developed Alternative D. The following section defines issues common to all alternatives, outlines alternatives considered but not brought forward for assessment, and describes the four alternatives evaluated in this environmental assessment.

### Issues Common to All Alternatives

Issues common to all alternatives that require new BLM Royal Gorge RMP decisions and/or modifications include the status and location of mountain plover populations and breeding habitat, location, hydrology and biological significance of fen and mire wetlands, location and trends in private conservation efforts, and paleontology and cultural features in the South Park planning area.

Proposed changes to land tenure language for South Park (RMP Planning Unit #4) to clarify realty categories common to action Alternatives A, C, and D are listed in [Table 1](#). [Table 2](#) compares the existing RMP land tenure decision language for specific resource values as they

appear in the 1996 document (Alternative B) and proposed decision language changes through RMP amendment by resource category for Alternatives A, C, and D.

**Table 1** Comparison of *current* and *proposed* BLM Resource Management Plan land tenure definitions for BLM administered public lands in South Park, Park County, Colorado

<b>Current or No Action (Alternative B)<sup>1</sup></b>	<b>Action Alternatives (Alternatives A, C, D)<sup>2</sup></b>
<p><b>Category I - DISPOSAL:</b> These lands are suitable for disposal by any means, including but not limited to sale, exchange, Recreation and Public Purposes (R&amp;PP) patents, or jurisdictional transfer. Concerns of adjacent landowners, current users, and local governments will be considered prior to disposal. An environmental assessment will be prepared for all such disposals. BLM will not acquire private lands in the vicinity of disposal parcels.</p>	<p><b>Category I - DISPOSAL:</b> These lands are suitable for disposal by any means, including but not limited to sale, exchange, Recreation and Public Purposes (R&amp;PP) patents, or jurisdictional transfer. Concerns of adjacent landowners, current users, and local governments will be considered prior to disposal. An environmental assessment will be prepared for all such disposals. BLM will not acquire private lands in the vicinity of disposal parcels.</p>
<p><b>Category II - RETENTION:</b> These lands are identified for retention in Federal ownership, with limited exceptions. Lands in this zone have significant public values and disposal could only occur when in the public interest and to complement management. Retention lands include Areas of Critical Environmental Concern (ACECs). Proposals to purchase or exchange BLM lands in this category will generally be denied, however, BLM may purchase or exchange private lands in the vicinity of these lands. In very limited situations, retention lands may be disposed of to acquire higher value private lands in the vicinity of the lands to be disposed. Acquisition of non-Federal lands in the vicinity of these lands may be pursued through exchange, purchase or donation.</p>	<p><b>Category II - RETENTION:</b> These lands are identified for retention in Federal ownership because lands in this zone have significant public values. Retention lands include Areas of Critical Environmental Concern (ACECs). Acquisition of non-Federal lands in the vicinity of these lands may be pursued through exchange, purchase or donation.</p>
<p><b>Category III – EXCHANGE - RESTRICTED:</b> These lands are generally identified for retention due to their resource values, access and public interest. If there are situations that arise that allow other federal or state agencies, or private entities (i.e., land trusts) to manage public lands consistent with BLM objectives, consideration can be given to disposal (through a variety of means, including sale, exchange and R&amp;PP) of these lands to those agencies/entities. Where lands lie adjacent to those held by other resource/land management agencies, preference will be given to transfer to those agencies. Where lands lie adjacent to existing land conservation easements, transfer to private interests may be considered if the public lands are added to the conservation easements and resource values are enhanced or maintained. If there are important resource values associated with BLM lands, and the BLM prefers to preserve these values, the lands may be sold thru direct sale provided the buyer establishes conservation easements or other protective covenants on the lands. BLM will consider proposals to exchange these lands for private or state lands and may propose such actions to other land owners. Acquisition of non-Federal lands in the vicinity of these lands may be pursued through exchange, purchase or donation, where the acquisition will serve to enhance the BLM’s objectives and special emphasis programs.</p>	<p><b>Category III – EXCHANGE - RESTRICTED:</b> These lands are generally identified for retention due to their resource values, access and public interest. If situations arise that allow other federal or state agencies, or private entities (i.e., land trusts) to manage public lands consistent with BLM objectives, consideration can be given to disposal (through a variety of means, including sale, exchange and R&amp;PP) of these lands to those agencies/entities. Where lands lie adjacent to those held by other resource/land management agencies, preference will be given to those agencies. Where lands lie adjacent to existing land conservation easements, transfer to private interests may be considered if the public lands are added to the conservation easements and resource values are enhanced or maintained. If there are important resource values associated with BLM lands, and the BLM prefers to preserve these values, the lands may be sold thru direct sale provided the buyer establishes conservation easements or other protective covenants on the lands. BLM will consider proposals to exchange these lands for private or state lands and may propose such actions to other land owners. Acquisition of non-Federal lands in the vicinity of these lands may be pursued through exchange, purchase or donation, where the acquisition will serve to enhance the BLM’s objectives and special emphasis programs.</p>

<sup>1</sup> BLM Royal Gorge Field Office Resource Management Plan, 1996

<sup>2</sup> BLM South Park Land Tenure Adjustment Environmental Assessment (CO-200-2005-0025EA)

**Table 2** Comparison of current and proposed BLM Resource Management Plan (RMP) land tenure decisions for BLM administered public lands in South Park Subregion #4, Park County, Colorado

<b><u>Current or No Action (Alternative B)</u></b> <b>Value Managed, Decision #, Decision</b>	<b><u>Action Alternatives (Alternatives A, C, D)</u></b> <b>Value Managed, Decision #, Decision</b>
<p><b>Special Status Animal Species Habitat 4-26</b> Special status animal species habitat will be available for fluid minerals leasing with timing limitations in:</p> <ul style="list-style-type: none"> <li>- bald eagle winter roosting habitat;</li> </ul>	<p><b>Special Status Animal Species Habitat 4-26</b> Special status animal species habitat will be available for fluid minerals leasing with timing limitations in:</p> <ul style="list-style-type: none"> <li>- bald eagle winter roosting habitat;</li> <li>- mountain plover nesting habitat.</li> </ul>
<p><b>Fluid Minerals 4-30</b> Fluid minerals leasing may occur on certain lands with a no surface occupancy stipulation to protect:</p> <ul style="list-style-type: none"> <li>- raptor nesting/fledging habitat;</li> <li>- Park County landfill;</li> <li>- reservoir rights-of-way;</li> </ul>	<p><b>Fluid Minerals 4-30</b> Fluid minerals leasing may occur on certain lands with a no surface occupancy stipulation to protect:</p> <ul style="list-style-type: none"> <li>- raptor nesting/fledging habitat;</li> <li>- Park County landfill;</li> <li>- reservoir rights-of-way;</li> <li>- mountain plover nesting habitat;</li> <li>- fen wetlands.</li> </ul>
<p><b>Fluid Minerals 4-31</b> Fluid minerals leasing may occur on certain lands with timing limitations to protect:</p> <ul style="list-style-type: none"> <li>- elk calving/deer birthing habitat;</li> <li>- bighorn sheep lambing habitat;</li> <li>- big game critical winter habitat;</li> <li>- bald eagle winter roosting habitat;</li> <li>- peregrine falcon nesting habitat;</li> </ul>	<p><b>Fluid Minerals 4-31</b> Fluid minerals leasing may occur on certain lands with timing limitations to protect:</p> <ul style="list-style-type: none"> <li>- elk calving/deer birthing habitat;</li> <li>- bighorn sheep lambing habitat;</li> <li>- big game critical winter habitat;</li> <li>- bald eagle winter roosting habitat;</li> <li>- peregrine falcon nesting habitat;</li> <li>- mountain plover nesting habitat.</li> </ul>
<p><b>Locatable Minerals &amp; Mineral Materials 4-35</b> Areas will be open to mineral entry under timing limitations and available for mineral materials development under a seasonal limitation through claimant/ operator notification to protect:</p> <ul style="list-style-type: none"> <li>- big game critical winter habitat;</li> </ul>	<p><b>Locatable Minerals &amp; Mineral Materials 4-35</b> Areas will be open to mineral entry under timing limitations and available for mineral materials development under a seasonal limitation through claimant/ operator notification to protect:</p> <ul style="list-style-type: none"> <li>- big game critical winter habitat;</li> </ul>

<ul style="list-style-type: none"> <li>- peregrine falcon habitat;</li> <li>- ferruginous hawk nesting/fledging habitat;</li> </ul>	<ul style="list-style-type: none"> <li>- peregrine falcon habitat;</li> <li>- ferruginous hawk nesting/fledging habitat;</li> <li>- mountain plover nesting habitat.</li> </ul>
<p><b>Locatable Minerals &amp; Mineral Materials 4-36</b></p> <p>Areas will be closed to mineral entry and mineral materials development to protect:</p> <ul style="list-style-type: none"> <li>- big game birthing habitat;’</li> <li>- fishery habitat;</li> <li>- perennial riparian areas;</li> </ul>	<p><b>Locatable Minerals &amp; Mineral Materials 4-36</b></p> <p>Areas will be closed to mineral entry and mineral materials development to protect:</p> <ul style="list-style-type: none"> <li>- big game birthing habitat;’</li> <li>- fishery habitat;</li> <li>- perennial riparian areas;</li> <li>- mountain plover nesting habitat;</li> <li>- fen wetlands.</li> </ul>
<p><b>Rights-of-Way 4-43</b></p> <p>There are no areas to be excluded from rights-of-way.</p>	<p><b>Rights-of-Way 4-43</b></p> <p>Areas will be excluded for some rights-of-way (see new Riparian decision) to protect:</p> <ul style="list-style-type: none"> <li>- fen wetlands.</li> </ul>
<p><b>Rights-of-Way 4-44</b></p> <p>Areas will be avoided for rights-of-way to protect:</p> <ul style="list-style-type: none"> <li>- big game birthing habitat;</li> <li>- big game critical winter habitat;</li> </ul>	<p><b>Rights-of-Way 4-44</b></p> <p>Areas will be avoided for rights-of-way to protect:</p> <ul style="list-style-type: none"> <li>- big game birthing habitat;</li> <li>- big game critical winter habitat;</li> <li>- mountain plover nesting habitat;</li> <li>- fen wetlands.</li> </ul>
<p><b>Land Ownership Adjustments 4-47</b></p> <p>Land ownership adjustments will be made with the following guidance:</p> <ul style="list-style-type: none"> <li>- parcels considered difficult and uneconomical to manage with no significant resource values will be identified for sale;</li> <li>- exchange could be used when the result is clearly in the best interest of the public and management will be improved;</li> <li>- identified parcels for acquisition or retention will provide values for public use and have access;</li> <li>- all uses will be equally considered in analyzing proposals;</li> </ul>	<p><b>Land Ownership Adjustments 4-47</b></p> <p>Land ownership adjustments will be made with the following guidance:</p> <ul style="list-style-type: none"> <li>- parcels considered difficult and uneconomical to manage with no significant resource values will be identified for sale;</li> <li>- exchange could be used when the result is clearly in the best interest of the public and management will be improved;</li> <li>- identified parcels for acquisition or retention will provide values for public use and have access;</li> <li>- all uses will be equally considered in analyzing proposals;</li> <li>- evaluate relationship among parcels to be</li> </ul>

	<p>sold or exchanged, other publicly owned lands, and subdivided private lands. Consolidate so that large blocks of public lands are near or adjacent to large working ranches and other conservation lands so that the value of these lands to wildlife, particularly mountain plovers, is maximized.</p> <ul style="list-style-type: none"> <li>- consolidate lands so that fen wetlands are protected;</li> <li>- work with the Colorado State Land Board and the Colorado Division of Wildlife to ensure that all public lands in the Reinecker Ridge area are retained, consolidated and managed for the high priority wildlife that is present.</li> </ul>
<p><b>Off-Highway Vehicle Use 4-54</b> An off-highway vehicle limited designation will be placed on designated roads and trails and/or seasonally to protect:</p> <ul style="list-style-type: none"> <li>- perennial riparian areas;</li> <li>- fishery habitat;</li> <li>- big game birthing habitat;</li> <li>- big game critical winter habitat;</li> <li>- special status animal habitat;</li> </ul>	<p><b>Off-Highway Vehicle Use 4-54</b> An off-highway vehicle limited designation will be placed on designated roads and trails and/or seasonally to protect:</p> <ul style="list-style-type: none"> <li>- perennial riparian areas;</li> <li>- fishery habitat;</li> <li>- big game birthing habitat;</li> <li>- big game critical winter habitat;</li> <li>- special status animal habitat;</li> <li>- mountain plover nesting habitat;</li> <li>- fen wetlands.</li> <li>- Class 5 paleontological resources</li> </ul>
<p>No current Riparian value RMP decision for BLM South Park Subregion #4</p>	<p><b>Riparian 4-65</b> Fen wetlands will be protected by:</p> <ul style="list-style-type: none"> <li>- excluded from any rights-of-way causing a physical change to water tables, hydrologic flow paths, water quality, changes in soil properties; or surface disturbing actions</li> <li>- only aerial rights-of-way not affecting the fens would be permitted.</li> </ul>
<p>No current Special Status Plants/Plant Communities Habitat value decision for BLM South Park Subregion #4</p>	<p><b>Special Status Plants/Plant Communities Habitat 4-66</b> Special status plants and plant community habitat in fen wetlands on public land will be protected through elimination of conflicting uses.</p>

## Range of Alternatives

Four South Park Land Tenure Adjustment Plan Amendment alternatives were selected for NEPA analysis. The range of alternatives in this environmental assessment includes a No Action alternative ([Alternative B](#)), representing the current situation, and three action alternatives: [Alternative A](#), [Alternative C](#), and the BLM proposed action [Alternative D](#). Draft and final range of South Park Land Tenure Adjustment alternatives for NEPA analysis were based on:

- public lands realty laws and guidelines ([Appendix 2](#))
- preliminary resource values rankings ([Appendix 4](#)),
- CNHP recommendations for sensitive species protection ([Appendix 1](#)), and
- public comment on draft alternatives in late 2006, early 2007.

The range of alternatives for NEPA analysis varies by land tenure *configuration* and *acreage* of public lands proposed for retention, restricted-exchange, and disposal. [Table 3](#) compares acreage statistics for the three RMP realty categories under the [four](#) South Park Land Tenure Adjustment alternatives<sup>3</sup>. [Appendix 5](#) summarizes 152 parcel acreage estimates for BLM public lands in the South Park planning area. [Appendix 6](#) summarizes acreage breakdown by parcel and proposed land tenure classification for each alternative.

**Table 3 - Comparison of Alternatives**

	<b>Retention</b>	<b>Exchange-Restricted</b>	<b>Disposal</b>
<b>Alt. A</b>	34,822 acres (55 %)	13,424 acres (21 %)	15,353 acres (24 %)
<b>Alt. B – No Action</b>	7,910 acres (12 %)	43,551 acres (68 %)	12,138 acres (20 %)
<b>Alt. C</b>	32,147 acres (51 %)	4,797 acres (7 %)	26,655 acres (42 %)
<b>Alt. D – Proposed Action</b>	40,316 acres (63%)	19,330 acres (30%)	3,953 acres (6 %)

(due to rounding, totals don't always equal 100 %; ref: ilmco6na1\gis\giswork\shared\nepa\CO-200-2005-0025\_EA.mxd)

**Alternative A:** Alternative A is portrayed in [Map A](#). Alternative A would expand the acreage of BLM lands defined for retention in the South Park planning area from current land tenure decisions defined in the 1996 RMP (Alternative B- [Map B](#)) by 43%. New retention properties identified in Alternative A include BLM parcels that ranked high in terms of individual and cumulative resource values. Parcels identified for retention in Alternative A contain a combination of resource values for mountain plover, wetlands, proximity to private open space, adjacency to Colorado State Wildlife Areas, cultural features, and other resource values.

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<sup>3</sup> Acreage estimates presented in this EA were generated in ESRI ArcMap™ GIS v. 9.2 using BLM land status data originally compiled from USGS 1:24,000 and 1:100,000 data sources. Parcel ID numbers represented in Appendices 5 and 6 and on Maps A, B, C, and D are arbitrary. Over the course of NEPA scoping and analysis, parcels were combined and/or added resulting in Parcel ID numeration gaps. Parcel numbers have been maintained for consistency and to allow tracking of public comment based on specific parcels.

Under Alternative A, approximately 34,822 acres would be held in retention as BLM public lands (approximately 55% of the BLM administered public lands in the study area) including public lands at Reinecker Ridge, Red Hill, Fourmile, Como East, Playa Lakes, Park Gulch, and Round Hill. Approximately 13,424 acres (~21%) would be categorized as exchange-restricted in Alternative A, a reduction of 47% over the No Action alternative. Lands categorized under the exchange-restricted category would allow for future realty transactions, but only if such transactions foster protection of resource values outside of public ownership. Alternative A identifies approximately 15,353 acres for potential disposal (~24%), an increase of 4% over the No Action.

Alternative A identifies those BLM parcels for retention that ranked highest in terms of resource values, notably mountain plover habitat, wetlands, open space, wildlife habitat, cultural values, and adjacent private conservation actions. The lands in the exchange-restricted category may have one or more resource values and would generally be retained in federal ownership unless a proposal is made for disposal that also includes protecting the land in a conservation easement or similar deed restriction. The parcels identified for disposal in Alternative A include the smallest and most scattered parcels notably parcels that are heavily influenced, and/or surrounded by adjacent private developments.

**Alternative B – The No Action Alternative:** Under Alternative B, the existing land tenure decisions in the 1996 Royal Gorge RMP would be retained. The No Action alternative would result in retention of approximately 7,910 acres of the public lands (~12 % of public lands in the planning area) while approximately 43,551 acres (~68% of planning area public lands) would be categorized as exchange-restricted. Under the No Action – Alternative B approximately 12,900 acres (~19% of South Park BLM lands) would be categorized for disposal by any means category (see the Alternative B - No Action Alternative map for details of this categorization) (see [Appendix 1](#) for a parcel by parcel acreage computation and [Appendix 2](#) for a breakdown of each parcel by alternative). BLM would continue to dispose of small isolated tracts of public land as opportunities arose. BLM would also consider land exchanges that would trade away lower value public lands for higher value private lands.

Under the No Action (Alternative B), the lands identified for retention are either in the Mosquito Range ACEC or are in areas where BLM has made recent acquisitions. Lands identified under the exchange-restricted category lands would only be disposed of with other entities through a land exchange for protection of resource values. The lands identified for disposal in the No Action represent the smallest acreage and most scattered parcels of public land. Lands in this category can be disposed of by any means.

**Alternative C:** Alternative C would change the current land tenure decision and increase lands for retention over the No Action Alternative by 39% to 32,147 acres ([Table 3](#)); approximately 51% of BLM administered public lands in the study area - see [Alternative C- Map C](#)). Alternative C would identify approximately 4,800 acres in the exchange-restricted category (~7%), lands that could be exchanged with private or public entities if resource values are protected. Under Alternative C, approximately 26,665 acres would be categorized for disposal by any means (~42%), an increase of 22% over the No Action (Alternative B). Under Alternative C, BLM would continue to dispose of small isolated tracts of public land as

opportunities arise. BLM would also consider land exchanges that would trade away lower value public lands for higher value private lands.

Alternative C is similar to Alternative A for lands in the retention category. The exchange-restricted category in Alternative C is much smaller than that found in Alternative A, while the lands identified for any disposal is higher than Alternatives A or B (No Action). This alternative was developed to provide a range of options to the decision maker on a number of parcels that pose long-term land management costs and public access constraints. As part of Alternative C, and similar to Alternative A, a number of existing decisions would be modified or new decisions added to the Royal Gorge RMP.

**Alternative D (Proposed Action):** Alternative D is portrayed in [Map D](#) and was developed in response to public comment received from Draft Alternatives A, B, and C. Alternative D would expand the acreage of BLM lands designated for retention in the South Park planning area from current land tenure decisions defined in the 1996 RMP in Alternative B ([Map D](#)) by 51%. New retention properties identified in Alternative D include BLM parcels that ranked high in terms of individual and cumulative resource values, as well as additional parcels prioritized by the public and Park County during draft alternative public comment. Parcels identified for retention in Alternative D contain a combination of resource values for mountain plover, wetlands, proximity to private open space, adjacency to Colorado State Wildlife Areas, cultural features, and other resource values.

In Alternative D, approximately 40,316 acres would be held in retention as BLM public lands ([Table 3](#); approximately 63% of the BLM administered public lands in the study area). Approximately 19,330 acres (30%) would be categorized as exchange-restricted in Alternative D, a reduction of 38% over the No Action (Alternative B). Lands categorized under the exchange-restricted category would be available for future realty transactions, but only if such transactions foster protection of resource values outside of public ownership. Alternative D identifies the least amount of study acre parcels (3,952 acres) for potential disposal (6%) among the alternatives, a decrease of 14% over the No Action.

As in Alternative A, Alternative D identifies those BLM parcels for retention that ranked highest in terms of resource values, notably mountain plover habitat, wetlands, open space, wildlife habitat, cultural values, and adjacent private conservation actions. The lands in the exchange-restricted category may have one or more resource values and would generally be retained in federal ownership unless a proposal is made for disposal that also includes protecting the land in a conservation easement or similar deed restriction. The disposal parcels include the smallest and most scattered parcels, especially those that are heavily influenced by adjacent private developments.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:** Alternatives including, but not limited to, “dispose all BLM parcels”, “retain all BLM parcels”, “exchange all BLM parcels”, or “exchange no BLM parcels”, etc. were not carried forward for NEPA analysis. NEPA public scoping identified a demand for long-term BLM retention of public lands in the South Park planning area. BLM recognizes that rapid, large-scale public land disposal in the study area could challenge Park County master planning and public-private open space

initiatives, jeopardize critical wildlife habitat, constrain recreation access, reduce cultural resource protection, and burden heritage ranching values for which the South Park National Heritage area designation is being considered<sup>4</sup>. Therefore, a NEPA alternative to “dispose all BLM parcels” was not carried forward.

However, BLM also recognizes that future land exchanges in the study area with adjacent public or private entities *could* conceivably streamline land management while simultaneously protecting resource values on those parcels. For instance, Colorado Division of Wildlife has interest in several parcels for purposes of wildlife management and hunter access. Other opportunities could similarly arise with private entities. Therefore a NEPA alternative to “exchange no BLM parcels” was not carried forward for analysis.

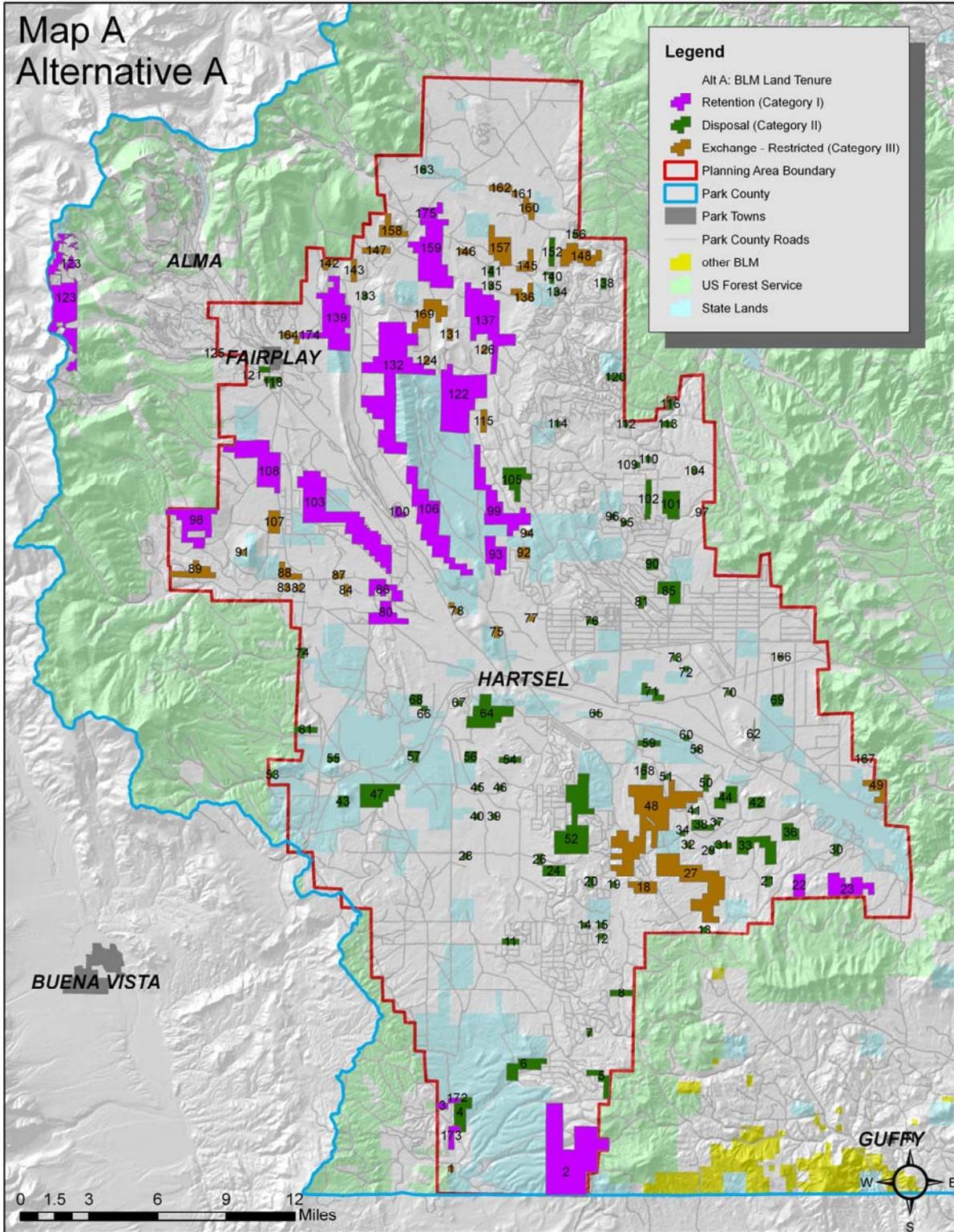
Finally, BLM realty policy and alternatives development is conducted in the legal context defined by the U.S. Congress and Executive Orders as outlined in [Appendix 2](#). Agency flexibility concerning potential land disposal of small and isolated parcels, particularly those small parcels with limited public access, may serve the public interest, depending on realty case-specific circumstances. Therefore, a NEPA alternative to “dispose no BLM parcels” was not carried forward for analysis.

While a large number of alternatives could have been developed, with various parcel combinations of the three land tenure categories, no additional alternatives were carried forward as the four listed alternatives reasonably cover land tenure criteria and issues identified in scoping.

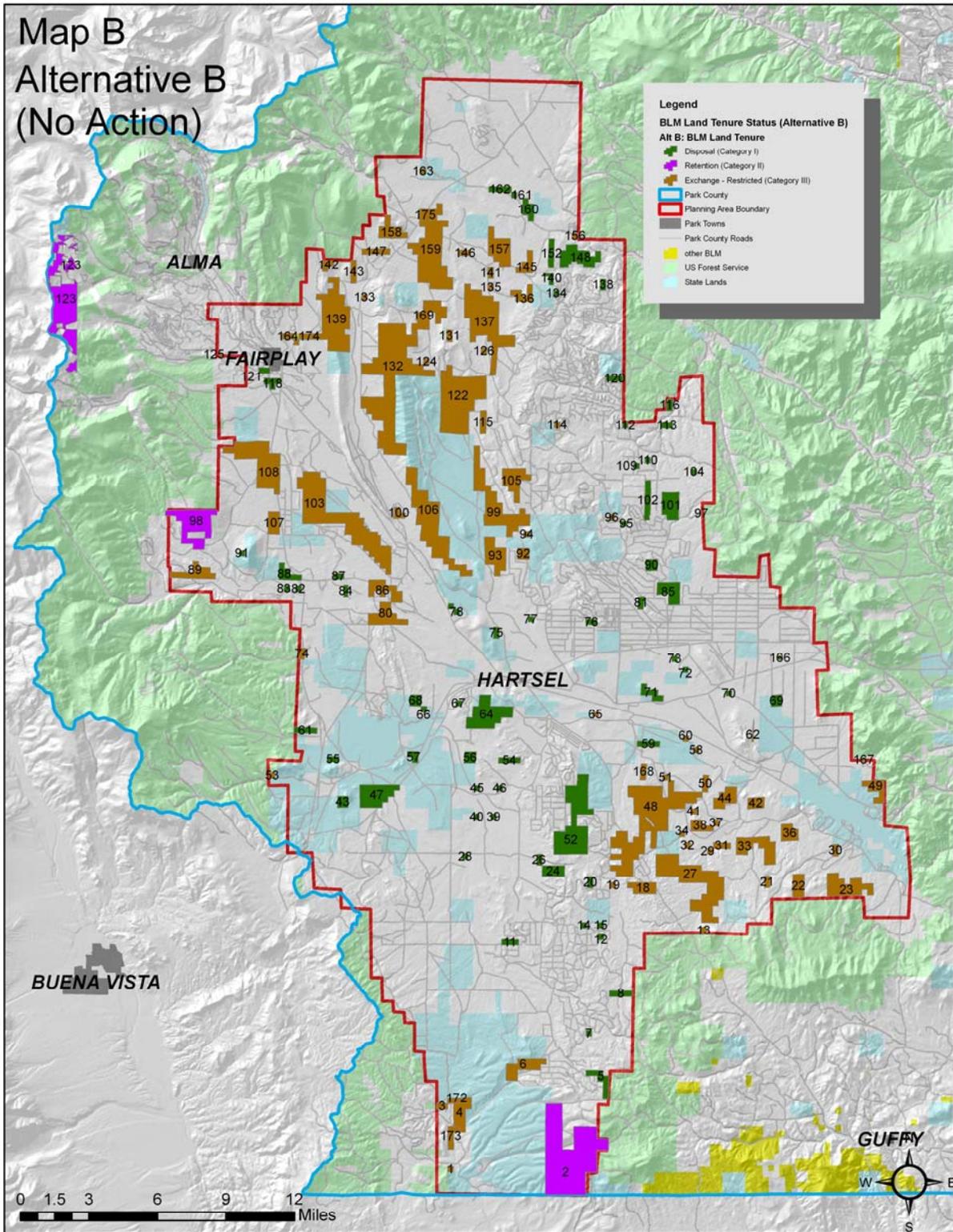
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<sup>4</sup> S.444 South Park National Heritage Area Act; Sponsor: Sen. Ken Salazar (D-CO); This bill was considered in committee which has recommended it be considered by the Senate as a whole. Although it has been placed on a calendar of business, the order in which bills are considered and voted on is determined by the majority party leadership. Keep in mind that sometimes the text of one bill is incorporated into another bill, and in those cases the original bill, as it would appear here, would seem to be abandoned. [Last Updated: Jan 27, 2008] <http://www.govtrack.us/congress/bill.xpd?bill=s110-444>

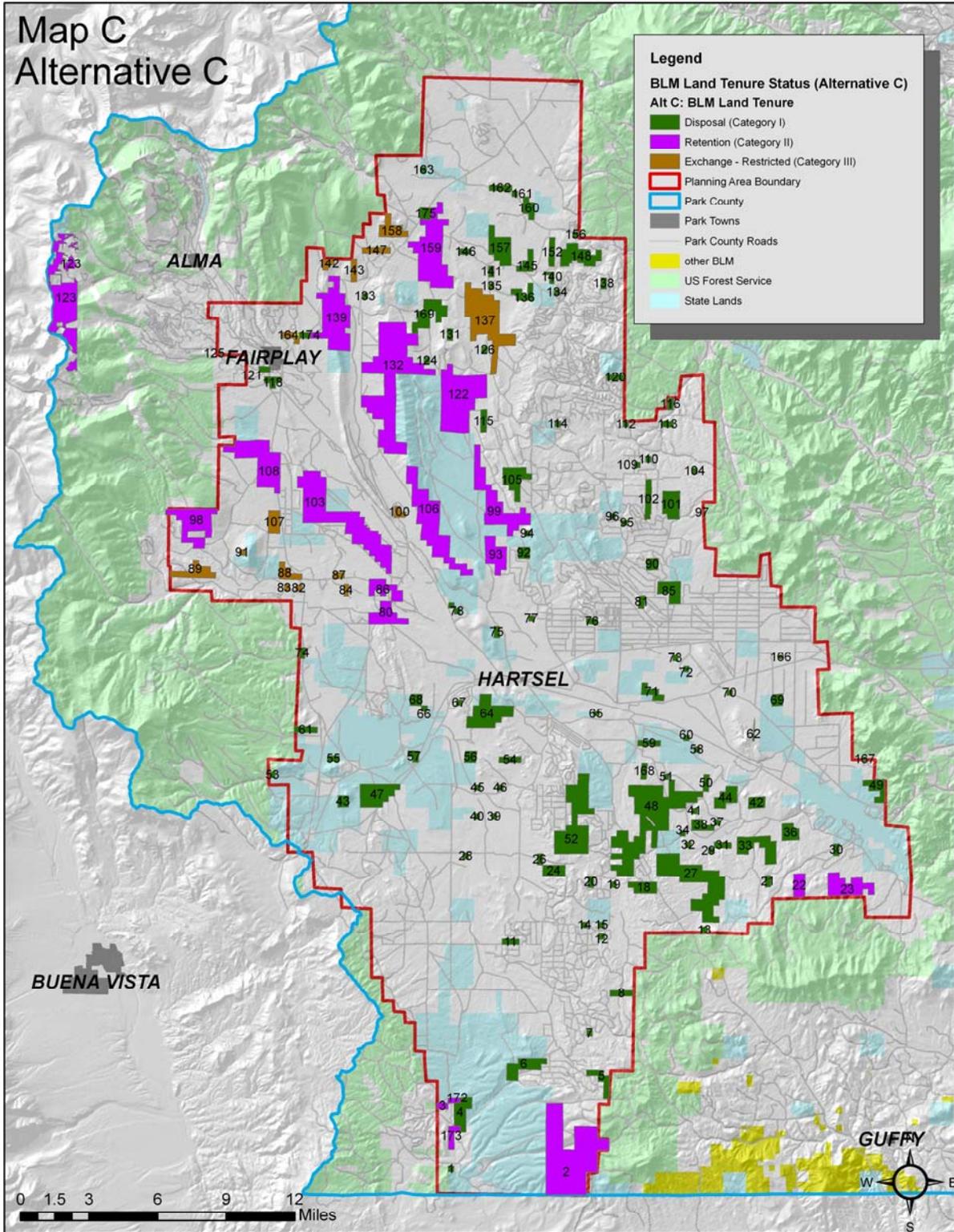
# Map A Alternative A



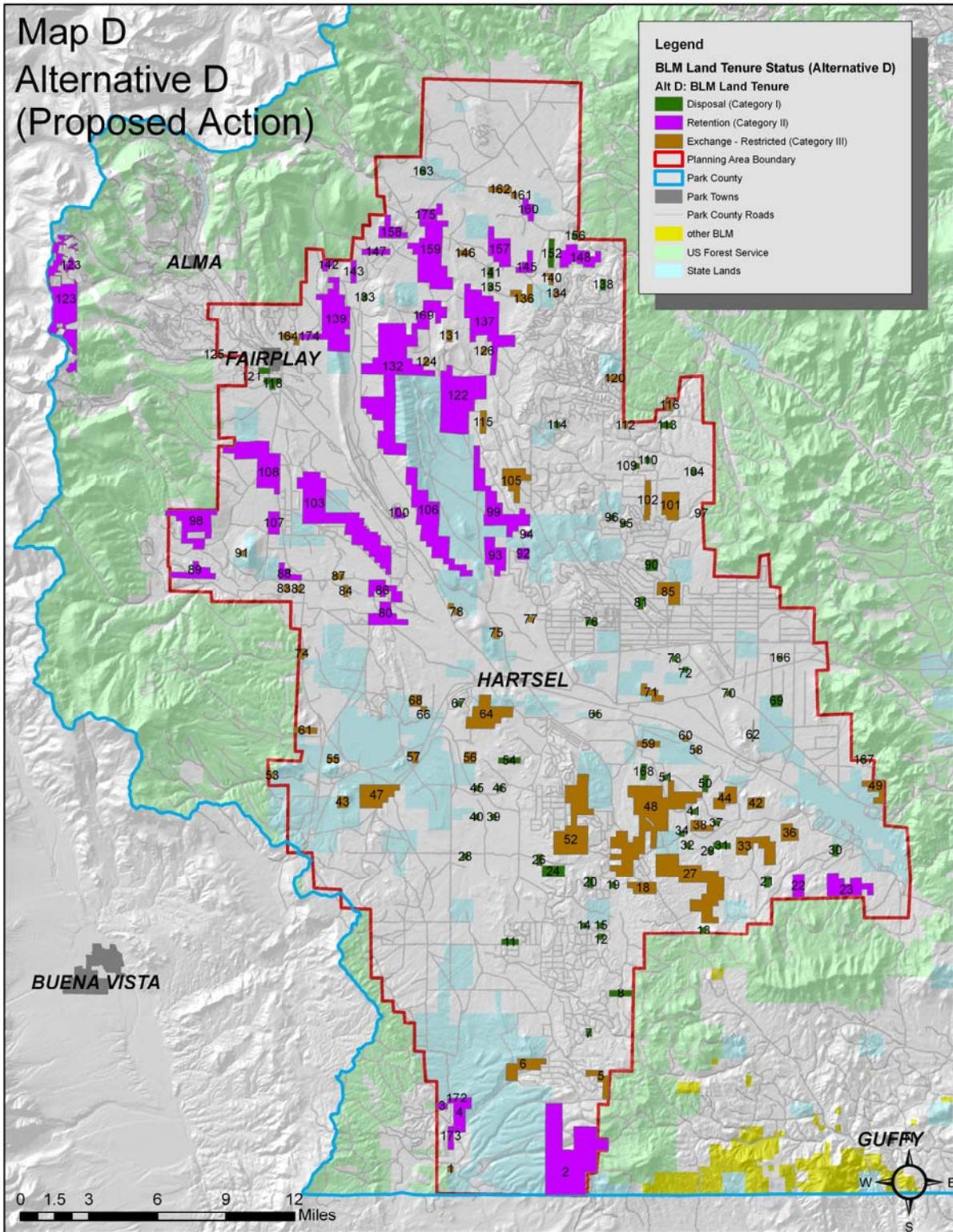
# Map B Alternative B (No Action)



# Map C Alternative C



# Map D Alternative D (Proposed Action)



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

Name of Plan: Royal Gorge Resource Management Plan

Date Approved: 05/13/96

Decision Number: 4-48 and the Land Ownership Adjustment Map

Decision Language: Land ownership adjustments include: 12,900 acres for disposal; 45,200 acres for disposal through exchange, lease, or transfer; 7,900 acres for retention or exchange.

Standards for Public Land Health: In January 1997, Colorado BLM approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below.

#### AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

##### CRITICAL ELEMENTS

##### AIR QUALITY

**Affected Environment:** Air quality in the South Park area is good to excellent. The area is largely undeveloped; roads are limited, frequent wind events scrub the air of the most common pollutant, road dust.

**Environmental Consequences/Mitigation:** None of the considered alternatives will have significant effects upon air quality. The BLM lands are widely scattered and a minority of the land mass of the area. Development is unlikely to be rapid regardless of whether or not BLM retains or disposes of a particular parcel or group of parcels. No specific mitigation is necessary.

##### CULTURAL RESOURCES

**Affected Environment:** Previous cultural resources inventories document that both prehistoric and historic sites are present in South Park. Many of the sites are eligible for the National Register of Historic Places.

**Environmental Consequences/Mitigation:**

Alternative A: On the lands in South Park that remain under federal ownership in South Park, BLM will continue to manage historic properties that are present and will have control of impacts to them. If the integrity of properties is threatened, the sites will be afforded protection under federal laws that are not present in Colorado state statutes. Therefore, the greater the percentage of land that BLM continues to administer, the higher the percentage of historic properties that will benefit from federal management. All lands that leave federal ownership will be subjected to cultural resources inventories, and any historic properties located during those inventories would be subject to mitigation.

Alternative B – No Action: Same as alternative A, except that a smaller percentage of sites would receive federal protection.

Alternative C: Same as alternative A, except that a smaller percentage of sites would receive federal protection.

Alternative D – Proposed Action: Same as alternative A, except that a larger percentage of sites would receive federal protection.

Cumulative Impacts: Cumulative effects on historic properties cannot be specifically identified until cultural resources inventories are completed and historic properties have been identified. In general, however, erosion caused by ground-disturbing activities, depending on their proximity to sites, could have permanent negative impacts on both buried sites as well as those with standing structures. Historic properties that are managed by the federal government are far less likely to be impacted or destroyed by development than those on private land, where no laws and regulations cause a process of identification, evaluation and treatment to occur.

## ENVIRONMENTAL JUSTICE

**Affected Environment:** There is no minority or low-income populations in or near the project area.

**Environmental Consequences/Mitigation:** The Proposed Action and alternatives will not have a disproportionately high and adverse human health or environmental effect on minority or low-income populations.

## FARMLANDS, PRIME AND UNIQUE

**Affected Environment:** There are no prime or unique farmlands located on any of the public lands covered in this plan amendment.

**Environmental Consequences/Mitigation:**

Alternative A: None.

Alternative B – No Action: None.

Alternative C: None.

Alternative D – The Proposed Action: None.

Cumulative Impacts: None

## FLOODPLAINS, WETLANDS & RIPARIAN ZONES (includes a finding on Standard 2)

**Affected Environment:** Until rather recently, BLM knew little about the wetland resources under its jurisdiction in the Park County (primarily South Platte Drainage). Small tract size, insignificant management influence by BLM for land health in sub-watersheds where predominant land acreage is in other ownership, and other priority workload, limited BLM on an extensive inventory. As part of the decision to dispose of lands (1996 RMP), and a need to fill a data gap relating to fens possibly involved in water right cases, BLM began inventorying wetland resources. Initially, remote sensing located wetland resources (interagency riparian-wetland GIS data). BLM staff followed remote sensing characterization with wetland resources inventory for condition and management issues centering upon wetlands stewardship. Some, but few, of the more important wetlands were receiving management to protect values before and during the inventory phase.

Subsequent inventory was conducted under contract to the BLM by the Colorado Natural Heritage Program (CNHP 2004) to visit key areas for further biological and botanical information. A summary of results from this work show there are surface waters present on approximately 39 BLM managed land parcels. Some additional parcels have intermittent flow and swale habitat, but not wetlands. There are approximately 13 total BLM miles of stream draining a fractured land pattern having about 0.6 miles (average length) of stream length per parcel. Some are longer, but many are quite a bit shorter than average. Of these 39 parcels, 13 have standing water wetlands (average of 41 acres per parcel) of some wetland type; playa, fen, mire, reservoir, pond, or other. Mires typically have stream riparian flowing through or adjacent to ground water supported fen wetlands. Fen wetlands are unique and have uncommon plant associations affiliated with them. The values reported here are approximate but are close because final reporting, GIS recalculation, report reformatting, and tally are in progress. A range of condition can be found for these wetlands/riparian varying from very good to very poor condition. Funding has been sought to incorporate changed management where needed.

### **Environmental Consequences/Mitigation:**

Alternative A: Alternative A would retain wetlands in public ownership in the South Park Area while disposing of isolated uplands. Only short segments on some very small streams would be taken out of federal ownership; generally limited to intermittent streams and swales running through small isolated parcels. In any of these cases, the public land never provides habitat or stream function influence to that of the larger land mass surrounding it (parcel 145 exempted). A high percentage of total BLM wetlands stay BLM. However, under this action the opportunity to exchange lands that might be traded containing small riparian areas for other lands elsewhere, oftentimes with greater

riparian values, is forgone. BLM has acquired numerous important wetlands by exchanging isolated parcels for key in-holding lands with wetlands and placing them into public ownership (RGFO records). Alternative A is the best though for retaining BLM lands with riparian and wetlands in the Park County region and eliminating dry uplands, usually isolated tracts. Some of the exchange–restricted lands have greater riparian reaches, but a restriction likely would be to exchange for equal wetland area. Parcel 145 is in the exchange restricted category and this parcel has valued resources. Disposal of this parcel would not be recommended, or if exchanged, equal values wetlands should be sought. Similarly, some lands with extensive improvement actions underway in the Three Mile watershed would likely come out of BLM management.

Alternative B – No Action: Under this action most parcels with wet areas, streams and wetlands would be disposed from BLM management in South Park. There might however be substantial opportunity to acquire lands with equal or greater resource elsewhere but that would be uncertain, and the wetland type would be different from that in the Park County region. The amount of disposed wetland would be close to approximately that presented in the affected environment except small amounts retained in the Mosquito Range. BLM fen resources would be disposed of and this would not be recommended based upon information available after the 1996 RMP. Alternative A is far better to retain wet areas in the South Park area than B or C. Some parcels, for instance parcels 22 and 23, have nice segments of improving streams that border the National Forest and likely could best go to USFS jurisdiction and should not be exchanged out of public ownership when they have good public access if possible.

Alternative C: For wetland resources, Alternative C is more similar to Alternative B (a major wetland disposal) rather than Alternative A (wetlands primarily retained). Most of the lands retained in alternative C are upland; (not including those retained under any alternative.) Like Alternative B, some parcels bordering USFS with good access and streams could be publicly retained by exchange to the National Forest, but come out of BLM jurisdiction. With this alternative, disposal of uncommon fen resources is probable.

Alternative D – The Proposed Action: Similar to Alternative A, Alternative D Proposed Action would retain wetlands in public ownership in the South Park Area while disposing of isolated uplands. As in Alternative A, only short segments on some very small streams would be taken out of federal ownership under Alternative D; generally intermittent streams and swales running through small isolated parcels. In these cases, the public land never provides habitat or stream function influence to that of the larger land mass surrounding. A very high percentage of total BLM wetlands would stay BLM. However, under this action the opportunity to exchange lands that might be traded containing small riparian areas for other lands elsewhere, oftentimes with greater riparian values, is forgone. BLM has acquired numerous important wetlands by exchange of isolated parcels for key in-holdings with wetlands and placed into public ownership elsewhere (RGFO records). Alternative D is the best though for retaining BLM lands with riparian and wetlands in the Park County region and eliminating dry uplands, usually isolated tracts. Some of the exchange–restricted lands have extended riparian reaches, but a restriction likely would be to exchange for equal wetland area. Parcel 145

is in the retain category and this parcel has highly valued resources. Some lands with extensive improvement actions underway in the Three Mile watershed would likely come out of BLM management however with this alternative.

**Cumulative Impacts:** The BLM land pattern being analyzed was arrived at through generations of human settlement and land use changes that were generally haphazard and unplanned. Specific to floodplains and wetlands, settlement of South Park resulted in substantial direct modifications through water development and agriculture. Impacts upon BLM resources were due to their interspersed association. Additional direct and indirect affects upon South Park wetland resources continue through water exchanges, development, etc., but there are also favorable preservation efforts. The exchange scenarios under any Alternative, if implemented, are will leave a cumulative and long lasting affect upon the makeup of who owns what land in South Park. Generally, wetland resources are excluded more so from disposal because most parcels to exchange are uplands under any Alternative, but still, exchanges can result in major changes to how a wetland will be managed. Due to inherent uncertainty that comes with potential exchanges whereby what might be acquired is entirely unknown, cumulative impacts of the proposed action, or any Alternative (including the major disposal alternative), will be uncertain. However, this does not necessarily signal a negative connotation. There are numerous partners engaged with BLM that support the acquisition of wetland/riparian habitats when exchanges are preformed. There are also other entities working to generally preserve all wetlands whether through conservation easement or some other improved management. These heightened stewardship actions mirror legislation for wetland protection so even if implemented to the full extent, the selection of Alternative D would likely result in more wetlands coming into public ownership. Wetlands with better management ability would have greater long term protection than without an exchange thus resulting in at least a beneficial cumulative impact. BLM, RGFO has exchanged many parcels in recent times through individual actions that overall positively affected wetland ownership and management through increased total acreage and a general improved land ownership pattern.

**Finding on the Public Land Health Standard for Riparian Systems:** The range of alternatives has more to do with retaining or disposal of wetlands rather than condition of the wetlands and the merits of retention/disposal is explored in the alternative analysis. RGFO houses condition data on riparian resources currently held under its jurisdiction. Presently there both functional and non-functional areas as evaluated by the BLM and CNHP. Under an alternative selection to retain wetlands, management changes need to occur on some parcels. Funding has been sought.

#### INVASIVE, NON-NATIVE SPECIES

**Affected Environment:** The ecological sites that are found on the public lands in South Park are prone to invasion by yellow toadflax and Canada thistle if severe soil surface disturbance occurs. The proposed action and the alternatives will not authorize any type of soil disturbance.

#### **Environmental Consequences/Mitigation:**

Alternative A: None.

Alternative B – No Action: None.

Alternative C: None.

Alternative D – The Proposed Action: None.

Cumulative Impacts: None

## MIGRATORY BIRDS

**Affected Environment:** South Park provides habitat for many of the birds, reptiles, amphibians, fish and mammals found throughout the mountainous landscape of Colorado. Recent Conservation assessments for the Southern Rockies, conducted through the Nature Conservancy, identified South Park as the largest and best of the montane grasslands within the Ecoregion. The grassland historically was filled with prairie dog towns and an abundant herd of mountain bison roamed South Park until the early 1900's. Waterfowl numbers were once some of the highest in the state. The current numbers of waterfowl produced in the park are miniscule compared to the numbers of the past. Historical accounts indicate that waterfowl populations in South Park were abundant before market hunting, driven by the needs of hungry miners in the surrounding mountains, took its toll. Accounts of market hunting found in old diaries mention hunting of waterfowl in South Park for the purpose of supplying the needs of one of the largest cities in the Rockies at the time – Leadville.

South Park contains important habitats valuable to a wide array of bird species: palustrine emergent habitats in the form of wet meadows; shallow ponds; playa lakes; palustrine shrub habitat in the form of willow riparian; and, upland habitats including park-like coniferous forest, aspen stands, and grasslands. The following species breed in emergent marsh, wet meadow, salt meadow, or open water habitats in the area: American avocet, common snipe, killdeer, spotted sandpiper, sora rail, savannah sparrow, and common yellowthroat. White-faced ibis and Virginia rail breed in dense emergent vegetation, and may occur in the area. Furthermore, these wetlands also provide foraging sites for Swainson's hawk and red-tailed hawk. Coniferous forests in the area provide habitat for migrating Calliope and broad-tailed hummingbirds in addition to breeding habitat for several other migratory land birds. Aspen stands also provide habitat for priority species: migrating Lewis' woodpecker, migrating and breeding red-naped sapsucker, and cordilleran flycatcher.

### **Environmental Consequences/Mitigation:**

Alternative A: Compliance with the Migratory Bird Treaty Act requires that BLM avoid actions that "take" migratory birds. In many BLM actions vegetation is disturbed during project implementation and it is recommended that vegetation disturbance be avoided from April 15 thru July 15 when possible. This is the breeding and brood rearing season for most Colorado migratory birds. Several species might occur in the planning area and are found on the US Fish and Wildlife Services "Birds of

Conservation Concern-2002 List for BCR-16 (Shortgrass Prairie). However, land tenure decisions under Alternative A will not in itself create a “take” situation for migratory birds. Alternative A identifies high priority habitats that will be retained and/or identified as “exchange restricted”. Approximately 75% of the public land in the park will fall in these two categories in Alternative A. These lands will always be protected from development and will remain as wildlife habitat. However, approximately 24% of the public lands would be available for disposal under Alternative A and the future use of these lands is uncertain. Site specific impacts to migratory birds will be identified when NEPA work is completed if these lands are planned for disposal from public ownership.

Alternative B – No Action: This alternative maintains status quo which is potentially a more significant impact to wildlife since less public land is identified for retention. BLM does not actively seek to dispose of lands in South Park, however Alternative B makes more lands available should interest in these lands increase in the future. Once again, this alternative will not in itself create a “take” situation for migratory birds. Site specific impacts to migratory birds will be identified when NEPA work is completed if lands are planned for disposal from public ownership.

Alternative C: This alternative identifies approximately 58% of public lands that will be “retained” or “exchange restricted”. These lands will always be protected from development and will remain as wildlife habitat. Conversely 42% of the public lands in South Park will be identified for disposal. Future use of these lands, as well as direct and indirect impacts to migratory birds, will be uncertain. This alternative will not in itself create a “take” situation for migratory birds. Site specific impacts to migratory birds will be identified when NEPA work is completed if lands are planned for disposal from public ownership.

Alternative D – The Proposed Action: As in Alternatives A, B, and C, compliance with the Migratory Bird Treaty Act requires that BLM avoid actions that “take” migratory birds. However, the proposed action (Alternative D) to change the land tenure decisions will not in itself create a “take” situation for migratory birds. Alternative D, like Alternative A, identifies high priority habitats that will be retained and/or identified as “exchange restricted”. Approximately 94% of the public land in the park will fall in these two categories. These lands will always be protected from development and will remain as wildlife habitat. Under Alternative D, approximately 6% of the public lands would be available for disposal and the future use of these lands is uncertain. Site specific impacts to migratory birds will be identified when NEPA work is completed if these lands are planned for disposal from public ownership.

## NATIVE AMERICAN RELIGIOUS CONCERNS

**Affected Environment:** BLM consulted with the following tribes regarding the proposed amendment: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Lakota Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Northern Ute Tribe, Oglala

Lakota Tribe, Rosebud Sioux Tribe, Shoshone Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe. No tribes indicated any specific concerns.

**Environmental Consequences/Mitigation:**

Alternative A: No concerns.

Alternative B – No Action: No concerns.

Alternative C: No concerns.

Alternative D – No concerns.

Cumulative Impacts: Cumulative effects on properties of concern to tribes cannot be specifically identified until cultural resources inventories are completed. In general, however, erosion caused by ground-disturbing activities, depending on their proximity to sites, could have permanent negative impacts on both buried sites as well as those with standing structures. However, historic properties that are managed by the federal government are far less likely to be impacted or destroyed by development than those on private land, where no laws and regulations cause a process of identification, evaluation and treatment to occur. Furthermore, the American Indian Religious Freedom Act (AIRFA) requires the federal government to protect and provide access to sites of concern to Native Americans, whereas such sites on private land are not protected by AIRFA.

**THREATENED, ENDANGERED, AND SENSITIVE SPECIES** (includes a finding on Standard 4)

**Affected Environment:** South Park provides habitat for many of the birds, reptiles, amphibians, fish and mammals found throughout the mountainous landscape of Colorado. Recent Conservation assessments for the Southern Rockies, conducted through the Nature Conservancy, identified South Park as the largest and best of the montane grasslands within the ecoregion. The grassland historically was filled with prairie dog towns and an abundant herd of mountain bison roamed South Park until the early 1900's. Waterfowl numbers were once some of the highest in the state. The wetlands of South Park are comparable to few others found in the world. The geologic and hydrologic setting found in South Park combines to create wetlands known as "extreme rich fens," so named because of their high concentrations of minerals. These fens provide habitat for 14 state-rare plant species, two of which are BLM Sensitive and globally rare: Porter feathergrass (*Ptilagrostis porteri*) and Greenland primrose (*Primula egaliksensis*). They also provide habitat for 11 state- and globally-rare invertebrate species. Other wetland types located in Park County include playa lakes, wet meadows, springs, alkaline wet meadows and springs, and riparian wetlands.

South Park uplands are also unique. One is located on the basin floor and contains a globally rare grassland plant community of Arizona fescue (*Arizona fescue*) and slimstem muhly (*Muhlenbergia filiculmis*). In addition, this plant community provides habitat for 10-20% of the known breeding population of the globally imperiled, BLM sensitive mountain plover. Unique uplands are also located in the alpine of the Mosquito Mountain Range where 41 rare plants are

associated with the presence of Leadville Limestone. BLM manages land in the Mosquito range that contains critical habitat for Pendland Eutrema (*Eutrema pendlandii*), a threatened species.

The most significant rare wildlife species managed by BLM in South Park is the mountain plover. On May 3, 1993, the USFWS listed the mountain plover as a Candidate Species under the ESA. On February 16, 1999, a notice was published in the Federal Register proposing to list the mountain plover as a Threatened species. On September 9, 2003 the US Fish and Wildlife Service found that listing the plover was not warranted and withdrew the proposed rule. Colorado Natural Heritage Program (CNHP) considers the mountain plover globally imperiled (G2/S2B). The species is listed by the U.S. Forest Service and the BLM as a Sensitive Species, and by the Colorado Division of Wildlife as a Species of Special Concern. BLM manages approximately 12 % (25,156 acres) of potential mountain plover habitat in South Park.

Gunnison’s prairie dogs, a BLM sensitive species, are found in South Park in low numbers. Historically, the species was widespread throughout the park in suitable habitat. This species is limited to high mountain valleys and plateaus in the southern Rocky Mountains and is found at elevations above 6,000 feet. Its distribution centers on the Four Corners region where the states of Utah, Colorado, New Mexico, and Arizona meet. The northernmost population of Gunnison’s prairie dog is found in South Park while the southernmost population resides in southwestern New Mexico. Compared to the habitats of other prairie dog species, the habitat of this species varies greatly with respect to topography and vegetation. In addition, the burrow systems are more similar to those of ground squirrels than they are to other species of prairie dogs. Entrances are usually located on slopes or small hummocks rather than in depressions, protecting the burrows from flooding. Gunnison’s prairie dogs are often found in semi-social aggregations and colonies of these mammals are generally smaller than those of other species of prairie dogs and usually consist of fewer than 50 to 100 individuals.

Other BLM sensitive species that may be found in South Park include: burrowing owl, bald eagle, white pelican, and white-faced ibis. Burrowing owls would be most commonly found in Gunnison’s prairie dog towns. Since prairie dog towns are rare, burrowing owls would be uncommon. Bald eagles would be associated with the reservoirs and river systems generally in the winter months. White pelicans are most common on the larger reservoirs in the area.

**Environmental Consequences/Mitigation:**

**Table 4** – Potential mountain plover habitat (CNHP, 1998) on BLM lands by land tenure categories for Alternatives A, B, C, and D (*Percentage of South Park BLM potential Mountain Plover habitat*)

	<b>Retention</b>	<b>Exchange-Restricted</b>	<b>Disposal</b>
<b>Alt. A</b>	16,518 acres (~66 %)	3,340 acres (~13 %)	5,298 acres (~21 %)
<b>Alt. B – No Action</b>	0 acres (0 %)	20,737 acres (~82%)	4,420 acres (~18 %)
<b>Alt. C</b>	14,262 acres(~57 %)	2,925 acres (~12 %)	7,969 acres (~32 %)
<b>Alt D – Proposed Action</b>	18,773 acres(~75%)	4,935 acres (~20 %)	1,447 acres (~6 %)

(due to rounding, totals don’t always equal 100 %)

Alternative A: Under Alternative A, 19,858 acres of BLM potential mountain plover habitat, roughly 79% of BLM administered mountain plover habitat, is classed in the retention or exchange-restricted categories (Table 4). These lands would always be protected from development and should remain as wildlife habitat, in perpetuity. On the other hand, approximately 5,298 acres, or 21 % of BLM administered mountain plover habitat, would be available for disposal under Alternative A. Many of the 5,298 acres of habitat identified for disposal are small, isolated, and difficult to manage parcels on the fringes of good plover habitat. Several of the larger BLM parcels that contain plover habitat categorized for disposal category under Alternative A are located within a large subdivision north of Hwy 24, east of the Elkhorn Road. The future use of these lands, and thus indirect impacts to T&E habitat from land transfer, is uncertain. Site specific impacts to T&E and sensitive species would be identified and accounted for during NEPA analysis if South Park BLM parcels classed for disposal were proposed for future realty actions. While some mountain plover habitat is identified for disposal, the long term conservation plan is to protect and consolidate lands in mountain plover habitat. These actions will be most effective in areas where other conservation practices and conservation easements are in place or are planned. In summary, Alternative A would retain large blocks of public land in areas where mountain plover are concentrated. While this alternative still proposes disposal of mountain plover habitat, these areas are generally on the fringes of habitat and are small, difficult to manage parcels. Most are in the vicinity of subdivisions with uncertain potential for long-term conservation of mountain plover. Alternative A would protect the largest blocks of the best habitat in those areas where landscape level conservation is possible. In addition, Alternative A retains lands in areas where other conservation organizations are working to protect critical habitat and open spaces. Alternative A would also protect wetland and fen areas where several rare plant species are found (see Riparian section). In addition, lands in the Mosquito range will be retained which will protect the rare plants in that area.

Alternative B – No Action: The No Action alternative retains current management of public lands in South Park, as defined in the 1996 RMP. Alternative B identifies 12,138 acres of public land for “disposal”, 43,551 acres in the “exchange-restricted” category and 7,910 acres identified for retention (Table 3). No BLM administered mountain plover habitat is classed for retention, under the No Action, although the majority of mountain plover habitat acreage (Table 4; ~82%) is classed in exchange-restricted. Under Alternative B, indirect impacts to rare plant and animal species could be significant if public lands were: 1. transferred from public to private management and 2. subject to development and ground-disturbing activities. Alternative B is unacceptable considering habitat resource values in South Park that are identified as in need of protection. Under Alternative B, site specific impacts to T&E species would be determined during NEPA analysis if parcels were proposed for exchange or sale from public ownership.

Alternative C: Alternative C places less public land (36,944 acres) in the retention and exchange-restricted category and 26,665 acres in the disposal category than Alternatives A or D (Table 3). As a result less potential mountain plover habitat would be retained by BLM. Approximately 69% (17,187 acres) of BLM administered mountain

plover habitat would be “retained” or categorized as “exchange restricted” under Alternative C, less than Alternatives A, B, or D (Table 4). Approximately 32%, or 7,969 acres, of BLM administered mountain plover habitat would be identified for disposal under Alternative C, the least of alternatives considered. Many of these acres identified as mountain plover habitat disposal under Alternative C are located south of Spinney Mountain reservoir.

Alternative D – Proposed Action: Under Alternative D, 23,708 acres of BLM potential mountain plover habitat, roughly 95% of BLM administered mountain plover habitat, is classed in the retention or exchange-restricted categories (Table 3). These lands would always be protected from development and should remain as wildlife habitat, in perpetuity. Under Alternative D, approximately 1,447 acres, or 6 % of BLM administered mountain plover habitat, would be available for disposal, the least amount of acreage among alternatives considered. Many of the 1,447 acres of habitat identified for disposal are small, isolated, and difficult to manage parcels on the fringes of good plover habitat. The future use of these lands, and thus indirect impacts to T&E habitat from land transfer, is uncertain. Site specific impacts to T&E and sensitive species would be identified and accounted for during NEPA analysis if South Park BLM parcels classed for disposal were proposed for future realty actions. While some mountain plover habitat is identified for disposal, the long term conservation plan is to protect and consolidate lands in mountain plover habitat. These actions will be most effective in areas where other conservation practices and conservation easements are in place or are planned. In summary, Alternative D, like Alternative A, would retain large blocks of public land in areas where mountain plover are concentrated. While Alternative D proposes disposal of mountain plover habitat, these areas are generally on the fringes of habitat and are small, difficult to manage parcels. Most are in the vicinity of subdivisions with uncertain potential for long-term conservation of mountain plover. Similar to Alternative A, Alternative D would protect the largest blocks of the best habitat in those areas where landscape level conservation is possible. In addition, Alternative D retains lands in areas where other conservation organizations are working to protect critical habitat and open spaces. Alternative D would also protect wetland and fen areas where several rare plant species are found (see Riparian section). In addition, lands in the Mosquito range will be retained which will protect the rare plants in that area.

Cumulative Impacts: BLM land ownership in South Park was arrived at through generations of human settlement and homesteading. BLM desires to consolidate holdings to make management more effective. Consolidating lands into large blocks has the potential to benefit wildlife by increasing core habitat areas. Future growth in Park County will further fragment wildlife habitat, a potential impact to many species. Alternative D was designed to consolidate BLM lands in important habitat areas and dispose of lands in areas with little management potential. This alternative also allows for acquisition of key parcels of wildlife habitat when the opportunity presents itself. The long term benefit of this type of management will have a positive effect on wildlife resources in the park.

**Finding on the Public Land Health Standard for Threatened & Endangered species:** BLM believes that long term conservation actions in South Park to protect T&E and sensitive

species, including mountain plover, must seek to conserve large landscapes of habitat. BLM identified large parcels of public land with mountain plover habitat near state wildlife areas and private lands with conservation easements and determined these areas would best protect the core areas for plover. As a result some acres of habitat will not be protected. These areas are of lesser quality, smaller in size and generally surrounded by subdivisions and will be almost impossible to protect as core habitat areas. Protecting the largest areas of the best habitat will ensure that land health standards for T&E species will be maintained.

## WASTES, HAZARDOUS OR SOLID

**Affected Environment:** Dumping of hazardous or regulated materials in the South Park area has been only occasional. Development in the area is low, especially where public lands are common. The landscape is vast and largely uncontrolled.

**Environmental Consequences/Mitigation:** None of the considered alternatives will have a significant impact upon the use, storage or disposal of hazardous or regulated materials upon public lands. No specific mitigation is necessary.

## WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

**Affected Environment:** Water in South Park is very important to many people since it is the main watershed for the Denver area. The water quality of South Park is generally considered to be good, however all segments of the South Platte River from the sources of the South and Middle Forks to the North Fork South Platte River are contained on the Colorado Monitoring and Evaluation list for sediment. Most of the streams on in South Park are low gradient with large amounts wetland areas in the valley bottoms. Wetlands typically act as filters cleaning water as it flows through them leading to high amounts of clean water if the wetlands are left undisturbed. In addition to the wetlands associated with streams, South Park also contains a high concentration of fens that add high quality water to the area.

### **Environmental Consequences/Mitigation:**

Alternative A –: Under Alternative A more BLM lands would be retained or exchange restricted leading to the greatest oversight for the protection for water quality than in Alternatives B or C but less than Alternative D. Wetland resources would have a higher level of protection under this alternative than either B or C but less than Alternative D. Alternative A would result in a higher amount of wetlands available to filter water, over the long-term, than Alternatives B or C, assuming the higher acreage under exchange and/or disposal under the latter was under higher risk of surface disturbance and development.

Alternative B – No Action: Taking no action would have a moderate potential for future exchanges and development of lands in South Park. This could lead to a potentially negative impact on the water quality of the area's water, assuming the higher acreage under exchange and/or disposal under the latter led to higher acreage under

surface disturbance and development. This alternative contains a large amount of lands that would be exchange restricted that would still allow for some flexibility in future actions and protection of water quality if needed.

Alternative C: Alternative C puts the greatest amount of land in the disposal category, approximately 46% of the lands. This would be the highest potential for future development of lands and waters in the area, thus it would have the most potential for impacts to water quality.

Alternative D – The Proposed Action: Under the Proposed Action the greatest amount of BLM lands would be retained or exchange restricted leading to the greatest amount of protection for water quality. Wetland resources would have the most protection under this alternative leading to the greatest amount of wetlands available to filter water.

Cumulative Impacts: The upper South Platte watershed is an important source of water for many Colorado residents and the future of the downstream urban area relies heavily on clean water. As South Park becomes more developed over time there will be more impacts on water resources and quality in these headwater areas. Many of these impacts would be small in nature, but cumulatively they could add up to have a major negative impact on water quality. The Proposed Action would retain the greatest amount of input and control over the future development of the public lands in question leading to the greatest protection of water quality in the future.

**Finding on the Public Land Health Standard for Water Quality:** Currently, waters in South Park are meeting standards; however the state is evaluating the sediment levels in much of the area. The Proposed Action would have the greatest potential not to have a negative impact on this standard with Alternative C having the potential for the most impact.

#### WILDERNESS, AREAS OF CRITICAL ENVIRONMENTAL CONCERN, WILD AND SCENIC RIVERS

**Affected Environment:** A portion (about 2,000 acres) of the Mosquito Pass Area of Critical Environmental Concern is within the project area. The ACEC was designated to protect special status plant species, scenic and historic values.

#### **Environmental Consequences/Mitigation:**

Under each alternative, all of the public lands within the ACEC would be retained in public ownership; therefore, there would be no impact to the ACEC under any alternative.

#### NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

**Affected Environment:** The soils underlying the public lands being reviewed in Park County vary widely. These are soils of the high plateau mesa. The soils of the lower plateau areas are erosion deposits from the geologically up-thrust mountains through wind, water, and glaciations. The soils on the lower flatter plains tend to be deeper and less erosive, while those on the mountain and hill sides tend to be shallower and have more risk for water erosion during storm events. The higher erosion potential on both the hills and plains can be seen with subdivision lands throughout the county, where road and home building construction has increased normal runoff and created additional or deeper erosion cuts. Some of the common soil legend descriptions of the soils in South Park include Boyle-Rock outcrop-Resort on the mountain sides; Rogert-Wetmore-Rock outcrop on mountain sides, hills, and mesas; and Bushvalley-Ess-Hoode found mostly in the mesas and washes. Typically, the South Park soils are going to tend to be cobbly or gravelly, particularly those areas of alluvial wash materials coming from the mountains.

The soils support diverse vegetation, with a few acres in high mountain areas supporting typical long winter and short growing season conifer forest. Elevations ranging from 7500-8500 feet support pinion-juniper and open short and mid grass prairies. (see Vegetation section for more detail

Some of the scattered smaller parcels of public land fall in the lower elevation lands that have been sub-divided, in some cases to acreage as small as 2-3 acres. While road and trail and house development/construction has been slow for the previous 20 years, more and more development is occurring at an ever increasing rate. The soils within these sub-divided areas tend to be less functional soils because of the hardened road surface areas, and the re-direction of water flows from the road/trail and other hardened areas that cause catchments of water, which then direct the larger water flows to outlet points. In areas where trails and roads lack enough water diversions, signs of cutting are apparent. Most of the erosion problems are located on private lands, since road development has been limited on the BLM public land surface.

#### **Environmental Consequences / Mitigation:**

Alternative A: Under Alternative A, for those lands identified for disposal, the impacts/risks described in Alternative B would still apply but would be less due to the reduced acreage of BLM lands identified for disposal. For the most part, parcels identified for retention by the BLM are lands where soils and vegetation resources are more critical. Since the BLM generally manages such lands more intensively to reduce impacts to these resources, it is likely the soils will be more protected with less surface probably less surface disturbing activities. This is true also for those lands in the exchange restricted category. While the BLM would lose direct management capabilities of the property, generally the easements prevent large scale subdivision and surface disturbing activities that are common activities resulting in soil impacts, increased erosions potential, and increased sedimentation.

Alternative B – No Action: Under this alternative, the soils currently being managed by BLM would over a period of time continue to be disposed of. In some cases, disposal would not change the soil condition or situation. However, typically lands that

become private tend to have more activity on them, with less consideration for functioning soils at a level considered in the Land Health Standards. Typical private land development tends to only worry about what happens at the point of development, without consideration to changes it creates in erosion problems that are on lands lying below them. The severity of such potential soil and erosion concerns on these parcels will depend on the surface management that private land-owners who acquire the properties bring to bear and oversight by local and state agencies. In some cases, the counties do impose storm water considerations prior to permitting rural development. The management of any lands acquired through exchanges to BLM will probably be more intensely managed for soils and other resources, with an attempt to meeting soil Land Health Standards.

Alternative C: Under this alternative, the impacts to the soil are the same as those discussed in Alternative A and B but to a slightly different scale. In this case, more lands are designated for disposal than Alternative A but less than in Alternative B, so soil impact risk is slightly increased over the proposed action, but less than that under the No Action Alternative.

Alternative D – The Proposed Action: Under the Proposed Action, as in Alternatives A and C, the impacts/risks described in Alternative B would still apply, for BLM parcels identified for disposal. However, acreage identified for disposal under Alternative D is least and thus represents the least potential impact/risks in comparison to all alternatives. For the most part, the lands identified to be identified for retention by the BLM are lands where soils and vegetation resources are more critical. Since the BLM generally manages such lands more intensively to reduce impacts to these resources, it is likely the soils will be more protected with less surface probably less surface disturbing activities. This is true also for those lands in the exchange restricted category. While the BLM would lose direct management capabilities of the property, generally the easements prevent large scale subdivision and surface disturbing activities that are common activities resulting in soil impacts, increased erosions potential, and increased sedimentation.

**Finding on the Public Land Health Standard for Upland Soils:** No major changes are anticipated to upland soils at this time. The Proposed Action will result in better soil management and greater compliance with Land Health Standards.

VEGETATION (includes a finding on Standard 3)

**Affected Environment:** The majority of the public land parcels in South Park are dominated by open, rolling grasslands. Slopes generally vary between 0 - 30%. The interior of the South Park area is generally characterized as a high, cool desert. The growing season usually begins in earnest in late May or June. Generally, the temperatures at night in early to mid September at this elevation begin to fall low enough to significantly reduce and eventually halt plant growth. Precipitation records indicate that July and August in this area are the wettest months of the year as well as the warmest. The combination of available moisture and warm

temperatures tend to provide July and August with the most favorable conditions for plant growth during the year. (June can also provide favorable growth conditions but is often fairly dry and averages only approximately ½ the amount of precipitation as July or August.)

The upland grasslands in the area include prairie junegrass, Arizona fescue, blue gramma, western wheatgrass, bottlebrush squirreltail, mountain muhley, parry oatgrass, elk sedge and sun sedge. Shrubs and half-shrubs such as mountain mahogany, plains pricklypear, wax currant, cinquefoil, rabbitbrush, snakeweed and fringed sage are also common. Where historic, unmanaged livestock grazing has impacted plant communities in the South Park area, the grasslands tend to have a higher percentage of blue gramma, slimstem muhley, and fringed sage. Some of the South Park area includes spruce/fir or ponderosa pine woodland vegetation that is discussed in more detail in the forestry portion of this analysis.

The fens, wetlands and mires mentioned in the riparian section of this analysis also include some unique plant communities that are considered imperiled or vulnerable within the state. The majority of this unique plant community acreage is on private land although several BLM parcels including #145, 157, and 160 in the Tarryall Road area, including #122 and 137 in the Playa Lakes area, and #98 in the Sheep Creek area include these communities. Details of vegetation in these communities are available at the Royal Gorge Field Office in Canon City.

#### **Environmental Consequences/Mitigation:**

BLM policy generally requires vegetative communities on public land to be achieving (or moving towards achieving) vegetative standards for public land health. Therefore, the vegetative communities present on the parcels that would remain in public ownership under each of the alternatives generally would receive a higher degree of protection than those are identified for disposal and may eventually transfer into private ownership.

Alternative A: This alternative would protect the unique plant communities included on parcels #98, 122, 137, 145 and 157 via retention or under restricted-exchange land ownership. The vegetative communities present on most of the parcels identified for disposal under this alternative are common in the area and do not represent any unique or highly valuable vegetative resources on public land.

Alternative B – No Action: This alternative would protect the unique plant communities included on parcels #98, 122, 137, and 157 but would allow disposal of vegetative resources located on parcel 145. The vegetative communities present on most of the other parcels identified for disposal under this alternative are common in the area and do not represent any unique or highly valuable vegetative resources on public land.

Alternative C: This alternative would protect the unique plant communities included on parcels #98, 122, and 137 but would allow disposal of vegetative resources located on parcels 145 and 157. The vegetative communities present on most of the other parcels identified for disposal under this alternative are common in the area and do not represent any unique or highly valuable vegetative resources on public land.

Alternative D – The Proposed Action: As in Alternative A, Alternative D would protect the unique plant communities included on parcels #98, 122, 137, 145 and **157**. The vegetative communities present on most of the parcels identified for disposal under this alternative are common in the area and do not represent any unique or highly valuable vegetative resources on public land.

**Finding on the Public Land Health Standard for Plant and Animal Communities** (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Land Health Assessments for the South Park area are currently scheduled to be conducted during 2006. Until these assessments have been completed, it would be premature to speculate on applicable public land health standards for the area.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

**Affected Environment:** Without detailing specific details about each of the 39 parcels with known surface water (described generally in the Affected Environment section of the floodplain section), there are important aquatic habitats present and are shown on the maps. The fens and playa habitats are likely the most unique to BLM and South Park. BLM has streams with fisheries present, but the streams in South Park are more common. There are unique alpine wetlands in the Mosquito Range, but they are retained under any alternative. Alpine habitats are the most likely to provide locations for the boreal toad. Merits and rationale for either retaining or disposal of the aquatic habitats is similar to that presented in the Floodplain section above.

**Environmental Consequences/Mitigation:**

Alternative A –: Similar to Floodplain Section; where possible streams with fisheries, adjacent to USFS, in the exchange-restricted category should be retained into public ownership (BLM or USFS) when possible.

Alternative B – No Action: Same as Floodplain section

Alternative C: Same as Floodplain Section

Alternative D – The Proposed Action: Similar to Floodplain Section; where possible streams with fisheries, adjacent to USFS, in the exchange-restricted category should be retained into public ownership (BLM or USFS) when possible.

Cumulative Impacts: The rationale for cumulative impacts is similar to that presented in the floodplain section above.

**Finding on the Public Land Health Standard for Plant and Animal Communities** (partial, see also Vegetation and Wildlife, Terrestrial): This plan amendment does not change the habitat condition of any public land aquatic resource. Specific parcel exchanges in future years will evaluate any change to aquatic populations.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

**Affected Environment:** South Park provides habitat for many of the birds, reptiles, amphibians, fish and mammals found throughout the mountainous landscape of Colorado. Recent Conservation assessments for the Southern Rockies, conducted through the Nature Conservancy, identified South Park as the largest and best of the montane grasslands within the Ecoregion (Pague, 2002). The grassland historically was filled with prairie dog towns and an abundant herd of mountain bison roamed South Park until the early 1900's. Waterfowl numbers were once some of the highest in the state.

Big game populations and densities vary widely within the South Park area. The deer herd remains fairly stable at a low density with the population lower than historic high levels. The pronghorn antelope population is more erratic depending on winter conditions and harvest, but is currently 25% less than historic highs in the late 1960s. Not unlike the rest of the state, the elk herd is currently high but has been slowly declining from highs of the mid to late 1990s. Additionally, the elk herd has also tended to gather into larger groups during the winter in the last ten years. When groups reach 1,000 – 1,200 they are very noticeable and impacts to forage and fences can be significantly increased. Large areas of public land are available for wintering elk in the James Mark Jones State Wildlife Area and surrounding BLM lands.

In the last 40 years, very large areas of deer and elk habitat, especially historic winter ranges, have been converted from agricultural use to seasonal and year-round residential use. There are now conflicts between big game and urban landscaping and gardens that have expanded as development has encroached on habitat throughout the area. Elk have taken refuge in subdivisions where they are unavailable to hunters.

#### **Environmental Consequences/Mitigation:**

Alternative A: As described in the T&E section of this EA, BLM's contribution to landscape-level conservation is to maintain ownership of large tracts of public land in the vicinity of other state and federal lands and in the vicinity of private lands that have been protected via conservation easements. Alternative A would retain 34,822 acres of public lands and classify 13,424 acres in the exchange-restricted category within these "core" areas (Table 3). Alternative A would effectively protect these lands from development in the future and maintain them as wildlife habitat. Site specific impacts to wildlife and wildlife habitat would be determined during NEPA analysis for parcels when, and if, they are transferred or sold from public ownership.

Alternative B – No Action: this alternative retains current management of public lands in South Park. Alternative B identifies 12,138 acres for "disposal", 45,551 acres in the "exchange-restricted" category, and identifies 7,910 acres for retention (Table 3). This alternative is unacceptable, in terms of protections to terrestrial wildlife resources, considering the resources that are identified in South Park that are in need of protection. Impacts to wildlife habitat would be significant as these lands could be lost from public management and subject to development. Site specific impacts to wildlife and wildlife habitat will be determined during NEPA work for parcels as they are transferred or sold from public ownership.

Alternative C: Alternative C places less public land (36,944 acres, ~58%) in the retention and exchange-restricted categories when compared with Alternatives A and D (Table 3). Under Alternative C, 30,700 acres would be classified for disposal. Despite an obvious difference in acres between Alternative C and Alternatives A and D, wildlife habitats would be generally protected in this alternative, similar to Alternative A. The difference is in the area south of Spinney Mountain reservoir. In this area there are large blocks of public land but the wildlife values are less than other areas in the north end of South Park. This area contains important pronghorn habitat but is less critical for elk and mule deer.

Alternative D – The Proposed Action: BLM’s contribution to landscape-level conservation through maintenance of federal ownership of large tracts of public land in the vicinity of other state and federal lands would be highest in Alternative D. Key differences with Alternatives A and C are in the vicinity of private lands that have been protected via conservation easements. Alternative D would retain 40,316 acres in public ownership and classify 19,330 acres in the exchange-restricted category in these “core” areas, the highest level of any alternative considered (Table 3). Alternative D would effectively protect the highest public land acreage from future development and maintain the largest extent of wildlife habitat among Alternatives considered. As in Alternatives A, B, or C, site specific impacts to wildlife and wildlife habitat would be determined during NEPA analysis, if and when any of the 3953 acres of BLM parcels were proposed for transfer or sale from public ownership.

Cumulative Impacts: BLM land ownership in South Park was arrived at through generations of human settlement and homesteading. BLM desires to consolidate holdings to make management more effective. Consolidating lands into large blocks has the potential to benefit wildlife by increasing core habitat areas. Future growth in Park County will further fragment wildlife habitat, a potential impact to many species. Alternative D was designed to consolidate BLM lands in important habitat areas and dispose of lands in areas with little management potential. This alternative also allows for acquisition of key parcels of wildlife habitat when the opportunity presents itself. The long term benefit of this type of management will have a positive effect on wildlife resources in the park.

**Finding on the Public Land Health Standard for Plant and Animal Communities** (partial, see also Vegetation and Wildlife, Aquatic): BLM believes that long term conservation actions in South Park to protect wildlife habitat must seek to conserve large landscapes of habitat. BLM identified large parcels of public land with important wildlife habitat near state wildlife areas and private lands with conservation easements and determined these areas would best protect the “core” areas for wildlife. Protecting the largest areas of the best wildlife habitat will ensure that land health standards for plant and animal communities will be maintained.

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Cadastral Survey	X		

Fire		X	
Forest Management			X
Geology and Minerals			X
Hydrology/Water Rights		X	
Law Enforcement	X		
Paleontology			X
Noise	X		
Range Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics	X		
Transportation & Access			X
Visual Resources			X

## GEOLOGY

**Affected Environment:** The geology within the analysis area is dominated by sedimentary rocks and extrusive volcanic flow rocks that are commonly covered by quaternary gravel deposits. The gravel deposits in South Park have a high economic value because they can be mined for gold and sand and gravel, but gold holds the highest economic value. The placer gold deposits in South Park are among the oldest and most prolific in the state of Colorado. A large deposit of high-grade gravel still remains in part of the Fairplay placer in northwest Park County. These districts are still being mined today primarily by recreational miners especially near the town of Como, Colorado.

Other minerals: There is currently no oil or gas production within the area, although the basin does contain favorable Mesozoic source and reservoir rocks. Several oil and gas wells have been drilled in South Park but are now abandoned, probably because recovery of hydrocarbons in this basin is not economic due to the lack of infrastructure.

This analysis is based on the review of GIS data including the following shapefiles: Mineral Availability System (MAS) and Mineral Resource Data System (MRDS) published by the US Geological Survey, Industrial mineral mining operations that existed in the state prior to 1981 that were digitized from a set of maps prepared by the Colorado Geological Survey in 1981, IHS Energy PI/Dwights PLUS oil and gas well locations for the state of Colorado, Division of Minerals and Geology mining permit locations downloaded from their website October 2005, mining claims created from the LR2000 database in July 2004, digitized geologic maps of Denver, Pueblo, and Leadville, , Gold Prospects of Colorado published by the Quarterly of the School of Mines, Vol. 69 No.3, and Gold Placers and Their Geologic Environment in Northwestern Park County, published by the Colorado Geological Survey Bulletin 955-D.

### **Environmental Consequences/Mitigation:**

Alternative A: Alternative A allows for the retention and restricted exchange of a greater amount of land, than the No Action (Alternative B) within the areas with the

highest mineral values that lie in the northern part of South Park, near the Fairplay and Tarryall gold mining districts. Alternative A ranks high with respect to mineral value because it retains the BLM parcels with the highest mineral values. In addition, the greater number of parcels designated for exchange versus disposal are in the public's interest because these lands can be used to acquire land parcels with similar mineral value to the exchanged parcels. It is recommended also that parcels 134, 135, 140, and 152, southeast of Como, parcels 37, 38, and 41 south of Spinney Reservoir, and parcel 155 south of Antero Reservoir be used as exchange parcels rather than disposal due to their high mineral value. The parcels marked for disposal that are not recommended here for exchange do not contain the valuable gravels that are found in the northwestern part of South Park and therefore are not considered to have a high mineral value. Regarding the proposed RMP decisions to protect fens and potential breeding grounds for mountain plovers, several of the gravel deposits in South Park do contain fens and are within the seasonal mountain plover breeding habitat boundaries. In these areas, withdrawal of federal minerals is not likely so any mining activity will likely be mitigated based on the seasonal limitations imposed by mountain plover breeding and mining will not be allowed within the areas designated as fens.

Alternative B: The no action alternative allows primarily for the restricted exchange of the parcels of land with the highest mineral values in the northern part of the South Park analysis area. This alternative would create a potentially adverse affect because often when public lands are exchanged the federal mineral estate is retained creating a surface interference situation which can potentially create difficulty in the management of federal mineral estate. The parcels designated for disposal under Alternative B have low mineral values.

Alternative C: Alternative C allows for the disposal of 46% of all BLM parcels in South Park. This alternative would create fewer situations for mineral sales in South Park and would possibly increase surface interference situations if federal mineral estate is retained during disposal. The mineral value of the parcels designated for disposal is highest in the northeastern part of South Park because they contain gravels and lowest in the southern part of South Park because they do not contain gravels.

Alternative D: Similar to Alternative A, Alternative D allows for the retention and restricted exchange of a greater amount of land within the areas with the highest mineral values that lie in the northern part of South Park, near the Fairplay and Tarryall gold mining districts. This is the best alternative with respect to mineral value because it retains the BLM parcels with the highest mineral values. In addition, the greater number of parcels designated for exchange versus disposal are in the public's best interest because these lands can be used to acquire land parcels with similar mineral value to the exchanged parcels. It is recommended also that parcels 134, 135, 140, and 152, southeast of Como, parcels 37, 38, and 41 south of Spinney Reservoir, and parcel 155 south of Antero Reservoir be used as exchange parcels rather than disposal due to their high mineral value. The parcels marked for disposal that are not recommended here for exchange do not contain the valuable gravels that are found in the northwestern part of South Park and therefore are not considered to have a high mineral value. Regarding the

proposed RMP decisions to protect fens and potential breeding grounds for mountain plovers, several of the gravel deposits in South Park do contain fens and are within the seasonal mountain plover breeding habitat boundaries. In these areas, withdrawal of federal minerals is not likely so any mining activity will likely be mitigated based on the seasonal limitations imposed by mountain plover breeding and mining will not be allowed within the areas designated as fens.

## PALEONTOLOGY

**Affected Environment:** Paleontologic resources within the Royal Gorge Field Office area have been ranked according to fossil yield potential (FYP) using a 5 tiered ranking system with 1 being the lowest ranking and 5 being the highest ranking indicating that vertebrate fossils, significant invertebrate fossils, or vertebrate trace fossils have been identified within that area. Class 5 paleontologic resources are the land manager's highest concern and should be intensely managed. Public lands containing Class 5 paleontologic resources should be monitored on a cyclical basis for outcrop degradation. Class 4 paleontologic resources are Class 5 paleontologic resources that are protected from degradation because they are either hard to reach or covered by soil. Class 3 paleontologic resources are outcrops of paleontologically important resources that have either not been studied sufficiently, or have low predictability of fossil material. (See RGFO-FYPC)

The highest ranking formations (Class 4 and 5) are the Antero and Wagon Tongue formations which are important sources of vertebrate fossils, fossil wood, fossil plant material, and are similar in age to the Florissant Fossil Beds which have been designated a National Monument due to the high value of their paleontologic resources. All other formations have been ranked as 1 through 3 representing minimal to moderate potential for paleontologic resource recovery.

The most important paleontologic resource in South Park is Porcupine Cave which is located on the southwest rim of the park (NWSE Section 23, T 15S, R 76W) Porcupine Cave is the world's most important source of information regarding animals that lived at high elevations in North America between 1 million and 600,000 years ago. The cave has been studied for about 20 years by over 30 scientists and has produced tens of thousands of vertebrate specimens (Barnosky, A.D., 2004, Biodiversity Response to Climate Change in the Middle Pleistocene: The Porcupine Cave Fauna from Colorado).

This analysis is based on the review of the following GIS data: a shapefile of points representing locations of fossils compiled by the BLM-RGFO using information from several publications and reconnaissance work, a paleontologic classification of digitized geologic formations (from digitized Denver, Pueblo, and Leadville quadrangles) which was completed using information about paleontology in all geologic formations and point data indicating fossil locations.

### **Environmental Consequences/Mitigation:**

Alternative A: Alternative A would result in less adverse affects to Class 5 paleontologic resources because it retains the highest percentage of parcels with Class 5 paleontologic resources than Alternatives B and C but more than Alternative D. To protect and preserve the irreplaceable scientific information that these Class 5

paleontologic resources provide, retention of parcels 6, 56, 57, and 148 would be preferred. If however, these parcels are not retained by the BLM, a paleontologic survey would be required prior to the exchange or disposal of these parcels. Several parcels designated for disposal in the southern part of South Park contain Class 3 and Class 4 paleontologic resources but do not contain fossil locations so a paleontologic survey may not be required.

Alternative B: The no action alternative would cause highly adverse affects to paleontologic resources because it proposes to either dispose of or exchange all of the Class 5 federal paleontologic resources in South Park.

Alternative C: Alternative C would cause adverse affects to paleontologic resources because it proposes retention of only a small portion of parcels in South Park that contain Class 5 paleontologic resources while disposing of and exchanging most of the federal parcels containing Class 5 paleontologic resources.

Alternative D: Alternative D would result in the fewest adverse affects to Class 5 paleontologic resources because it retains the highest percentage of parcels with Class 5 paleontologic resources among Alternatives considered. To protect and preserve the irreplaceable scientific information that these Class 5 paleontologic resources provide, I recommend the retention of parcels 6, 56, 57. If these parcels are not retained by the BLM, a paleontologic survey would be required prior to the exchange or disposal of these parcels. Several parcels designated for disposal in the southern part of South Park contain Class 3 and Class 4 paleontologic resources but do not contain fossil locations so a paleontologic survey will not likely be required.

#### FOREST MANAGEMENT:

**Affected Environment:** The majority of the planning area is non-forested, hence the name South Park. The existing forests should be considered significant for wildlife, recreation, and visuals, due to the limited extent of forest lands within the planning area.

Substantial changes have taken place in the forest condition over the past 150 years due to past resource utilization. The area is dominated by stands of ponderosa pine, Douglas-fir, aspen and spruce along the stream banks. These tree species are hardy drought tolerant trees that are well suited to the landscape. Many stands consist of several different trees species; these are typically classified as mixed conifer stands. Stands once dominated by ponderosa pine and aspen are being replaced by the more shade tolerant Douglas-fir. Most of the stands within the area are classified as overstocked with too many trees per acre. Many stands have 300 to over 2000 trees per acre. These are mainly trees less than 10 inches in diameter.

There is a moderate to heavy amount of dead-and-down wood and litter/duff layer present on the forest floor. Most of the forests within the planning area have old stumps and logs with evidence of past fire occurrence. Meadows and open parks are being encroached upon by small trees due to the lack of wildfire. Wildfire is the dominant disturbance agent shaping the landscape for

thousands of years. Native plants and animals have adaptations to survive wildfire and some need fire in order to be maintained on the landscape.

**Environmental Consequences/Mitigation:** Forest management recommendations to ensure optimum tree health include providing adequate space, water, and avoid the wounding of the trees. Generally an overcrowded forest is more susceptible to catastrophic wildfire, insect infestations and diseases. Overstocked forests exhibit a decline in forest health such as individual small tree crown ratios which limits the trees ability to capture sunlight and slow growth rates.

Alternative A): Under Alternative A most of the forested lands are retained. There are some forested acres that could be lost through disposal. Most of these acres are accessed through private lands requiring landowner permission. This limits potential forest management opportunities and public use of these forests. There are also some forested acres identified for exchange. Actual forested acres lost or gained would have to be determined at the time of land exchanges.

Alternative B (No Action): Under Alternative B the acres of forested lands will remain the same. There is the potential for loss in any future land exchanges or disposal that may increase or decrease forested acres and forest management opportunities. Actual forested acres lost or gained would have to be determined at the time of any land exchanges.

Alternative C: Under Alternative C most of the accessible forested lands are retained. There are some forested acres that could be lost through disposal. Most of these acres are accessed through private lands requiring landowner permission. This limits potential forest management opportunities and public use of these forests. There are also some forested acres identified for exchange. Actual forested acres lost or gained would have to be determined at the time of any land exchanges.

Alternative D (The Proposed Action): Similar to Alternative A most of the forested lands are retained in Alternative D. There are some forested acres that could be lost through disposal. Most of these acres are accessed through private lands requiring landowner permission. This limits potential forest management opportunities and public use of these forests. There are also some forested acres identified for exchange. Actual forested acres lost or gained would have to be determined at the time of land exchanges.

**Cumulative Impacts:** The proposed land tenure changes in Alternative A would result in the moderate direct, indirect, and cumulative impacts to the forest resources. The proposed land tenure changes in Alternative B have the potential to have the second most direct, indirect, and cumulative impacts to the forest resources due to the large amount of acres planned for disposal or exchange. The proposed land tenure changes in Alternative C would result in the largest direct, indirect, and cumulative impacts to the forest resources due to the largest acres under disposal. The proposed land tenure changes in Alternative D would result in the least direct, indirect, and cumulative impacts to the forest resources due to fact that this alternative has the largest acreage under retention and

exchange which should result in the most positive outcome for the areas public land forests. Changes that occur because of decisions made on this EA may result in both positive and negative changes to the forest cumulative impacts situation. The final outcome will be determined once site specific action NEPA documents are prepared.

## REALTY AUTHORIZATIONS

**Affected Environment:** The realty land use authorizations on public lands in Park County consist of rights-of-way. There are no land use permits, leases or easements, no land withdrawals or, authorizations for those uncommon types of actions such as Desert Land Entires or Airport Grants. The large majority of the rights-of-way are for public utility and access purposes granted under the authority of the Federal Land Policy and Management Policy Act of 1976. The predominant utility right-of-way grants are for electrical and telephone transmission and distribution systems, with a much smaller number of individual service line grants. Two large diameter water transmission pipelines are authorized across those scattered public land parcels which are located along their route through South Park to the urban areas of the “Colorado Front Range”. These historic “aqueducts” were authorized under the authority of pre-FLPMA right-of-way laws. The majority of the existing road rights-of-way are granted for gravel surfaced roads that provide access to rural subdivisions and individual residences. There are no existing rights-of-way for communication sites.

The Park County Road System is not currently recorded on the public land records. A submission for RS 2477 determination and recordation, a process which was initiated and encouraged by the BLM, was submitted by the County in 1988. This process however was not completed as a result of the moratorium placed on RS 2477 determinations in 1993 by the Department of the Interior. The BLM has granted four (4) individual Federal Land Policy and Management Act (FLPMA) rights-of-way to Park County for small, separate segments of the road system. A FLPMA right-of-way was also granted to the County for a small, connecting two road access system and an emergency medical services heliport, located immediately south of Fairplay. In addition to providing access to the heliport the roads provide access to the County’s solid waste transfer station located on their adjacent county owned land. No discussion has taken place between the BLM and the County concerning the possible authorization of the total road system under the authority of FLPMA.

Major highways located on a number of the public land parcels in Park County include Colorado State Highway 9 and Federal Highways 24 and 285. While these highways have physically been in place for more than 70 years the appropriation of the public lands involved and a grant of a permanent easement for their rights-of-way across those public lands, a process required by Federal law and conducted by the Federal Highway Administration (FHWA) with the concurrence of the BLM, has only been completed for Federal Highway 285. There currently is no documentation or FHWA grant of a right-of-way easement for either State Highway 9 or Federal Highway 24 across public lands in Park County.

### **Environmental Consequences/Mitigation:**

Alternative A: Alternative A would retain the second largest percentage of public lands in federal ownership, among alternatives considered, but would also increase restrictions on the availability of a portion of those lands for right-of-way (ROW) authorizations. The existing resource management plan established no right-of-way exclusion areas in South Park. Under the proposed action for the new management plan approximately 110 acres are excluded from right-of-way authorizations that require any surface disturbance in order to protect fen wetlands. Rights-of-way for aerial powerlines that could be constructed to span these wetlands, requiring no structure placement, surface travel or other surface disturbance within the fen, may be reviewed and authorized on a case by case basis. Big game birthing and critical winter habitat are established right-of-way avoidance areas in the current management plan. The proposed action for the new plan would add mountain plover breeding habitat to this list of right-of-way restricted areas. Rights-of-way proposals in these areas would be reviewed, considered and may be authorized with the proper mitigation that would include, but not be limited to, restrictions for any construction or ancillary activities during breeding season.

Alternative B – No Action: Under the no action alternative there would be no change in acreage availability or restrictions for right-of-way authorizations on public lands in South Park.

Alternative C: The total number of acres identified for retention in Alternative C and the proposed action, Alternative D are fairly close in number. Further, the new added exclusion areas for fen wetlands and avoidance areas for mountain plover breeding habitat present in the proposed action are also present in Alternative C. Therefore, the environmental consequences are measurably the same and the required mitigation unchanged.

Alternative D - The Proposed Action: The proposed action would retain the largest percentage of public lands in federal ownership, among the alternatives considered, but similar to Alternative A it also increases restrictions on the availability of a portion of those lands for right-of-way authorizations. The existing resource management plan established no right-of-way exclusion areas in South Park. Under the proposed action for the new management plan approximately 110 acres are excluded from right-of-way authorizations that require any surface disturbance in order to protect fen wetlands. Rights-of-way for aerial powerlines that could be constructed to span these wetlands, requiring no structure placement, surface travel or other surface disturbance within the fen, may be reviewed and authorized on a case by case basis. Big game birthing and critical winter habitat are established right-of-way avoidance areas in the current management plan. The proposed action for the new plan would add mountain plover breeding habitat to this list of right-of-way restricted areas. Rights-of-way proposals in these areas would be reviewed, considered, and may be authorized with the proper mitigation that would include, but not be limited to, restrictions for any construction or ancillary activities during breeding season.

Cumulative Impacts: The 1996 RMP identified a majority of the federal lands in South Park for disposal or exchange. Only 12.5 percent were identified for retention. Although this RMP had the ability to drastically impact the public (through sales, exchanges, etc.), no major realty actions were undertaken to dispose of these lands. The no-action alternative (Alt. B) could have a longer-term cumulative impact as much of the federal lands would stay in the disposal and exchange categories. This could create the potential for more land sales (competitive, modified competitive, and direct) or land exchanges and a possible loss of public lands in South Park. If Alt. B is chosen as the preferred alternative, an increase in land development could be seen. This could possibly increase the need for rights-of-way across public land. On the other hand, the decrease in the number of acres of public land could lead to a decrease in the number of rights-of-ways needed.

Although land sales may decrease the number of acres of public land, exchanges and conservation easements may protect land as open space even though it is privately owned property. The intent of the exchange restricted category is to allow for another entity or agency to manage the land according to BLM objectives. This creates the possibility of decreasing the number of public land acres thereby possibly decreasing the number of right-of-way authorization.

Alternatives A, C, and D propose to retain more public lands in the South Park area, approximately 55%, 51%, and 63% respectively. The retention of more public land will possibly increase the need for ROW's in the future, although all three alternatives will now have 110 acres that are considered exclusion areas to allow for protection of specific resources. This loss of public land could cause a decrease in ROW authorizations. The same impacts could occur, as stated above, for lands in the sale and exchange categories.

In conclusion, this planning effort may cumulatively effect realty authorizations by decreasing OR increasing the number or ROW's authorized. Another cumulative effect may be an increase in land development due to public land sales. On the other hand, land exchanges and conservation easements may decrease land development and protect more environmental resources.

## RECREATION

**Affected Environment:** National Forest lands and State Wildlife Areas are the primary recreation destinations for the majority of local residents and visitors in Park County. BLM public lands adjacent to these areas enhance recreation opportunities, experiences and settings. The BLM lands in South Park are within the Royal Gorge Extensive Recreation Management Area (ERMA). Management within the ERMA is restricted to custodial actions only. Specific recreation management actions may be taken to address issues of visitor health and safety, user conflict, and resource protection.

A variety of recreation opportunities, experiences, and settings exist in this area. Generally, predominant recreation activities include hunting, fishing, camping, and wildlife observation.

Recreation use is dispersed and occurs in settings that are largely undeveloped (no facilities and few on-site management controls). The primary limitation on recreation opportunities on BLM lands is a lack of legal public access and the scattered and isolated nature of some BLM lands. This lack of legal public access has, in some cases, created conflicts between the public and private land owners. In areas where legal access is not available, it is difficult for BLM to manage recreation activities, such as OHV use, that may be originating from adjacent private land and adversely impacting BLM lands.

In areas where BLM lands adjoin lands managed by State Parks, Division of Wildlife, and the US Forest Service, recreation opportunities are enhanced because larger areas are available for recreation and legal public access is usually available. In these areas, it is easier to provide on-site management controls as necessary to address visitor health and safety, user conflict, and resource protection.

### **Environmental Consequences/Mitigation:**

Alternative A: Alternative A would retain the second largest percentage of BLM lands, among alternatives considered (Table 3). Alternative A would provide a higher benefit to the public for recreation opportunities, experiences, and settings than Alternatives B or C, but less than Alternative D. In addition, many of the parcels identified for retention in Alternative A adjoin State Wildlife Areas and National Forest – providing enhanced access and recreation opportunities for the public. The lands in the exchange-restricted category provide some value for recreation as long as they are retained in federal ownership. If these lands are disposed of, the protection of the land in a conservation easement or other deed restriction would help retain the recreation setting of the area even though recreation opportunities may be reduced. Although the acreage of the disposal parcels is larger than Alternative B, these parcels are small, scattered and heavily influenced by adjacent private developments. In many cases, recreation management of these parcels is complicated and limited by a lack of legal access. Much of the recreation use originates from adjacent private lands; the recreation value for the public is limited. The disposal of these parcels would decrease recreation opportunities but only minimally.

Alternative B – No Action: Because this alternative retains the least amount of BLM lands in federal ownership, it would provide the least benefit to the public for recreation opportunities, experiences, and settings. The only lands in the retention category are either in the Mosquito Range ACEC or are in areas where BLM has made recent acquisitions. Several large parcels of BLM lands adjoining State Wildlife Areas and National Forest with important recreation values are in the exchange-restricted category (may be disposed of by exchange). Although land exchanges have the potential to offset the loss of recreation opportunities and benefits in South Park by acquiring lands with significant recreation value in other areas, recreation opportunities, benefits, and settings would be lost in this specific area. The parcels in the disposal category are small, scattered and heavily influenced by adjacent private developments. In many cases, recreation management of these parcels is complicated and limited by a lack of legal

access. Much of the recreation use originates from adjacent private lands; the recreation value for public is limited. The disposal of these parcels would decrease recreation opportunities but only minimally.

Alternative C: This alternative would retain the BLM lands with the highest recreation values. More BLM lands are subject to disposal by any means while only a small percentage is in the exchange-restricted category. This increases the potential for loss of recreation opportunities, benefits, and settings in South Park; however, many of the disposal parcels are scattered, lack legal public access, and would be increasingly influenced by adjacent private land.

Alternative D – The Proposed Action: Because the proposed action retains the largest percentage of BLM lands, among alternatives considered (Table 3), it would provide the greatest benefit to the public for recreation opportunities, experiences, and settings. As in Alternative A, many of the parcels identified for retention in Alternative D adjoin State Wildlife Areas and National Forest – providing enhanced access and recreation opportunities for the public. The lands in the exchange-restricted category provide some value for recreation as long as they are retained in federal ownership. If these lands are disposed of, the protection of the land in a conservation easement or other deed restriction would help retain the recreation setting of the area even though recreation opportunities may be reduced. The acreage of the disposal parcels in Alternative D is less than in Alternatives A, B, or C. Disposal parcels are small, scattered and heavily influenced by adjacent private developments. As in other alternatives, in many cases recreation management of these parcels is complicated and limited by a lack of legal access. Much of the recreation use originates from adjacent private lands; the recreation value for public is limited. The disposal of these parcels would decrease recreation opportunities but only minimally.

Cumulative Impacts: Because of the fragmented landownership pattern in Park County, current recreation opportunities, experiences, and settings in Park County are influenced by Federal, State and local government agencies such as BLM, USFS, Division of Wildlife, and Park County as well as private landowners. A combination of population growth in Colorado and increased development of private lands for residential use in Park County have increased demand for recreation opportunities and experiences in this area. Among alternatives considered here, the proposed land tenure changes in Alternative D would result in the greatest retention of public lands – particularly key parcels that adjoin lands (State Wildlife Areas, National Forest) with high value for recreation opportunities, experiences, and settings. It also offers more opportunities to protect recreation settings through conservation easements and other deed restrictions in the exchange-restricted category. Over time, the disposal of small, scattered parcels would only minimally affect recreation opportunities and experiences because they usually do not provide legal public access. Alternatives A, B, and C retain less land in federal ownership. Over time this would reduce recreation opportunities and experiences available to the public as recreation demand continues to grow. Under every alternative, management of increasing recreation use on public lands would present challenges to BLM because of the fragmented land ownership pattern and lack of public access. The

costs of recreation management in Park County would continue to increase over time as the public lands are more intensively used by a growing population of both residents and visitors.

## VISUAL RESOURCES

**Affected Environment:** The existing Visual Resource Management (VRM) inventory identifies the project area with a Class III Visual Inventory rating. Actions taken in this area should conform to the standards prescribed by this VRM class. VRM is a tool used to ensure the scenic qualities of an area are considered prior to implementation of a project.

VRM Class III: Change attracts attention but is not dominant. The objective for VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the landscape.

In large part, the visual resource value of BLM lands in South Park derives from the open space that is protected from increasing residential and commercial development on private land. This situation is particularly true of larger parcels, parcels that adjoin other “open space” such as State Wildlife Areas and National Forest, and parcels along or highly visible from major highways and scenic roads (such as the Mosquito Pass Road).

### **Environmental Consequences/Mitigation:**

Alternative A: Alternative A would retain the second largest amount of BLM lands in federal ownership, among alternatives considered. Alternative A would afford BLM higher control of the management of visual resources on these lands when compared with Alternatives B or C but less than with Alternative D. The lands in the exchange-restricted category would have conservation easements or other protective deeds in place upon disposal. Presumably, this would help meet the VRM Class III objectives by partially retaining the existing character of the landscape. Once lands in the disposal category leave federal ownership, BLM would not lose control over management of visual resources on these parcels.

Alternative B – No Action: Because this alternative retains the least amount of BLM lands in federal ownership, it would provide the least benefit to the management of visual resources. Under this alternative, most of the BLM lands are in the exchange-restricted category. Through land exchanges, BLM could acquire lands in other areas of high visual resource value but the control over visual resources on the exchange parcels would be lost. BLM would not have any control over management of visual resources once the disposal parcels leave federal ownership.

Alternative C: This alternative would retain many of the BLM lands with the highest visual resource values. More BLM lands are subject to disposal by any means while only a small percentage is in the exchange-restricted category. As BLM lands leave federal ownership, it is assumed many would be subject to residential or

commercial development. This would decrease the amount of “open space” and visual resource values that derives from it in certain areas of South Park.

**Alternative D – The Proposed Action:** The proposed action would retain the largest amount of BLM lands in federal ownership, among alternatives considered. This affords BLM the greatest control of the management of visual resources on these lands. The lands in the exchange-restricted category would have conservation easements or other protective deeds in place upon disposal. Presumably, this would help meet the VRM Class III objectives by partially retaining the existing character of the landscape. Once lands in the disposal category leave federal ownership, BLM would not lose control over management of visual resources on these parcels.

**Cumulative Impacts:** Over time, the development of private lands for residential and commercial uses is likely to negatively impact visual resources in Park County. Under this scenario, retaining the maximum amount of land in federal ownership and/or disposing of public land parcels while restricting development rights through conservation easements or other deed restrictions would help maintain open space and the characteristic landscape of this area. The impacts to Visual Resources of disposal of specific parcels would need to be assessed in separate EAs that take into account the location and likely development scenario for each parcel.

## TRANSPORTATION AND ACCESS

**Affected Environment:** Transportation and access in South Park, Park County CO occurs in a context typical of Rocky Mountain States with a high percentage of public lands. The area is crossed by US 285, 24, and 9 as well as a network of county, federal, and private roads leading in and out of the county to such destinations such as Breckenridge, Chaffee County, as well as public lands of the Pike National Forest. The following evaluation addresses the impacts that the proposed action (Alternative D) and the three alternatives would have on the availability of the public lands for use by the general public (ACCESS) and the need for BLM to manage and maintain roads and trails on the public lands (TRANSPORTATION). The evaluation does not consider the effects that future exchanges resulting from changes in land tenure would have on access and transportation, since the locations of such exchanges are unknown at this time.

**ACCESS:** For the purpose of this evaluation the public lands that are available to the general public are defined as those lands where permanent legal public access exists either via public roads (state, federal, or county highways), where BLM has acquired a public easement, or where the lands adjoin National Forest lands. Public lands that are not connected via public roads, easements, or National Forest/State Trust Lands are not considered to be available to the general public.

As a general rule, those lands that are available to the public provide higher levels of recreational benefits than are realized from those lands that are not available to the public. People enjoy using the public lands and place a high value on being able to access them for recreational purposes. Consequently, the existence or non-existence of legal public access and the associated

recreation benefits that are derived from the lands are important factors that need to be considered when evaluating land tenure decisions. The public lands that are accessible are generally regarded as more essential for retention, whereas, those that are not accessible are regarded as more suitable for disposal or exchange.

**TRANSPORTATION:** The type of access, public vs. non-public, has a direct effect on the needs for transportation improvements and travel management. Public lands that are accessed by public roads and easements generally receive greater amounts of traffic, both on and off existing roads. Thus, as a general rule, those lands that are accessed by public roads and easements require higher levels of management for constructing and maintaining access roads and limiting off-road travel uses than lands that are not accessible to the public.

The parcels within the South Park project area that are available for public use are accessed by public roads that are administered and maintained by state, federal, and county highway departments. In addition, numerous roads stem from these public roads that are not administered and maintained by other agencies. Some of these roads may have been constructed in the past for mining or other authorized uses; however, in most cases the roads are not constructed but have been created for recreational access by vehicular use. The management of these roads, then, is the BLM's responsibility. [Appendix 7 Tables 7-18](#) detail road mileage on all BLM parcels (lands with both public and non-public access) by alternative and land tenure category.

Currently, none of the roads in the South Park project area that are under BLM jurisdiction have been designated as "BLM System" routes that are assigned a BLM road number and maintained on a scheduled basis. Also, no travel management planning has been done in the South Park project area for limiting off-highway vehicles (OHVs) to designated routes. The travel management plan for this area is scheduled for FY's 2008 – 2009.

### **Environmental Consequences/Mitigation:**

**Methodology:** Impacts to transportation and access were inferred by estimating the acreage of public lands parcels by land tenure category (Retention, Disposal, Exchange) and mileage of (currently inventoried) routes for each alternative that are accessible from existing state, federal, and county roads. Calculations were generated in GIS using agency road datasets. The locations of BLM public easements and adjoining National Forest lands were compiled separately. Although jurisdiction of routes crossing BLM in South Park are commonly county, state, or federal, BLM parcels considered for retention are assumed to have longer-term travel management and road maintenance cost to the federal government given current trends in recreational travel on public lands in Colorado. Conversely, BLM parcels considered for disposal and/or exchange would be assumed to have a higher risk to recreational access given the potential for new owners to restrict travel on such parcels.

Table 5 compares accessible public land acreage by alternative and land tenure category for each alternative. Table 6 compares existing road mileage by land use alternative and land tenure category for each alternative. Tables 7 to 18 (Appendix 7 )

detail parcel numbers, acres, and roads by alternative and land tenure category that are accessed by public roads, BLM easements, and adjoining NF lands.

**Table 5** – Acres of Public Lands with Access from Public Roads, BLM Easements, or NF Lands:

Alternative	Retention	Disposal	Exchange
A	16788	1329	6105
B – No Action	5630	3074	17227
C	14048	8688	2907
D - Proposed Action	18369	367	5486

**Table 6** – Existing road mileage (County, State, Federal) by Alternative and Land Tenure Category:

Land Tenure Category	Alternative A	Alternative B (No Action)	Alternative C	Alternative D (Proposed)
Retention	66.1	13.8	56.9	76.3
Disposal	22.1	17.5	40.3	8.3
Exchange	22.2	79.1	13.2	25.8
Total	110.4	110.4	110.4	110.4

Alternative A – Alternative A would allocate the second largest amount of public lands in the retention category among alternatives considered. Alternative A would retain 16,788 acres of BLM public land with legal public access. Consequently, of the four alternatives, Alternative A would retain more public land accessible to the public than B or C, but less than D. Because of the large amount of accessible lands in this alternative, Alternative A would also require higher levels of management and associated costs than either alternative B or C for maintaining transportation improvements and controlling uses of off-highway vehicles.

Alternative B – The No Action alternative would result in the least amount of lands retained under BLM ownership that would be accessible to the public. Because of the small amount of accessible lands in this alternative, the No Action alternative would require the lowest level of management and associated costs than either alternative A, C, or D for maintaining transportation improvements and controlling uses of off-highway vehicles.

Alternative C – This alternative would allocate public lands in the retention category that includes about 14,048 acres of parcels with legal public access. This would amount to approximately 2,740 acres less than would be retained under the Proposed Action and 8,418 acres more than the No Action alternative of accessible lands. Because of the relatively high amount of accessible lands in this alternative, however, Alternative C would also require a high level of management and associated costs for maintaining transportation improvements and controlling uses of off-highway vehicles.

Alternative D Proposed Action – Alternative D would allocate the largest amount of public lands in the retention category among alternatives considered. Alternative D would include about 18,369 acres of parcels with legal public access. Consequently, of the four alternatives, Alternative D would provide the most land that would be accessible to the public. Because of the large amount of accessible lands in this alternative, Alternative D would also require highest levels of management and associated costs than alternatives A, B, or C for maintaining transportation improvements and controlling uses of off-highway vehicles.

**Cumulative Impacts:** Direct and indirect impacts to transportation and access on public lands in the South Park planning area over the next 10 years resulting from changes to land tenure patterns in Alternatives A, B, C, or D would depend on actual realty transactions and are thus uncertain. Direct impacts could include increased taxpayer costs for road and trail maintenance cumulative to increased motorized access from adjacent private lands. Changes to transportation and public lands access would be occur in the context of increasing recreational traffic from adjacent Park County private lands and Front Range counties.

**Mitigation:** Under all alternatives, there is a need in this area to inventory and identify essential BLM access roads that would be improved and maintained and to limit OHVs to designated routes to reduce resource degradation throughout the planning area. A travel management plan is scheduled for FY's 2008-2009 for the South Park project area that will accomplish both of these needs.

## RANGE MANAGEMENT

**Affected Environment:** A listing of grazing allotments and operators in the planning area is included in [Appendix 8 – Table 19](#). The allotments range in size from 40 acres to approximately 8,000 acres of public land. Many of the allotments consist of, or include relatively small, isolated or scattered parcels of public land. Many parcels of public land are not fenced separately from the grazing lessee's private land. A listing of the specific parcels that comprise these allotments is included in [Appendix 8 – Table 20](#)

In general, “custodial” management is employed on the most of the allotments in the area. Allotments where custodial management is used generally consist of parcels of public land that are unfenced from large amounts of private land, are difficult to manage separately, and/or have limited resource issues. Under custodial management, the permittee is not restricted to a specific number of livestock, or specific grazing dates, as long as an authorized amount of grazing use on public land is not exceeded. The authorized amount of grazing use is based on the estimated carrying capacity of the allotment and is expected to result in utilization levels of 40% - 60% of the annual forage production. Grazing use that exceeds this level on public land is not authorized.

Allotments where: 1) the present rangeland condition has been identified as unsatisfactory, 2) moderate to high resource potentials exist but the allotment is producing at low to moderate levels and/or 3) resource conflicts (or the potential for resource conflicts) exist are generally targeted for “improved” management. Improved management generally includes specific grazing dates and livestock numbers. In order to implement improved management on most allotments, additional investments such as more intensive management or additional range improvements (fencing, wells, etc...) are often required. In order to qualify for improved management, opportunities should exist for positive economic return from this investment. Only a few allotments with higher resource values in the South Park area currently employ “improved” management. These include the Agate Beds, Como Park East, Hot Springs, Link Ditch and portions of the Elevenmile Canyon allotments.

A third category of management, “Maintained” management is employed on one allotment in the planning area, the Rye Slough North. Under this management, no issues exist and current resource conditions and management is satisfactory.

A number of the BLM allotments in the planning area are not fenced separately from “uncontrolled” private land<sup>5</sup>. In general, Colorado fencing law is commonly interpreted to mean that it is the responsibility of the landowner to initiate fencing to keep livestock off of his or her land. Although this law pertains to areas where the “uncontrolled” private land is unfenced from BLM allotments, BLM management of these allotments often becomes more difficult and time consuming. BLM typically spends an inordinate amount of time on these allotments responding to complaints or problems regarding livestock drift onto “uncontrolled” private land. Generally, these allotments are low priority allotments with very limited resource value. Due to budget and staffing constraints, the amount of time required on these allotments, reduces the amount of available time that is needed on other, higher priority allotments with greater resource values.

Many additional allotments in the South Park area include mountain plover habitat and therefore are considered to contain high resource values. However, mountain plover nesting habitat typically consists of areas where vegetation is lacking or is reduced in height. Typically, this habitat includes areas that have been grazed by livestock. Therefore, little or no conflicts between livestock use and plover nesting habitat have been identified at this time. Allotments that include plover habitat have not necessarily been identified for improved management.

The grazing allotments on public land provide forage to numerous livestock operations within South Park. Currently, livestock operators pay a grazing fee of \$1.35 per animal unit month (AUM). (An AUM is defined as the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month.) This fee is based on a fee formula set by Congress and typically varies slightly each year. Currently, BLM estimates that the average private grazing land lease rate per AUM for Colorado is currently \$14.50.

Some allotments also include authorized range improvements such as fences, wells or livestock water ponds. In some cases, the grazing lessee has contributed financially to the development of these improvements.

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<sup>5</sup> Uncontrolled land refers to private land that is not owned or leased by the lessee

## **Environmental Consequences/Mitigation:**

Under each of the alternatives, various parcels of public land currently included in various grazing allotments would be available for potential disposal into private ownership. Federal grazing regulations indicate that, when public lands are disposed of, the grazing lessees will be given 2 years' prior notification "before their grazing permit or grazing lease and grazing preference may be canceled". In general, after 2 years, the grazing lessee may lose the availability of the amount of forage on the parcel of "former" public land and/or be forced to replace it at a higher price that reflects the higher price of private land leases in Colorado. The cost of replacing forage on federal lands with forage from private lands is currently estimated to be \$13.15/AUM. (This calculation is based on the difference between the current private land lease rate of \$14.50/AUM and the current federal grazing fee of \$1.35/AUM.) The total cost of replacing forage from a specific parcel would depend on the specific amount of forage available on the parcel. Appendix 8 – Table 21 identifies the specific parcels that would potentially be exchanged or disposed of under each of the alternatives. These parcels would no longer be available to the operator for grazing under federal grazing authorization if and when the parcels are eventually disposed of or exchanged. Appendix 8 – Table 22 identifies the estimated cost to the individual operators of replacing the forage on these parcels with forage from other private land leases.

There may be unique issues regarding the disposal of specific parcels of public land. For example, parcels may contain the only livestock water available for a specific pasture; parcels may provide the only access for a lessee to a specific area or they may incorporate a unique aspect of a lessee's operation, etc.... These types of site specific impacts to range management and the livestock lessee's operation would be identified during site specific NEPA analysis if and when various parcels were proposed for exchange or disposal.

Also, various parcels to be disposed of may contain authorized range improvements to which the lessee has made a financial contribution. In this case, federal grazing regulations state that "Whenever a grazing permit or lease is cancelled in order to devote the public lands covered by the permit or lease to another public purpose, including disposal, the permittee or lessee shall receive from the United States reasonable compensation for the adjusted value of their interest in authorized permanent improvements placed or constructed by the permittee or lessee on the public lands....". Again, site specific impacts related to authorize range improvements would be identified as site specific NEPA work is completed if these lands parcels were proposed for exchange or disposal.

**Cumulative Impacts:** The cumulative impacts of changes in the amount of federal land available for livestock grazing are substantially higher under the existing situation (Alternative B- No Action) than any of the other alternatives as shown in Appendix 8, Table 22. In general, any substantial cost increase to livestock operators reduces the

profitability of their existing operations. This in turn can add to existing or other pressure to seek alternative or more profitable land uses. Typically, the reduced profitability of agricultural land uses in the South Park area tends to result in greater amounts of agricultural property being developed, subdivided or used for other purposes. How great a factor the reduction in available federal grazing land contributes to this process is difficult to determine. However, as indicated in Table 22, these impacts would be greatest under Alternative B and least under Alternative D (Proposed Action).

Mitigation: Recommendation for Future Management:

1. Implementation of “improved” management on most allotments requires additional investments such as intensive management, monitoring or costly range improvements. The criteria for “improved” management dictate that opportunities should exist for positive economic return from these investments. Parcels slated for future disposal under the proposed action will not retain the likelihood of future, positive economic return from any improved management on these parcels. Therefore, it is recommended that “improved” management should not be employed on the parcels identified for future disposal under the proposed action. Only custodial management should be utilized on parcels identified for future disposal. This is unlikely to have any impact on any significant resource values, since all of the parcels with significant resource values would be retained or included in the “exchange –restricted” category under the proposed action. Improved, Custodial, or Maintained Management, as appropriate, could continue to be applied to allotments to be retained or in the “exchange –restricted” category.
2. The increased difficulty of managing allotments that are unfenced from “uncontrolled” private land is an increasing issue for BLM range management in South Park. Many of the parcels where this is a problem are already identified for disposal under the proposed action. However, parcel 48 has the potential for continued problems related to uncontrolled private land. Although there are few residences within the area at the present time, some of the adjacent private land is already subdivided into numerous ownerships, increasing the potential for more residences. Additionally, the odd shape of parcel 48 results in over 20 miles of unfenced public land boundary, making additional control of the public land impractical. To reduce the potential for increased range management problems in the future, parcel 48 should be moved to the disposal category under the proposed action.
3. There has been an inconsistency in the way the 2 year notification for lessees when a parcel is to be disposed of has been processed within the RGFO in the past. In some cases, two year notification have been issued to lessees when a land use plan first identified portions of their grazing allotment as being available for disposal. In some of these cases, although a lessee received a 2 year notification, the allotment was still in federal ownership over 10 years later. In other cases, the 2 year notification has been sent when BLM actually received an exchange or disposal proposal for a specific parcel. For parcels that are available for disposal under this alternative, it is recommended that the 2 year notification has been sent when BLM actually receives an exchange or disposal proposal for a specific parcel.

**CUMULATIVE IMPACTS SUMMARY:** South Park land tenure adjustment planning occurs in a context of an increasingly diversified high-altitude ranching economy, a continuously expanding residential frontier, and countervailing forces securing privately held and state-administered open space. Over the last 25 years, land use defined by bison, llamas, and yak husbandry occur adjacent to long-held cattle operations. Other past and present actions in the study area concurrent to BLM land tenure decisions include trans-basin water transfer and storage, reservoir development, fluid mineral exploration, road development, commercial, and residential development.

These past and present actions have had limited impact on resource values on BLM parcels to date. The notable exception is the increase in residential development on private property adjacent to public lands. Since the 1996 RMP, South Park has experienced an increase in road and home construction, individual actions that have resulted in habitat fragmentation. BLM anticipates that developments on private subdivisions (Figure 3) are reasonably foreseeable actions that will continue in the study area. Since 2000 and following passage of the Colorado Conservation Easement Tax Credit Program, the South Park study area has also benefited from extensive private conservation efforts. Such private conservation protections as well as State Wildlife Area designations should limit further urbanization in key areas such as Red Hill and Reinecker Ridge. Current resource conditions, including maintenance of public land health standards over the coming decade, will be beneficially impacted from these actions.

As envisioned in Alternative D, BLM anticipates that long-term retention and restrictions on exchange of public lands will maintain public grazing, wildlife habitat, watersheds, wetlands status, and recreation on the majority of public land in the study area over the coming decade. These beneficial impacts would be cumulative to the direct impacts of adjacent private and state-level conservation actions. On the other hand, direct impacts of disposal of any BLM parcel would include increased costs to one or more livestock operators who depend on public grazing allotments for affordable forage. Indirect impacts of parcel disposal could also include potential private development of that land.

Alternatives A, B, C, or D all include lands available for disposal. Indirect impacts resulting from disposal of these parcels would be cumulative to fragmentation already present and expected given established small parcel land ownership. Among alternatives considered, the proposed land tenure changes in Alternative D would result in the least direct, indirect, and cumulative adverse impacts to biophysical, cultural, economic, and recreational resource values. In summary, changes that occur because of decisions made on this EA could result in both positive and negative changes to the human environment. However the magnitude of impact in the context of South Park would be limited, as measured by acreage and parcels categorized for disposal, as well as the number of parcels that would be considered for disposal in any given period of time. Site specific determinations of direct, indirect, and cumulative impacts would be considered in separate NEPA analysis at the time of any proposed realty action.

**PERSONS / AGENCIES CONSULTED:**

Park County Commissioners

US Forest Service

CO Div. of Wildlife

INTERDISCIPLINARY REVIEW:

<u>Name</u>	<u>Title</u>	<u>Area of Responsibility</u>
Keith Berger	Range Management Spec.	Range, Vegetation
Erik Brekke	Wildlife Biologist	Wildlife, T&E, Migratory Birds
Mike Gaylord	Fire Mit./Educ. Spec.	Air, Hazardous Materials
Dave Gilbert	Fisheries Biologist	Aquatic Wildlife, Riparian/Wetlands
Ernie Gillingham	Surface Reclamation Spec.	Soils
Natalee Czarnota	Realty Specialist	Realty
Dan Grenard	Geologist	Minerals, Paleontology
Melissa Smeins	Geologist	Minerals, Paleontology
Tom Grette	Range Management Spec.	Farmland, Weeds
Leah Quesenberry	Outdoor Recreation Planner	Recreation, Wilderness, Visual, ACEC
Ken Reed	Forester	Forestry
Ed Skerjanec	Fire Management Officer	Fire
John Smeins	Hydrologist	Hydrology, Water Quality/Rights
Joe Vieira	Natural Resources Specialist	Transportation, Access, Cumulative
Monica Weimer	Archaeologist	Cultural, Native American

## APPENDICES:

Appendix 1 Colorado Natural Heritage Program land tenure recommendations and strategies for conservation of mountain plover (*Charadrius montanus*) on Bureau of Land Management administered lands in South Park, Park County, Colorado (Grunau and Wunder, 2001)

Appendix 2 Federal legal context and parameters guiding BLM Royal Gorge Field Office realty actions and Resource Management Plan (RMP) land tenure decisions in Park County, Colorado<sup>6</sup>

Appendix 3 NEPA Public Participation - public scoping timeline for South Park Land Tenure Adjustment Environmental Assessment-Resource Management Plan Amendment (CO-200-2005-0025-EA).

Appendix 4 South Park individual and cumulative resource value parcel-ranking exercise and map (CO-200-2005-0025-EA).

Appendix 5 Individual BLM parcels and estimated acreages for South Park, Park County, Colorado. Location of BLM parcels represented in Alternatives A (Map A), B (Map B), C (Map C), and D (Map D)<sup>7</sup>

Appendix 6 BLM Parcel Acreage by Alternative and Land Tenure Category for South Park, Park County, Colorado. Location of BLM parcels represented in Alternatives A (Map A), B (Map B), C (Map C), and D (Map D)

Appendix 7 Transportation and access impact assessment tables: BLM parcels, acreage and accessible public roads by alternatives; South Park Land Tenure Adjustment Plan Amendment - Environmental Assessment

Appendix 8 Range management impact assessment tables: public grazing allotments, operators, and BLM parcels, unallotted BLM parcels; by alternatives; South Park Land Tenure Adjustment Plan Amendment - Environmental Assessment

Appendix 9 References

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<sup>6</sup> Sources: epa.gov; blm.gov, westernlandgroup.com

<sup>7</sup> BLM parcel acreage estimates were generated in ESRI GIS ArcMap 9.2 from BLM Royal Gorge Field Office Land Status source data; source data compiled at a hybrid of scales between 1:24,000 and 1:100,000.

**Appendix 1** Colorado Natural Heritage Program land tenure recommendations and strategies for conservation of mountain plover (*Charadrius montanus*) on Bureau of Land Management administered lands in South Park, Park County, Colorado (Grunau and Wunder, 2001)

Recommendation	Strategy
<p><b>In designing realty projects, evaluate relationships among parcels to be sold or traded, other publicly owned lands, and subdivided private lands.</b></p>	<p>We recommend that BLM place high priority on working with Park County, the U.S. Fish and Wildlife Service, Colorado State, and local stakeholders to develop a coordinated conservation plan for Mountain Plover in South Park. Momentum for conservation is high in the county, and there are several initiatives already underway that could serve as the foundation for coordinated, strategic conservation planning. We believe such an approach would be more effective and more efficient in making a significant, lasting contribution to the preservation of this species than will likely be achieved if each party acts in isolation.</p> <p>Ideally, BLM lands should be consolidated such that large blocks of public lands are near or adjacent to large working ranches and other conservation lands, and away from subdivided lands that will presumably undergo development. This would maximize BLM's (and ranchers') ability to manage rangeland to the benefit of mountain plover, and would ease private ranchers' conflicts with neighboring private landowners.</p> <p>Ideally, BLM lands should be consolidated such that large blocks of public lands are near or adjacent to large working ranches and other conservation lands, and away from subdivided lands that will presumably undergo development. This would maximize BLM's (and ranchers'') ability to manage rangeland to the benefit of Mountain Plover, and would also ease private rancher's conflicts with neighboring private landowners (i.e. right to farm issues).</p> <p>Work with the Colorado State Land Board, the Colorado Division of Wildlife, and neighboring landowners to ensure that all lands containing high priority habitat in the Reinecker Ridge area are consolidated and managed for wildlife values (including Mountain Plover). We believe that this is the single best contribution the BLM can make to Mountain Plover conservation in South Park at this time.</p>
<p><b>Coordinate with other conservation practitioners working in South Park to consolidate protected lands (e.g., those with conservation easements, fee title held by conservation organization) in mountain plover habitat.</b></p>	<p>Support land protection projects proposed by other entities that assist in protecting high priority mountain plover habitat, or that assist in buffering and blocking BLM parcels.</p> <p>Consider the area south of Spinney Mountain Reservoir</p>

	<p>for potential land consolidation, and/or ensure that continuance of grazing leases maintains grasslands in their current condition. There is an existing bison herd there, the area is well grazed, and a fair number of Mountain Plover are doing well reproductively. This area is a continuation of Sipal/Hartsel landscape complex. The future may look different depending upon how the Hartsel Springs Ranch develops. If houses are built on ridges among trees, impacts will be minimized. If houses are built in the grasslands between the Sipal Ranch and Spinney Mountain Reservoir, birds in these two areas will likely be segregated.</p> <p>Ensure that any BLM lands sold or traded within the Sipal Ranch are protected as Mountain Plover habitat through conservation easement. It will also be important to work with the other relevant parties to design any realty projects so as to maximize the likelihood that the Sipal Ranch remains a working cattle ranch.</p> <p>Overall, construct BLM realty transactions such that there is no net loss in either quality or quantity of Mountain Plover habitat in either BLM ownership or in some other protected status (e.g., conservation easement or other tool that achieves perpetual conservation).</p>
<p><b>Explore the possibility of using money from the sale of BLM parcels that do not contain mountain plover habitat to buy other parcels in priority plover conservation areas.</b></p>	<p>If controlled use of funds is not an option, consider using non-habitat parcels strategically to trade for high-quality habitat parcels elsewhere</p>

**Appendix 2** Federal legal context and parameters guiding BLM Royal Gorge Field Office realty actions and Resource Management Plan (RMP) land tenure decisions in Park County, Colorado<sup>8</sup>

<b>Law</b>	<b>Purpose</b>	<b>Parameters</b>	<b>BLM RMP Land Tenure Category</b>
National Historic Preservation Act of 1996 (NHPA)	NHPA established a framework to identify, preserve and protect historical and cultural properties of significant importance to the Nation's heritage.	<ul style="list-style-type: none"> <li>NHPA requires federal agencies to establish and implement a program to take into account the effects of its actions on cultural properties.</li> <li>Cultural resources that have not yet been discovered (such as archaeological sites), but that possess significance, are subject to review.</li> <li>Once a site is determined "significant", it is listed in the National Register of Historic Places and is required by Federal law to be protected.</li> <li>This protection may include preservation of the actual site, or excavation and collection of the artifacts.</li> </ul>	I, III
National Environmental Policy Act of 1969 (NEPA)	NEPA established a framework for evaluation and public disclosure of potential impacts (environmental, cultural, social and economic) of a given project (action)	<ul style="list-style-type: none"> <li>NEPA implementation guidelines issued by the Council on Environmental Quality (CEQ).</li> <li>The nature of a land disposal and the level of effort required to fully assess the potential impacts of the transaction determine the NEPA documentation required.</li> <li>NEPA analysis determines the "significance" as measured by context and intensity.</li> <li>NEPA takes the form of a full Environmental Impact Statement (EIS), Environmental Assessment (EA) or a Categorical Exclusion (CE).</li> </ul>	I, III
Endangered Species Act of 1973 (ESA)	ESA established protection against federal actions that jeopardize listed threatened, endangered, or candidate species	<ul style="list-style-type: none"> <li>Presence of any of these species (plant or animal) can effect the determination of public benefit of land retention, or disposal.</li> </ul>	I, III
Federal Land Policy and Management Act of 1976 (FLPMA)	FLPMA established a land management planning framework for lands administered by the BLM and other agencies	<ul style="list-style-type: none"> <li>FLPMA governs BLM land exchanges and sales.</li> <li>FLPMA authorizes the Secretary of the Interior to acquire land by exchange and to dispose of a tract of public land by exchange where the</li> </ul>	I, III

<sup>8</sup> Sources: epa.gov; blm.gov, westernlandgroup.com

		<p>exchange is found to be in the public interest.</p> <ul style="list-style-type: none"> <li>• FLPMA requires that the values of the lands exchanged be equal. If the values are not equal, they may be equalized by a cash payment up to 25% of the value of the federal lands to be disposed, as determined by appraisals.</li> <li>• Sale parcels must meet the disposal criteria</li> <li>• Disposal by sale will be at no less than fair market value as determined by an appraisal.</li> <li>• Sales of public lands shall be conducted under competitive bidding procedures except under certain limited circumstances.</li> </ul>	
Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response and Liability Act of 1980 (CERCLA or Superfund)	RCRA gave EPA authority to control hazardous materials from the “cradle to grave”. CERCLA established prohibitions and requirements concerning closed or abandoned hazardous materials sites.	<ul style="list-style-type: none"> <li>• RCRA and CERCLA require BLMs to evaluate properties for the presence of hazardous substances and to clean up any contaminated federal parcel before it is disposed of.</li> </ul>	I, III
Federal Land Exchange Facilitation Act of 1994 (FLEFA)	FLEFA established a framework to facilitate and expedite land exchanges under the authority of the Secretary of Agriculture and the Secretary of the Interior by streamlining and improving the procedures for such exchanges.	<ul style="list-style-type: none"> <li>• FLEFA regularized a long-standing policy that land exchange is an important tool to consolidate landownership for purposes of more efficient management;</li> <li>• FLEFA defines land exchange as important land management tool objectives of resource management, enhancement, development and protection; and to fulfill other public needs.</li> </ul>	I, III
Federal Land Transaction Facilitation Act of 2000 (FLTFA or “Baca Act”)	FLTFA directs revenues generated from the sale or disposal of certain lands to an acquisition account for use by BLM, USFS, NPS, or USFWS to purchase	<ul style="list-style-type: none"> <li>• FLTFA does not apply for lands identified for disposal after 7/27/2000</li> </ul>	I, III
Executive Order (EO) 11988 “Floodplain Management” and EO 11990 “Protection of Wetlands”	EO’s 11988 and 11990 require federal agencies to minimize adverse impacts from occupying, destroying, or modifying floodplains and wetlands.	<ul style="list-style-type: none"> <li>• These Executive Orders also discourage federal actions that support development within floodplains and wetlands.</li> </ul>	I, III
The Act of June 14, 1926, as amended, commonly known as the Recreation and Public Purposes Act	R&PP Act authorizes the Secretary of the Interior to lease or convey public lands for recreational and public purposes under specified conditions.	<ul style="list-style-type: none"> <li>• Applications may be filed by States, Federal and State instrumentalities and political subdivisions, nonprofit associations and nonprofit corporations that are</li> </ul>	I, III

		<p>authorized to acquire land.</p> <ul style="list-style-type: none"><li>• Lands can be leased or conveyed only for an established or definitely proposed project with a satisfactory development and management plan.</li><li>• Different pricing schedules apply based on use and status of the applicant</li></ul>	
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[Appendix 3](#) NEPA public participation and public scoping timeline for South Park Land Tenure Adjustment Environmental Assessment-Resource Management Plan Amendment (CO-200-2005-0025-EA).

February 9, 2004 the Notice of Intent was printed in the Federal Register. This officially started the planning effort and the scoping period.

Feb 11, 2004 a letter was sent to US Fish and Wildlife Service requesting a list of T&E species that should be considered during the planning phase.

February 13, 2004 a news release was sent out announcing the start of the planning effort and the scoping period. It also announced a public meeting in Fairplay on Feb. 25, 2004 from 7-9 pm at the County Commissioners Board Room.

February 17, 2004 a "Dear Public Land User" letter was sent out. It had the same information as the news release. It was sent to 50 grazing allottees in South Park and to 32 other names on the mailing list.

February 17, 2004 letters were sent to the Park County Commissioners and to the CO Dept. of Natural Resources inviting them to become a "Cooperating Agency" in the planning effort.

February 25, 2004 Masinton, Zwaneveld and Brekke met with the Park County Commissioners and updated them on the planning process and requested that they participate as a "Cooperating Agency"

February 25, 2004 Masinton, Zwanaveld, Brekke, Gilbert, Vieira and Greer conducted a public meeting in Fairplay from 7-9pm. A 30 minute presentation was followed by questions and answers. Approximately 90 minutes was spent individually speaking with members of the public and looking at maps. The public was invited to provide comments. BLM parcel maps are posted in the county building.

February 25, 2004 the public comment period begins. Comments can be taken at any time in the process but the public is asked to comment by March 19, 2004 to be most effective. Comments are received via email, written and telephone conversation. All public comments are being tracked with Access database.

March 5, 2004 the Fairplay Flume reports on BLM's land use plan amendment process and additional public comments are received.

March 5, 2004 BLM received a letter from USFWS containing a county species list for T&E species that should be considered in the plan amendment.

March 16, 2004 Erik Brekke, Pete Zwaneveld and Dave Gilbert met with Mark Lamb, DWM Fairplay and Eric Odell, Habitat Biologist, Colorado Division of Wildlife and discussed BLM plans in SoPark. We received input from the DOW on lands that contained significant wildlife habitat that BLM should retain in federal ownership. DOW will also send comments via letterhead.

March 17, 2004 three Colorado Cattleman Association members (Tim Canterbury, Jim Coleman and Brett Shawcroft) met with Roy Masinton, Pete Zwaneveld, Erik Brekke, Tom Grette and Keith Berger. They had been fielding phone calls from members in Park Co and wanted to be more informed. We met for two hours and explained the process. They will get more info back to their constituents.

March 18, 2004: BLM loses internet access and according to the SO the public does not have access to the BLM website to look at maps.

March 19, 2004: Follow up letters were sent out to 53 grazing permittees in South Park based on our meeting with the CCA. The letter was written to explain in clear terms what BLM's intention is with this planning effort. Comments were solicited once again with a deadline of April 9, 2004.

March 23, 2004: Internet access is restored and comments continue to be received.

March 23, 2004: Department of Natural Resources decides not to become a Participating Agency but will involve Division of Wildlife and State Land Board informally in the process.

March 31, 2004: Pete Zwaneveld, Erik Brekke and Joe Vieira met with Larry Routten with the State Land Board in Denver. The process was explained to Larry and he was asked to participate in the effort and to provide comments as to how BLM and SLB can work together in South Park.

March 31, 2004: Pete Zwaneveld, Erik Brekke and Joe Vieira met with Dieter Erdmann, Colorado Open Lands and Matt Moorhead of The Nature Conservancy in Denver. These groups are actively working to conserve key lands in Park County through the use of conservation easements. Their work is important as it relates to easements that are contiguous to public lands.

April 5, 2004: Pete, Erik and Joe presented to staff at the Current Events meeting the progress to date, status of public comments received and GIS products in hand. Approximately 15 staff and three managers were present and many good comments were received about what is being accomplished.

April 23, 2004: Requested input from Leon Kot of the NRCS and received an email with his comments on our planning efforts.

May 3, 2004: Pete and Erik met with USFS in Fairplay (Sarah Mayben, District Ranger) and talked about the BLM planning effort for South Park. FS concerns are for BLM parcels that are adjacent to FS.

May 13, 2004: Comments received from Colorado Open Lands on parcels they prefer to see retained.

May 26, 2004: Brekke sent email to CDOW, TNC and State Land Board asking for written comments by June 15, 2004. We have met with these groups but have not received comments to date.

May 27, 2004: Erik Brekke and Dave Gilbert met with Gary Nichols of Park County prior to a Wetlands Meeting in Fairplay. Gary will send comments in a letter and identify individual parcels that the county believes should be retained in public ownership.

June 8, 2004: First issue of the planning newsletter sent to all people on the mailing list.

June 15, 2004: Pete Zwaneveld had planned on presenting a planning program for South Park at the Colorado Cattlemen's meeting in Grand Junction but was cancelled by more pressing USFS issues.

June 16, 2004: Brekke sent a follow up request to CDOW for comments on the planning process. Last request was to have comments by June 15, 2004 and was sent via email on May 26, 2004.

June 16, 2004: Comments received from The Nature Conservancy and City of Fairplay.

June 25, 2004: Brekke called Mark Lamb, DOW, and left a message on his answering machine asking for written comments ASAP.

June 30, 2004: End of comment period for comments from Indian Tribes.

July 5, 2004: We still don't have comments from CDOW, State Land Board or the Colorado Cattlemens Land Trust, all of which had indicated they would send written comments. Park County sent a list of only three parcels that they are interested in that lie in the vicinity of Fairplay. We met personally with CDOW, State Land Board and Gary Nichols of Park County and have informal comments on the planning process and parcels they are interested in BLM retaining. There are no entries in the data table for these entities (other that Park County).

July 8, 2004: Conducted the first Team Meeting for the plan amendment (8-10 am). Discussed plan progress, data in hand and the work that needs to be completed. Also set up the future meetings.

August 3, 2004: Team meeting to look at access issues and try to determine where legal access exists. We looked at 1980 County rd maps and a map provided by a private source in Park County. We made the decision to use the 1980 map because BLM has never been officially notified of road vacations so we assume them still to be legal access.

August 17, 2004: Team meeting attended by Joe V, Pete Z., Erik B., John S., and Ken Reed. We looked at Joes GIS layers for resource ranking and made some adjustments to the numbers so that important resources were ranked higher than others. Still lack any data for range and we talked to Paul T. about that problem. Will need to convene another team meeting to determine what parcels to place in what category and to discuss alternatives.

November 3, 2004: Pete Z updated the RAC on the progress of the team and the planning effort. Will update again in January.

November 9, 2004: Team meeting attended by Joe V, Pete Z, Erik B, Paul T, Leah Q, Keith B, Lindell G, and Roy M and Jim B. Discussed the progress to date and where we need to go. Looked at paper map (no Computer access) and made some tentative decisions on retention and disposal parcels. May decide to have up to 5 categories. Talked about the Work Group.

January 27, 2005: team meeting attended by Pete Z, Erik B, Dave Gilbert, Joe Vieira, Leah Quesenberry, Lindell Greer, John Smeins, and Keith Berger. Discussed the upcoming meeting with the Work Group scheduled for Feb 2, 2005. Reviewed the presentation and reviewed the first cut at determining the status of parcels. Determined that three categories are needed: Retention, Disposal and Flexible. We had some questions that Pete will review with Roy on Jan 28.

February 2, 2005: Working Group meeting in Fairplay. Attended by Roy M, Pete Z, Erik B and Joe V. Public included Dieter Erdmann (Colorado Open Lands), Joann Mills (Rancher), Bill Gordon (Rancher), Tom Eisenmann (Park County Planning), Gary Nichol (Park County), Dick Eggleston (Bar-D Homeowners Assoc), Kaaren Hardy (RAC), and Larry Strohl (RAC). Purpose of the meeting was to review the process that BLM used in the analysis, to identify any significant gaps in the process, to review land tenure categories and to review the preliminary determinations that have been made by BLM staff.

February 28, 2005: Pete, Joe and Erik met with Mark Lamb (DOW) to bring Mark up to speed on what he missed at the working group meeting held a month earlier. We went thru the power point and then looked at the maps. Mark was generally please with what was presented. His concerns were for the Ibel Ranch (north of Red Hill) which needs protection, the Cline Ranch near Como which is in an elk migration corridor and he was concerned that BLM is maintained near the DOW shop as access. DOW will wait until the public comment period to further refine comments.

March 2, 2005: Pete presented the staff recommendations to the full RAC for their review.

May 2, 2005: ID Team Meeting with Zwaneveld, Brekke, Vieira, M Weimer, Roy Smith, Greer, Quensenberry, Smeins, Berger, Gilbert and Grenard. Discussion focused on Reinecker Ridge-Monica asking to have Parcel 106 shown as retention due to cultural values. Retain all parcels in Reinecker for water purposes (RSmith)? Do not break off parcels along the highway as per County Commissioners request-makes no sense for land management. Some discussion on Alternatives. Pete, Joe and Erik will write up alternatives and change the map and get back with the ID Team.

June 2005 – October 2006: no activity

November 27, 2006: Joe V, Erik B and Ken S met to discuss the public meeting set up for Dec 13, 2006 to go over alternatives with interested persons. A news release has also been prepared that will go out today along with letters to the persons on the mailing list inviting them to the public meeting. We will take additional comments for 30 days from Dec 13, 2006 until January 15, 2007.

Dec 13, 2006 County Commissioners meeting Fairplay-1:30-3pm. Attendees: 3 county commissioners: Leni Walker, Lilian Wissel, and John Tighe. BLM: Roy Masinton, Linda McGlothlen, Lindell Greer, Erik Brekke, Ken Smith, Joe Vieira. Roy and Joe reviewed the South Park plan with a powerpoint presentation and took questions from the commissioners. Several members of the public were present and some provided comments. Some county employees (Linda Balough and Craig Baraclaugh) were also in attendance.

Dec 13, 2006 Public Meeting at the Fairplay Barn-6:30pm-8:30pm. Attending from BLM were Roy Masinton, Linda McGlothlen, Lindell Greer, Erik Brekke, Ken Smith, Joe Vieira, Dave Gilbert and Natalee Carznota). Chuck Rech from the RAC was also present. The meeting was attended by 48 persons. A powerpoint presentation was made and questions taken and then the group split and we reviewed the maps that were posted. Folks took 20 CD's with three more on order. It was a good meeting with BLM assuring the public that widespread land sales were not going to occur. BLM requested public comment by 1/16/2007.

Dec 14-Jan 9, 2007 Received several phone calls, letters and emails concerning the process from individuals and groups that have not been involved to date. We sent out several more CDs and exchanged phone calls/emails etc. The Park County Commissioners have scheduled a forum for January 10 in Fairplay to take additional comments and asked for BLM to participate. Joe, Erik and Natalee will attend.

January 10, 2007 County Commissioners Meeting Room in Fairplay. The Park County commissioners had called the meeting in response to the public's interest in the plan amendment. Their intent was to take comment from the public. BLM was invited to attend. Erik Brekke, Joe Vieira and Natalee Czarnota attended for BLM. The meeting last two hours and was attended by about 25 folks with 11 speaking on the record. Joe V gave some preliminary remarks. Speakers included Will Crago, Charles Shultze and Ron Simmons from Silverheels Homeowners Association (comments in writing in the record), Marie Chisholm, Tag Fanning (Salt Works Ranch, letter in the record), Don Holmes (South Platte Land Owners Assoc), Joanne Mills (Central Colorado Cattlemans Assoc), Shelly Sutherland, Dave Harvey (Permittee, letter in the record), Mary Ann Rozzi (letter in the record), and Mark Lamb (CDOW). Gary Nichols spoke on behalf of the county. He pointed out that the Park County Public Lands Planning Process completed in 2000 was reflected very well in Alternative A. Most folks spoke in support of retaining public lands near their ranches, homes etc. The county will compile all the comments and send them to BLM along with the county comments. The deadline for comments was extended to March 1, 2007.

January 25, 2007 Joe Vieira gave the power point presentation that was presented at the Dec 13, 2006 meeting in Fairplay to the Front Range RAC at 1:30 pm. A number of questions were asked by the RAC mostly related to BLMs' process for exchange or sale. There were some questions about conservation easements. There were no negative comments from the RAC. Joes presentation was well received and Roy fielded numerous questions.

February 5, 2007 Erik Brekke reviewed the current status of the land tenure plan at a Current Events meeting attended by most resource specialists. Erik reviewed where BLM is in the

process and when we anticipate the need for the team to get together and review public comments and adjust alternatives. Ken Smith will write another news release asking for comment by March 1, 2007. We continue to get comments in the form of email, telephone calls and letters.

February 6, 2007 Erik reviewed the Land Tenure Plan at a South Park Wetlands Focus Group meeting at the Fair Barn in Fairplay. Most of the group was aware of the process and there were no major concerns expressed at the meeting.

February 21, 2007 Erik briefed the South Park Habitat Partnership Program committee on the Land Tenure Plan at a regular HPP meeting at the Fairbarn in Fairplay. There were a few brief questions from the group.

March 5, 2007 Joe Vieira reviewed the status of the land tenure plan at the Current Events meeting. The date of April 11 was selected as the date to have a resources team meeting to revise alternatives. As of March 1 approximately 275 comments were received. The comments are being entered into an Access database by Helen Crow so that we can summarize comments by parcel number for the April meeting.

March 19, 2007 Ken Smith has prepared a Fact Sheet for folks interested in the process- specifically Salazars office whom have been contacted by the public concerning the process.

Late March 2007 Helen Crow and Shelly Hovland entered all the comments received into an access database for use in team meetings.

April 3, 2007 Joe Vieira and Erik Brekke met and reviewed comments and the database in preparation for the Team meeting on April 11, 2007. They formulated a revised Alt A so that the team meeting would be more efficient. The revisions were based largely on comments from the public.

April 11, 2007 Team Meeting in Canon City attended by Roy Masinton, Linda McGlothlen, Paul Trentzsch, Jan Lownes, Leah Quesenberry, Monica Weimer, Keith Berger, John Smeins, Dave Gilbert, John Dow, Joe Vieira, Natalee Czarnota and Erik Brekke. The team reviewed tentative changes that were made in the April 3 meeting by Erik and Joe. We also decided to formulate Alternative D-which will depict most accurately the public comment that was received. Joe and Erik will revise the EA and ask for more team input to the EA. There will be no more public meetings.

May 23, 2007 Joe Vieira briefed the RAC at the Abbey on the status of the plan amendment.

July 17, 2007 Joe Vieira briefed the RAC on the status of the plan amendment at the Sand Dunes NP in the SLV.

August 28, 2007 at RGFO - Roy, Joe and Ken briefed Joe Rall of Congressman Lamborn's staff and B.J. Jones of Senator Allard's staff in Colorado Springs on the status of the plan amendment.

August 30, 2007 at Salazar's Pueblo office - Roy and Ken briefed Dwight Gardner, Regional Director for Senator Ken Salazar's Pueblo Office.

August 1-31, 2007 Work continued on defining Alternative D (Agency Preferred), rewriting portions of the Environmental Assessment, calculating resource impact acres and redoing maps and statistics for the EA.

September 5, 2007 Meeting with Park County Commissioners Alternative D, Agency Preferred. The meeting was attended by Roy Masinton, Ken Smith and Erik Brekke. Roy opened with a summary of what had been done to date and Erik reviewed a large map of Alt D and explained where the major changes had occurred. The commissioners had many questions-mainly concerning how much input they may have as lands are exchanged or disposed of. There were 7-8 public in attendance, many happy with the new alternative. Gary Nichols spoke in favor of Alt D but also passed out a page of concerns he had with the Alternative. The next step is to conduct a public meeting sometime this fall.

Sept 2007-Feb 2008: Continue work on the EA and finalizing Alternative D. Preparation for commissioner meeting and public meeting on Feb 27, 2008.

February 27, 2008: Draft EA release and public meetings in Fairplay, CO.







**Appendix 5** Individual BLM parcels and estimated acreages for South Park, Park County, Colorado. Location of BLM parcels represented in Alternatives A (Map A), B (Map B), C (Map C), and D (Map D) <sup>9</sup>

Parcel_ID	Acres	Parcel_ID	Acres	Parcel_ID	Acres	Parcel_ID	Acres
1	40.8	47	886.8	88	278.4	135	39.7
2	4311.6	48	3841.0	89	481.3	136	270.5
3	77.8	49	370.2	90	160.8	137	2315.0
4	502.2	50	116.6	91	41.3	138	78.2
5	323.3	51	38.3	92	161.2	139	2090.0
6	584.9	52	2118.1	93	703.8	140	88.7
7	40.9	53	38.0	94	40.0	141	79.3
8	165.4	54	154.3	95	39.2	142	118.0
11	118.2	55	81.9	96	41.1	143	159.0
12	40.3	56	163.1	97	1.6	145	268.4
13	43.1	57	119.5	98	1318.2	146	81.0
14	41.3	58	39.9	99	1727.2	147	193.0
15	41.1	59	159.4	100	115.6	148	785.1
18	363.9	60	38.7	101	550.7	152	200.3
19	39.7	61	165.8	102	280.4	156	40.9
20	80.1	62	25.3	103	3282.8	157	752.0
21	80.2	64	1157.1	104	40.4	158	441.1
22	320.3	65	31.5	105	655.5	159	2358.0
23	884.5	66	44.1	106	2327.6	160	240.8
24	308.4	67	41.2	107	315.6	161	40.2
26	78.6	68	160.5	108	1760.6	162	160.7
27	2342.4	69	151.0	109	40.1	163	39.2
28	40.3	70	38.3	110	39.8	164	81.9
29	40.1	71	239.6	112	36.4	165	36.7
30	86.4	72	39.0	113	81.2	166	25.4
31	121.3	73	41.0	114	40.9	167	18.1
32	40.4	74	75.1	115	174.5	168	115.2
33	784.8	75	80.0	116	85.2	169	758.2
34	39.8	76	80.5	118	165.7	172	82.9
36	323.5	77	39.7	120	119.0	173	204.5
37	40.7	78	41.8	121	80.7	174	80.7
38	234.7	79	39.7	122	2699.2	175	163.5
39	40.3	80	636.7	123	2280.2		
40	38.7	81	92.2	124	40.5		
41	40.4	82	41.5	125	10.1		
42	226.9	83	40.7	126	41.2		
43	151.3	84	64.7	131	84.5		
44	430.1	85	494.7	132	4534.9		
45	39.8	86	546.5	133	40.3		
46	39.9	87	73.2	134	40.9		

<sup>9</sup> BLM parcel acreage estimates were generated in ESRI GIS ArcMap 9.2 from BLM Royal Gorge Field Office Land Status source data; source data compiled at a hybrid of scales between 1:24,000 and 1:100,000.



**Appendix 6** BLM Parcel Acreage by Alternative and Land Tenure Category for South Park, Park County, Colorado. Location of BLM parcels represented in Alternatives A (Map A), B (Map B), C (Map C), and D (Map D)

Parcel_ID	Acres	Action Alternative A	No Action Alternative B	Action Alternative C	Proposed Action Alternative D
1	40.8	Exchange	Exchange	Disposal	Exchange
2	4311.6	Retention	Retention	Retention	Retention
3	77.8	Retention	Exchange	Retention	Retention
4	502.2	Disposal	Exchange	Disposal	Retention
5	323.3	Disposal	Disposal	Disposal	Exchange
6	584.9	Disposal	Exchange	Disposal	Exchange
7	40.9	Disposal	Disposal	Disposal	Disposal
8	165.4	Disposal	Disposal	Disposal	Disposal
11	118.2	Disposal	Disposal	Disposal	Disposal
12	40.3	Disposal	Disposal	Disposal	Disposal
13	43.1	Disposal	Exchange	Disposal	Disposal
14	41.3	Disposal	Disposal	Disposal	Disposal
15	41.1	Disposal	Disposal	Disposal	Disposal
18	363.9	Exchange	Exchange	Disposal	Exchange
19	39.7	Disposal	Exchange	Disposal	Disposal
20	80.1	Disposal	Disposal	Disposal	Disposal
21	80.2	Disposal	Exchange	Disposal	Disposal
22	320.3	Retention	Exchange	Retention	Retention
23	884.5	Retention	Exchange	Retention	Retention
24	308.4	Disposal	Disposal	Disposal	Disposal
26	78.6	Disposal	Disposal	Disposal	Disposal
27	2342.4	Exchange	Exchange	Disposal	Exchange
28	40.3	Disposal	Disposal	Disposal	Disposal
29	40.1	Disposal	Exchange	Disposal	Disposal
30	86.4	Disposal	Exchange	Disposal	Disposal
31	121.3	Disposal	Exchange	Disposal	Disposal
32	40.4	Disposal	Exchange	Disposal	Disposal

<b>Parcel_ID</b>	<b>Acres</b>	<b>Action Alternative A</b>	<b>No Action Alternative B</b>	<b>Action Alternative C</b>	<b>Proposed Action Alternative D</b>
33	784.8	Disposal	Exchange	Disposal	Exchange
34	39.8	Disposal	Exchange	Disposal	Disposal
36	323.5	Disposal	Exchange	Disposal	Exchange
37	40.7	Disposal	Exchange	Disposal	Disposal
38	234.7	Disposal	Exchange	Disposal	Exchange
39	40.3	Disposal	Disposal	Disposal	Disposal
40	38.7	Disposal	Disposal	Disposal	Disposal
41	40.4	Disposal	Exchange	Disposal	Disposal
42	226.9	Disposal	Exchange	Disposal	Exchange
43	151.3	Disposal	Disposal	Disposal	Exchange
44	430.1	Disposal	Exchange	Disposal	Exchange
45	39.8	Disposal	Disposal	Disposal	Disposal
46	39.9	Disposal	Disposal	Disposal	Disposal
47	886.8	Disposal	Disposal	Disposal	Exchange
48	3841.0	Exchange	Exchange	Disposal	Exchange
49	370.2	Exchange	Exchange	Disposal	Exchange
50	116.6	Disposal	Exchange	Disposal	Disposal
51	38.3	Disposal	Exchange	Disposal	Disposal
52	2118.1	Disposal	Disposal	Disposal	Exchange
53	38.0	Disposal	Exchange	Disposal	Exchange
54	154.3	Disposal	Disposal	Disposal	Disposal
55	81.9	Disposal	Disposal	Disposal	Exchange
56	163.1	Disposal	Disposal	Disposal	Exchange
57	119.5	Disposal	Disposal	Disposal	Exchange
58	39.9	Disposal	Exchange	Disposal	Exchange
59	159.4	Disposal	Disposal	Disposal	Exchange
60	38.7	Disposal	Exchange	Disposal	Exchange
61	165.8	Disposal	Disposal	Disposal	Exchange
62	25.3	Disposal	Exchange	Disposal	Disposal
64	1157.1	Disposal	Disposal	Disposal	Exchange
65	31.5	Disposal	Exchange	Disposal	Disposal

<b>Parcel_ID</b>	<b>Acres</b>	<b>Action Alternative A</b>	<b>No Action Alternative B</b>	<b>Action Alternative C</b>	<b>Proposed Action Alternative D</b>
66	44.1	Disposal	Disposal	Disposal	Exchange
67	41.2	Disposal	Disposal	Disposal	Disposal
68	160.5	Disposal	Disposal	Disposal	Exchange
69	151.0	Disposal	Disposal	Disposal	Disposal
70	38.3	Disposal	Disposal	Disposal	Disposal
71	239.6	Disposal	Disposal	Disposal	Exchange
72	39.0	Disposal	Disposal	Disposal	Disposal
73	41.0	Disposal	Disposal	Disposal	Disposal
74	75.1	Disposal	Exchange	Disposal	Exchange
75	80.0	Exchange	Disposal	Disposal	Exchange
76	80.5	Disposal	Disposal	Disposal	Disposal
77	39.7	Exchange	Disposal	Disposal	Exchange
78	41.8	Exchange	Disposal	Disposal	Exchange
79	39.7	Exchange	Disposal	Disposal	Exchange
80	636.7	Retention	Exchange	Retention	Retention
81	92.2	Disposal	Disposal	Disposal	Disposal
82	41.5	Exchange	Disposal	Exchange	Exchange
83	40.7	Exchange	Disposal	Exchange	Exchange
84	64.7	Exchange	Disposal	Exchange	Exchange
85	494.7	Disposal	Disposal	Disposal	Exchange
86	546.5	Retention	Exchange	Retention	Retention
87	73.2	Exchange	Disposal	Exchange	Exchange
88	278.4	Exchange	Disposal	Exchange	Retention
89	481.3	Exchange	Exchange	Exchange	Retention
90	160.8	Disposal	Disposal	Disposal	Disposal
91	41.3	Exchange	Disposal	Exchange	Exchange
92	161.2	Exchange	Exchange	Disposal	Retention
93	703.8	Retention	Exchange	Retention	Retention
94	40.0	Exchange	Exchange	Disposal	Retention
95	39.2	Disposal	Disposal	Disposal	Disposal
96	41.1	Disposal	Exchange	Disposal	Disposal

<b>Parcel_ID</b>	<b>Acres</b>	<b>Action Alternative A</b>	<b>No Action Alternative B</b>	<b>Action Alternative C</b>	<b>Proposed Action Alternative D</b>
97	1.6	Disposal	Disposal	Disposal	Disposal
98	1318.2	Retention	Retention	Retention	Retention
99	1727.2	Retention	Exchange	Retention	Retention
100	115.6	Retention	Exchange	Exchange	Retention
101	550.7	Disposal	Disposal	Disposal	Exchange
102	280.4	Disposal	Disposal	Disposal	Exchange
103	3282.8	Retention	Exchange	Retention	Retention
104	40.4	Disposal	Disposal	Disposal	Disposal
105	655.5	Disposal	Exchange	Disposal	Exchange
106	2327.6	Retention	Exchange	Retention	Retention
107	315.6	Exchange	Exchange	Exchange	Retention
108	1760.6	Retention	Exchange	Retention	Retention
109	40.1	Disposal	Disposal	Disposal	Disposal
110	39.8	Disposal	Disposal	Disposal	Disposal
112	36.4	Disposal	Disposal	Disposal	Exchange
113	81.2	Disposal	Disposal	Disposal	Disposal
114	40.9	Disposal	Exchange	Disposal	Disposal
115	174.5	Exchange	Exchange	Disposal	Exchange
116	85.2	Disposal	Disposal	Disposal	Exchange
118	165.7	Disposal	Disposal	Disposal	Disposal
120	119.0	Disposal	Disposal	Disposal	Exchange
121	80.7	Disposal	Disposal	Disposal	Disposal
122	2699.2	Retention	Exchange	Retention	Retention
123	2280.2	Retention	Retention	Retention	Retention
124	40.5	Exchange	Exchange	Disposal	Exchange
125	10.1	Disposal	Exchange	Disposal	Disposal
126	41.2	Exchange	Exchange	Disposal	Exchange
131	84.5	Exchange	Exchange	Disposal	Exchange
132	4534.9	Retention	Exchange	Retention	Retention
133	40.3	Disposal	Exchange	Disposal	Disposal
134	40.9	Disposal	Disposal	Disposal	Exchange

<b>Parcel_ID</b>	<b>Acres</b>	<b>Action Alternative A</b>	<b>No Action Alternative B</b>	<b>Action Alternative C</b>	<b>Proposed Action Alternative D</b>
135	39.7	Disposal	Exchange	Disposal	Disposal
136	270.5	Exchange	Exchange	Disposal	Exchange
137	2315.0	Retention	Exchange	Exchange	Retention
138	78.2	Disposal	Disposal	Disposal	Disposal
139	2090.0	Retention	Exchange	Retention	Retention
140	88.7	Disposal	Disposal	Disposal	Exchange
141	79.3	Disposal	Exchange	Disposal	Disposal
142	118.0	Exchange	Exchange	Exchange	Retention
143	159.0	Exchange	Exchange	Exchange	Retention
145	268.4	Exchange	Exchange	Disposal	Retention
146	81.0	Exchange	Exchange	Disposal	Exchange
147	193.0	Exchange	Exchange	Exchange	Retention
148	785.1	Exchange	Disposal	Disposal	Retention
152	200.3	Disposal	Disposal	Disposal	Disposal
156	40.9	Disposal	Exchange	Disposal	Disposal
157	752.0	Exchange	Exchange	Disposal	Retention
158	441.1	Exchange	Exchange	Exchange	Retention
159	2358.0	Retention	Exchange	Retention	Retention
160	240.8	Exchange	Disposal	Disposal	Retention
161	40.2	Exchange	Disposal	Disposal	Exchange
162	160.7	Exchange	Disposal	Disposal	Exchange
163	39.2	Disposal	Exchange	Disposal	Disposal
164	81.9	Exchange	Exchange	Exchange	Exchange
165	36.7	Exchange	Exchange	Exchange	Exchange
166	25.4	Disposal	Disposal	Disposal	Disposal
167	18.1	Disposal	Exchange	Disposal	Disposal
168	115.2	Disposal	Exchange	Disposal	Disposal
169	758.2	Exchange	Exchange	Disposal	Retention
172	82.9	Retention	Exchange	Retention	Retention
173	204.5	Retention	Exchange	Retention	Retention
174	80.7	Retention	Exchange	Disposal	Retention

<b>Parcel_ID</b>	<b>Acres</b>	<b>Action Alternative A</b>	<b>No Action Alternative B</b>	<b>Action Alternative C</b>	<b>Proposed Action Alternative D</b>
175	163.5	Retention	Exchange	Disposal	Retention

The total acres for all 3 categories is 63,599 + ACEC acres of approximately 2,300 for a grand total acres of 66,078.21

**Appendix 7 BLM parcels, acreage and public accessible public roads by EA Alternative**

**Table 7 – Alternative A – Retention Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
2	4312	Adjoins NF
22	320	Adjoins NF
23	885	Adjoins NF
80	637	CR and BLM public easement
86	547	CR and BLM public easement
98	1318	Adjoins NF
108	1761	US 285
137	2315	CR 15
139	2090	US 285
159	2358	US 50 and CR 15
174	81	US 285
175	164	US 50 and CR 15
Total	16788	

**Table 8 – Alternative A – Disposal Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
47	887	US 24
74	75	US 285 and Forest Service Road
96	41	CR 15
118	166	US 285
135	40	CR 15
141	79	CR 15
156	41	CR 77
Total	1329	

**Table 9 – Alternative A – Exchange Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
18	364	State 9
48	3841	State 9
88	278	US 285
142	118	Adjoins NF
143	159	US 285
146	81	CR 15
148	785	CR 77
160	241	CR 77
161	40	CR 77
162	161	CR 77
165	37	US 285
Total	6105	

**Table 10 – Alternative B – Retention Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
2	4312	Adjoins NF
98	1318	Adjoins NF
Total	5630	

**Table 11 – Alternative B – Disposal Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
5	323	Adjoins NF
47	887	US 24
61	166	Adjoins NF
88	278	US 285
118	166	US 285
148	785	CR 77
160	241	CR 77
161	40	CR 77
162	161	CR 77
170	41	US 24
171	246	US 24
Total	3074	

**Table 12 – Alternative B – Exchange Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
9	806	Adjoins NF
18	364	State 9
22	320	Adjoins NF
23	884	Adjoins NF
48	3841	State 9
49	370	Adjoins NF
74	75	US 285 and Forest Service Road
80	637	CR and BLM public easement
86	574	CR and BLM public easement
96	41	CR 15
108	1761	US 285
135	40	CR 15
137	2315	CR 15
139	2090	US 285
141	79	CR 15
142	118	Adjoins NF
143	159	US 285
146	81	CR 15
156	41	CR 77
159	2358	US 50 and CR 15
165	37	US 285
167	18	Adjoins NF
174	81	US 285
175	164	US 50 and CR 15
Total	17227	

**Table 13 – Alternative C – Retention Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
2	4312	Adjoins NF
22	320	Adjoins NF
23	885	Adjoins NF
80	637	CR and BLM public easement
86	547	CR and BLM public easement
98	1318	Adjoins NF
108	1761	US 285
139	2090	US 285
159	2358	US 50 and CR 15
<b>Total</b>	<b>14048</b>	

**Table 14 – Alternative C – Disposal Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
9	807	Adjoins NF
18	364	State 9
47	887	US 24
48	3841	State 9
49	370	Adjoins NF
53	38	Adjoins NF
61	166	Adjoins NF
74	75	US 285 and Forest Service Road
96	41	CR 15
97	2	Adjoins NF
112	36	Adjoins NF
116	85	Adjoins NF
118	166	US 285
120	119	Adjoins NF
141	79	CR 15
146	81	CR 15
148	785	CR 77
156	41	CR 77
160	241	CR 77
161	40	CR 77
162	161	CR 77
167	18	Adjoins NF
174	81	US 285
175	164	US 285
<b>Total</b>	<b>8688</b>	

**Table 15 – Alternative C – Exchange Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
88	278	US 285
137	2315	CR 15
142	118	Adjoins NF
143	159	US 285
165	37	US 285
<b>Total</b>	<b>2907</b>	

**Table 16 – Alternative D – Retention Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
2	4312	Adjoins NF
22	320	Adjoins NF
23	885	Adjoins NF
80	637	CR and BLM public easement
86	547	CR and BLM public easement
88	278	US 285
98	1318	Adjoins NF
108	1761	US 285
137	2315	CR 15
139	2090	US 285
142	118	Adjoins NF
143	159	US 285
148	785	CR 77
159	2358	US 50 and CR 15
160	241	CR 77
174	81	US 285
175	164	US 50 and CR 15
Total	18369	

**Table 17 – Alternative D – Disposal Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
96	41	CR 15
118	166	US 285
135	40	CR 15
141	79	CR 15
156	41	CR 77
Total	367	

**Table 18 – Alternative D – Exchange Lands – Parcels Accessed By Public Roads, BLM Easements, or NF Lands**

Parcel No.	Acres	Road No.
18	364	State 9
47	887	US 27
48	3841	State 9
74	75	US 285 and Forest Service Road
146	81	CR 15
161	40	CR 77
162	161	CR 77
165	37	US 285
Total	5486	

## Appendix 8

**Table 19. BLM South Park public grazing allotments, operators, and allotment numbers – South Park Land Tenure Adjustment Plan Amendment-Environmental Assessment**

<b>BLM Allot. Name</b>	<b>Operator</b>	<b>BLM Allot. No.</b>	<b>BLM Allot. Name</b>	<b>Operator</b>	<b>BLM Allot. No.</b>
31-mile Creek	Lengbacher, Werner	5060	Long Hollow West		5173
31-mile Mtn.	Chernak, Candice	5125	Malice Ditch	Esparza, Rafael	5792
39-mile Mtn.		5204	Micanite		5164
Agate Beds	Stirrup Ranch LLC	5042	Michigan Campground	Frieda Wahl Estate	5903
Agate Mtn.	Harvey, David & Lark	5931	Mulligan Lakes	Magness Land & Cattle	5720
Antero Res. Allot	Esparza, Rafael	5228	North Waugh		15039
Antero Reservoir	Esparza, Rafael	5904	Park Gulch	Denison, James	5800
Badger Basin		5712	Park Gulch East	Hurst, Edna	5828
Balfour North	Stonebraker, Ann	15012	Playa Lakes	Palmer, John	5939
Buffalo Creek	Salt Works Ranch	5920	Poncha Park		15038
Buffalo Peaks	Sanders, Michael	5929	Pruden Creek	Snare, Kenny & Cindy	5169
Burlingame Ditch	Saunders, Roger	5931	Red Hill Pass	Armstrong, Timm	5770
Cobb Creek	Campbell, Laura	5065	Ruby Gulch		15019
Como	Hurst, Edna	5799	Rye Slough North	Grigsby Family Patnrship	5155
Como Park	Hitchinson, James	5805	Salt Works Pasture	Salt Works Ranch	5180
Como Park East	Armstrong, Timm	5801	Santa Maria	Carey, James	5744
Crooked Creek	Plankinton, Bruce	5756	Silverheel	Silverheels Land & Cattle	5853
Dicks Creek	Adrian, Otis	5157	Skyline		5176
Driveway		5782	Spinney Mtn.	Elk Mountain Cattle Co.	5798
Elevenmile Canyon	Elk Mountain Cattle Co.	5141	Steel Gulch		5913
Fourmile Creek	Plankinton, Bruce	5910	Taryall Creek		5754
Fourmile Ranch	Esparza, Rafael	5794	Trout Creek	Yunikar, William	5735
Freshwater Creek		5056	Trout Creek North	Safari Horse Ranch	5088
Garo	Unallotted	5703	Trout Creek South	Alta Vista Ranch	5080
Gravel Pit		5092	Twelvemile Club	Neukirk, Dave	5851
Hammond Peak		5240	U Long Gulch	Grigsby Family Patnrship	5156
Harlin Ditch	Walker, Marcus	5789	Upper Ditch		5814
Herring Creek	McMurray Land & Livestock	5152	West Fairplay		5757
High Creek Allot	Mills, Joanne	5739	West Guffey		5124
Kaufman Ridge		5304	West Pasture		5135
Link Ditch	Johns, David	5707	Wagon Tongue		5059
Logan Hill	Engelman, Wyatt	5795	Warm Springs		5729

**Table 20. BLM South Park public grazing allotments, operators, allotment numbers, and BLM Parcel Numbers – South Park Land Tenure Adjustment Plan Amendment-Environmental Assessment**

<b>BLM Allot. Name</b>	<b>Operator</b>	<b>BLM Allot. No.</b>	<b>EA Parcels</b>
31-mile Creek	Lengbacher, Werner	5060	NIP
31-mile Mtn.	Chernak, Candice	5125	NIP
39-mile Mtn.		5204	NIP
Agate Beds	Stirrup Ranch LLC	5042	2
Agate Mtn.	Harvey, David & Lark	5931	6
Antero Res. Allot	Esparza, Rafael	5228	47
Antero Reservoir	Esparza, Rafael	5904	56, 66, 68
Badger Basin		5712	52, 57, 64, 67, 75, 77, 85, 92, 93, 94, 96, 99, 101, 122,
Balfour North	Stonebraker, Ann	15012	52
Buffalo Creek	Salt Works Ranch	5920	55
Buffalo Peaks	Sanders, Michael	5929	114
Burlingame Ditch	Saunders, Roger	5931	82, 83, 87, 88
Cobb Creek	Campbell, Laura	5065	NIP
Como	Hurst, Edna	5799	158
Como Park	Hitchinson, James	5805	147
Como Park East	Armstrong, Timm	5801	122, 124, 132, 159, 169
Crooked Creek	Plankinton, Bruce	5756	139, 165, 174
Dicks Creek	Adrian, Otis	5157	NIP
Driveway		5782	NIP
Elevenmile Canyon	Elk Mountain Cattle Co.	5141	13, 23, 27, 29, 30, 31, 32, 33, 34, 36, 37, 38, 41, 42, 44, 48, 49, 50
Fourmile Creek	Plankinton, Bruce	5910	103
Fourmile Ranch	Esparza, Rafael	5794	103
Freshwater Creek		5056	NIP
Garo	Unallotted	5703	103, 106
Gravel Pit		5092	NIP
Hammond Peak		5240	NIP
Harlin Ditch	Walker, Marcus	5789	146, 159, 175
Herring Creek	McMurray Land & Livestock	5152	1, 4, 3, 172, 173

<b>BLM</b>		<b>BLM</b>	<b>EA</b>
<b>Allot. Name</b>	<b>Operator</b>	<b>Allot. No.</b>	<b>Parcels</b>
High Creek Allot	Mills, Joanne	5739	80, 86
Kaufman Ridge		5304	NIP
Link Ditch	Johns, David	5707	145, 157
Logan Hill	Engelman, Wyatt	5795	99, 105
Long Hollow West		5173	NIP
Malice Ditch	Esparza, Rafael	5792	103
Micanite		5164	NIP
Michigan Campground	Frieda Wahl Estate	5903	148, 160, 161, 162
Mulligan Lakes	Magness Land & Cattle	5720	140, 148, 152
North Waugh		15039	NIP
Park Gulch	Denison, James	5800	126, 137, 141, 145, 157
Park Gulch East	Hurst, Edna	5828	134, 136
Playa Lakes	Palmer, John	5939	122
Poncha Park		15038	NIP
Pruden Creek	Snare, Kenny & Cindy	5169	22
Red Hill Pass	Armstrong, Timm	5770	139, 142, 143
Ruby Gulch		15019	116
Rye Slough North	Grigsby Family Patnrship	5155	2
Salt Works Pasture	Salt Works Ranch	5180	43
Santa Maria	Carey, James	5744	93
Silverheel	Silverheels Land & Cattle	5853	174, 164
Skyline		5176	NIP
Spinney Mtn.	Elk Mountain Cattle Co.	5798	48, 50, 51, 58, 59, 60, 65, 69, 70, 71, 72, 73, 166, 168
Steel Gulch		5913	11, 102, 109, 112, 113
Taryall Creek		5754	157
Trout Creek	Yunikar, William	5735	132
Trout Creek North	Safari Horse Ranch	5088	133, 139
Trout Creek South	Alta Vista Ranch	5080	106
Twelvemile Club	Neukirk, Dave	5851	89, 91, 98, 107

U Long Gulch	Grigsby Family Partnership	5156	2, 5
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<b>BLM Allot. Name</b>	<b>Operator</b>	<b>BLM Allot. No.</b>	<b>EA Parcels</b>
Upper Ditch		5814	NIP
West Fairplay		5757	121
West Guffey		5124	NIP
West Pasture		5135	NIP
Wagon Tongue		5059	5, 7, 11, 12, 14, 15, 20, 24, 26, 39, 40, 45, 46, 52
Warm Springs		5729	108

**Table 21.** BLM Allotments, BLM parcel numbers, and realty classification (Retention, Disposal, Exchange) by South Park Land Tenture Adjustment NEPA Alternatives A, B (No Action), C, and D (Proposed Action)

BLM Allot. Name	Alternative A			Alternative B (No Action)			Alternative C			Alternative D (Proposed Action)		
	Retention	Disposal	Exchange	Retention	Disposal	Exchange	Retention	Disposal	Exchange	Retention	Disposal	Exchange
31-mile Creek												
31-mile Mtn.												
39-mile Mtn.												
Agate Beds	2			2			2			2		
Agate Mtn.		6				6		6				6
Antero Res. Allot		47			47			47				47
Antero Reservoir		56, 66, 68			56, 66, 68			56, 66, 68				56, 66, 68
Badger Basin	93, 99, 122	52, 57, 64, 67, 85, 96, 101	75, 77, 92, 94		52, 57, 64, 67, 75, 85, 77, 101	92, 93, 94, 96, 99, 122	93, 99, 122	52, 57, 64, 67, 75, 77, 85, 96, 101		92, 93, 94, 99, 122	67, 96	52, 57, 64, 75, 77, 85, 101
Balfour North		52			52			52				52
Buffalo Creek		55			55			55				55
Buffalo Peaks		114				114		114			114	
Burlingame Ditch			82, 83, 87, 88		82, 83, 87, 88				82, 83, 87, 88	88		82, 83, 87
Cobb Creek												
Como			158			158			158	158		
Como Park			147			147			147	147		
Como Park East	122, 132, 159		124, 169			122, 124, 132, 159, 169	122, 132, 159		124, 169	122, 132, 159, 169		124
Crooked Creek	139, 174		165			139, 165, 174	139	174	165	139, 174		165
Dicks Creek												

BLM Allot. Name	Alternative A			Alternative B (No Action)			Alternative C			Alternative D (Proposed Action)		
	Retention	Disposal	Exchange	Retention	Disposal	Exchange	Retention	Disposal	Exchange	Retention	Disposal	Exchange
Driveway												
Elevenmile Canyon	23	13, 29, 30, 31, 32, 33, 34, 36, 37, 38, 41, 42, 44, 50	27, 48, 49			13, 23, 27, 29, 30, 31, 32, 33, 34, 36, 37, 38, 41, 42, 44, 48, 49, 50	23	13, 27, 29, 30, 31, 32, 33, 34, 36, 37, 38, 41, 42, 44, 48, 49, 50		23	13, 29, 30, 31, 32, 34, 37, 41, 50	27, 33, 36, 38, 42, 44, 48, 49
Fourmile Creek	103					103	103			103		
Fourmile Ranch	103					103	103			103		
Freshwater Creek												
Garo	103, 106					103, 106	103, 106			103, 106		
Gravel Pit												
Hammond Peak												
Harlin Ditch	159, 175		146			146, 159, 175	159	146, 175		159, 175		146
Herring Creek	3, 172, 173	4	1			1, 3, 4, 172, 173	3, 172, 173	1, 4		3, 4, 172, 173		1
High Creek Allot	80, 86					80, 86	80, 86			80, 86		
Kaufman Ridge												
Link Ditch			145, 157			145, 157		145, 157		145, 157		
Logan Hill	99	105				99, 105	99	105		99		105
Long Hollow West												
Malice Ditch	103					103	103			103		
Micanite												
Michigan Campground			148, 160, 161, 162			148, 160, 161, 162		148, 160, 161, 162		148, 160		161, 162
Mulligan Lakes		140, 152	148			140, 148, 152		140, 148, 152		148	152	140

BLM Allot. Name	Retention	Alternative A	Exchange	Retention	Alternative B (No Action)	Exchange	Retention	Alternative C	Exchange	Retention	Alternative D (Proposed Action)	Exchange
		Disposal			Disposal			Disposal			Disposal	
North Waugh												
Park Gulch	137	141	126, 145, 157			126, 137, 141, 145, 157		126, 141, 145, 157	137	137, 145, 157	141	126
Park Gulch East		134	136		134	136		134, 136				134, 136
Playa Lakes	122					122	122			122		
Poncha Park												
Pruden Creek	22					22	22			22		
Red Hill Pass	139		142, 143			139, 142, 143	139		142, 143	139, 142, 143		142, 143
Ruby Gulch		116			116			116				116
Rye Slough North	2			2			2			2		
Salt Works Pasture		43			43			43				43
Santa Maria	93					93	93			93		
Silverheel	174		164			164, 174		174	164	174		164
Skyline												
Spinney Mtn.		50, 51, 58, 59, 60, 65, 69, 70, 71, 72, 73, 166, 168	48		59, 69, 70, 71, 72, 73, 166	48, 50, 51, 58, 60, 65, 168		48, 50, 51, 58, 59, 60, 65, 69, 70, 71, 72, 73, 166, 168			65, 69, 70, 72, 73, 166, 168	48, 59, 60, 71
Steel Gulch		11, 102, 109, 110, 112, 113			11, 102, 109, 110, 112, 113			11, 102, 109, 110, 112, 113			11, 109, 110, 113	102, 112
Taryall Creek			157			157		157		157		
Trout Creek	132					132	132			132		
Trout Creek North	139	133				133, 139	139	133		139	133	
Trout Creek South	106					106	106			106		

BLM Allot. Name	Alternative A			Alternative B (No Action)			Alternative C			Alternative D (Proposed Action)		
	Retention	Disposal	Exchange	Retention	Disposal	Exchange	Retention	Disposal	Exchange	Retention	Disposal	Exchange
Twelvemile Club	98		89, 91, 107	98	91	89, 107	98		89, 91, 107	89, 98, 107		91
U Long Gulch	2	5		2	5		2	5		2		5
Upper Ditch												
West Fairplay		121			121			121			121	
West Guffey												
West Pasture												
Wagon Tongue		5, 7, 11, 12, 14, 15, 20, 24, 26, 39, 40, 45, 46, 52			5, 7, 11, 12, 14, 15, 20, 24, 26, 39, 40, 45, 46, 52			5, 7, 11, 12, 14, 15, 20, 24, 26, 39, 40, 45, 46, 52			7, 11, 12, 14, 15, 20, 24, 26, 39, 40, 45, 46	5, 52
Warm Springs	108					108	108			108		

**Table 22.** BLM grazing allotments, allotment acreage potentially unavailable due to disposal or exchange, and estimated cost of replacing unavailable public land with private land lease by South Park Land Tenure Adjustment NEPA Alternatives A, B (No Action), C, and D (Proposed Action).

Allot. Name	Alternative A		Alternative B (No Action)		Alternative C		Alternative D (Proposed Action)	
	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease
31-mile Creek								
31-mile Mtn.								
39-mile Mtn.								
Agate Beds		\$0.00		\$0.00		\$0.00		\$0.00
Agate Mtn.	585	\$769.14	585	\$769.14	585	\$769.14	585	\$769.14
Antero Res. Allot	40	\$34.30	40	\$34.30	40	\$34.30	40	\$34.30
Antero Reservoir	368	\$362.64	368	\$362.64	368	\$362.64	368	\$362.64
Badger Basin	4,843	\$4,085.79	5,208	\$4,393.61	4,642	\$3,916.05	4,843	\$4,085.79
Balfour North	400	\$276.15	400	\$276.15	400	\$276.15	400	\$276.15
Buffalo Creek	80	\$78.90	80	\$78.90	80	\$78.90	80	\$78.90
Buffalo Peaks	40	\$13.15	40	\$13.15	40	\$13.15	2,699	\$887.36
Burlingame Ditch	434	\$427.84	434	\$427.84	434	\$427.84	434	\$427.84
Cobb Creek								
Como	441	\$382.30	441	\$382.30	441	\$382.30		\$0.00
Como Park	193	\$253.80	193	\$253.80	193	\$253.80		\$0.00
Como Park East	799	\$1,270.01	4,910	\$7,807.35	799	\$1,270.01	41	\$64.40
Crooked Creek	37	\$30.16	700	\$575.31	117	\$96.49	37	\$30.16
Dicks Creek								
Driveway		\$0.00		\$0.00		\$0.00		\$0.00
Elevenmile Canyon	9,122	\$6,331.41	10,007	\$6,945.30	9,122	\$6,331.41	9,122	\$6,331.41
Fourmile Creek		\$0.00	1,682	\$1,792.65				
Fourmile Ranch		\$0.00	540	\$505.26				
Freshwater Creek								
Garro		\$0.00	1,940	\$2,001.63		\$0.00		\$0.00

Allot. Name	Alternative A		Alternative B (No Action)		Alternative C		Alternative D (Proposed Action)	
	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease
Gravel Pit								
Hammond Peak								
Harlin Ditch	80	\$59.22	695	\$514.51		\$0.00	80	\$59.22
Herring Creek	540	\$395.40	6,300	\$4,612.96		\$0.00	40	\$29.29
High Creek Allot		\$0.00		\$0.00		\$0.00		\$0.00
Kaufman Ridge		\$0.00		\$0.00		\$0.00		\$0.00
Link Ditch	433	\$4,076.65	433	\$4,076.65		\$0.00		\$0.00
Logan Hill	655	\$456.00	695	\$483.84		\$0.00	655	\$456.00
Long Hollow West								
Malice Ditch		\$0.00	606	\$675.76		\$0.00		\$0.00
Micanite Michigan Campground	1,285	\$996.61	1,285	\$996.61	1,285	\$996.61	200	\$155.11
Mulligan Lakes	363	\$399.94	363	\$399.94	363	\$399.94	280	\$308.49
North Waugh								
Park Gulch	675	\$558.16	2,990	\$2,472.44	2,990	\$2,472.44	120	\$99.23
Park Gulch East	320	\$197.25	320	\$197.25	320	\$197.25	320	\$197.25
Playa Lakes		\$0.00	1,770	\$2,909.44		\$0.00		\$0.00
Poncha Park								
Pruden Creek		\$0.00	320	\$565.45		\$0.00		\$0.00
Red Hill Pass	277	\$195.93	1,227	\$867.90	277	\$195.93	277	\$195.93
Ruby Gulch	85	\$167.66	85	\$167.66	85	\$167.66		\$0.00
Rye Slough North		\$0.00		\$0.00		\$0.00		\$0.00
Salt Works Pasture	154	\$139.23	154	\$139.23	154	\$139.23	154	\$139.23
Santa Maria		\$0.00		\$0.00		\$0.00		\$0.00
Silverheel	80	\$87.67	160	\$175.33	160	\$175.33	80	\$87.67
Skyline								
Spinney Mtn.	1,114	\$840.45	1,114	\$840.45	1,114	\$840.45	919	\$693.47

Allot. Name	Alternative A		Alternative B (No Action)		Alternative C		Alternative D (Proposed Action)	
	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease	Acres potentially unavailable (due to disposal or exchange)	Estimated Cost of replacing unavailable public land w/ private land lease
Steel Gulch	556	\$729.57	556	\$729.57	556	\$729.57	556	\$729.57
Taryall Creek	80	\$180.34	80	\$180.34	80	\$180.34		\$0.00
Trout Creek		\$0.00	2,460	\$2,545.50		\$0.00		\$0.00
Trout Creek North	40	\$39.94	40	\$39.94	40	\$39.94		\$0.00
Trout Creek South		\$0.00	885	\$925.73		\$0.00		\$0.00
Twelvemile Club	838	\$804.13	838	\$804.13	838	\$804.13	40	\$38.37
U Long Gulch	40	\$39.45	40	\$39.45	40	\$39.45	40	\$39.45
Upper Ditch		\$0.00		\$0.00		\$0.00		\$0.00
West Fairplay	80	\$236.70	80	\$236.70	80	\$236.70	80	\$236.70
West Guffey								
West Pasture								
Wagon Tongue	2,952	\$1,933.26	2,952	\$1,933.26	2,952	\$1,933.26	2,952	\$1,933.26
Warm Springs		\$0.00	1,750	\$1,725.94				
<b>TOTAL</b>	<b>28,029</b>	<b>\$26,849.14</b>	<b>55,766</b>	<b>\$55,875.32</b>	<b>28,595</b>	<b>\$23,760.42</b>	<b>25,442</b>	<b>\$18,746.34</b>

## Appendix 9 References

Grunau, L. and M. Wunder, 2001, "Conservation Assessment for Mountain Plover (*Charadrius montanus*) in South Park, Colorado", Colorado Natural Heritage Program, Colorado State University, Ft Collins, CO.

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