

U.S. Department of the Interior
Bureau of Land Management
Royal Gorge Field Office
3170 E. Main Street
Canon City, CO 81212

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-200-2005-0074 EA

CASEFILE/PROJECT NUMBER: COC-64971

PROJECT NAME: Realty – Cooper Mountain Land Exchange

PLANNING UNIT: Gold Belt, #5

LEGAL DESCRIPTION:

Selected Federal Lands (Surface and Minerals)

Soda Springs Parcel (470 acres total)

Sixth Principal Meridian, Colorado,

T. 17 S., R. 68 W.,

section 30, $W\frac{1}{2}SE\frac{1}{4}SW\frac{1}{4}$, $S\frac{1}{2}SW\frac{1}{4}SE\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}SE\frac{1}{4}$, and $SE\frac{1}{4}SE\frac{1}{4}$;
(90 acres)

section 31, $NE\frac{1}{4}$, $S\frac{1}{2}NE\frac{1}{4}NW\frac{1}{4}$, $SE\frac{1}{4}NW\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}$, and $W\frac{1}{2}SE\frac{1}{4}$;
(340 acres)

section 32, $NW\frac{1}{4}NW\frac{1}{4}$. (40 acres)

Penrose Commons Parcel (914.09 acres total)

Sixth Principal Meridian, Colorado,

T. 18 S., R. 68 W.,

section 7, lots 1, 2, 3, and 4. (167.52 acres)

T. 18 S., R. 69 W.,

section 1, lots 7, 8, 9, 10, and $SW\frac{1}{4}SE\frac{1}{4}$; (156.57 acres)

section 11, $SE\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$, $SE\frac{1}{4}SW\frac{1}{4}NE\frac{1}{4}$, $NE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$, and
 $S\frac{1}{2}SE\frac{1}{4}SW\frac{1}{4}$; (50 acres)

section 12, $N\frac{1}{2}$, and $SE\frac{1}{4}$; (480 acres)

section 14, $NE\frac{1}{4}NW\frac{1}{4}$, and $S\frac{1}{2}NW\frac{1}{4}NW\frac{1}{4}$; (60 acres)

Dakota Ridge Parcel (280 acres total)

Sixth Principal Meridian, Colorado

T. 18 S., R. 69 W.,
section 17, SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, and S $\frac{1}{2}$ SE $\frac{1}{4}$. (200 acres)
section 20, N $\frac{1}{2}$ NE $\frac{1}{4}$. (80 acres)

Brush Hollow Parcel (240 acres total)

Sixth Principal Meridian, Colorado,

T. 18 S., R. 69 W.,
section 24, S $\frac{1}{2}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$. (240 acres)

Total Federal Acres: 1,904.09, more or less.

Offered non-federal land

Sixth Principal Meridian, Colorado

T. 17 S. R. 69 W.,
section 7, S $\frac{1}{2}$ SE $\frac{1}{4}$; (80 acres)
section 8, S $\frac{1}{2}$ S $\frac{1}{2}$; (160 acres)
section 17, All; (640 acres)
section 18, lots 2, 3, 4, NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$, and E $\frac{1}{2}$ W $\frac{1}{2}$; (522.19 acres)
section 19, lot 1, E $\frac{1}{2}$ E $\frac{1}{2}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, and NE $\frac{1}{4}$ NW $\frac{1}{4}$; (280.24 acres)
section 20, SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$, and SE $\frac{1}{4}$ SW $\frac{1}{4}$; (240 acres)
section 29, N $\frac{1}{2}$ NW $\frac{1}{4}$. (80 acres)

T. 17 S., R. 70 W.,
section 13, NE $\frac{1}{4}$, and E $\frac{1}{2}$ SE $\frac{1}{4}$. (240 acres)

Total Non-Federal Acres: 2,242.43, more or less.

Both the Federal and non-Federal lands are within Fremont County, Colorado

PROPONENT: Robin L. Morley and Phantom Canyon Ranch Land and Cattle Company, LLC,
a Colorado Limited Liability Company

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: During the winter of 2000/2001, Mark Morley of Phantom Canyon Ranch Land and Cattle Company, LLC, a Colorado Limited Liability Company, met with representatives of the Bureau of Land Management, Royal Gorge Field Office (BLM), to discuss

a potential land exchange. As a result of those meetings, a formal land exchange proposal was submitted to the BLM on March 1, 2001.

The proposal provides an opportunity for the BLM to acquire a 2,242.43-acre private inholding located on top of Cooper Mountain (see map in Attachment 2). Cooper Mountain is a major landmark in Fremont County. Lying on the very southern end of the Colorado Front Range in the shadow of Pikes Peak, it is nestled between two historic travel routes, the Shelf and Phantom Canyon Roads. During the turn-of-the-century gold rush, these routes connected the historic Cripple Creek and Victor Mining Districts to the communities of Florence and Canon City. They are now dedicated as part of the Gold Belt Tour, a National Scenic Byway.

The inholding is surrounded by a large, consolidated block of public lands that include the Beaver Creek Wilderness Study Area, the Phantom Canyon and the Garden Park Areas of Critical Environmental Concern and Garden Park (a dinosaur fossil area and a National Natural Landmark). Because of its physical relationship with major cities such as Colorado Springs, Pueblo, and Canon City these federal lands receive extensive public recreational use. The offered non-federal lands will provide an opportunity to enhance the public outdoor recreation in the area.

In 1997, the BLM acquired approximately 2,000 acres of land adjacent to the offered inholding. Prior to BLM's acquisition, that parcel had been advertised by a local realtor as a potential "wilderness subdivision" in publications as far away as Denver. If the parcel had been sold for private development, all proposed routes for access and utility rights-of-way would have been across public land on steep mountain sides; the visual impacts would have been significant. If the BLM is unable to acquire the offered inholding, the possibility of it being sold for private development is very high.

The offered mountain top property, at approximately 9,000 feet, consists of ponderosa pine forests and open "park like" meadows on top of broad mountain ridges separated by deep granite canyons. The forests and meadows are hunting habitat used by peregrine falcon (BLM-sensitive) and Mexican spotted owl (Federally Threatened) that nest in adjacent canyons. It is considered to be key winter range for deer and elk, prime wild turkey habitat, and excellent bear and mountain lion habitat.

If acquired, the offered lands will provide the BLM with a large contiguous block of federal land resulting in more effective and efficient natural resource management.

The federal lands (1,924.09 acres) identified for exchange constitute eight isolated parcels (see map in Attachment 2). At approximately 5,000 feet on the toe slope of Cooper Mountain, these lands consist of rolling grasslands separated by rocky breaks and "hogback" ridges topped with a pinyon-juniper plant community. Located in the area are both older and developing subdivisions that are surrounded by the proponent's private lands. The proponent's objective in the exchange is to enhance its grazing operation; utilizing the selected federal land (as well as its adjacent private land) in its livestock grazing operation. If exchanged, all of the selected federal land will be used in the pasture rotation with the proponent's private lands, much as they are today.

Of the 1,904.09 acres of federal lands, only 100 acres have legal vehicular access; 804.09 acres are accessible to the public only by foot or horseback from adjacent larger blocks of BLM; and, 1,000 acres are inaccessible. As a result, public use of the federal lands is very limited. The BLM is in the process of acquiring administrative vehicular access into the Soda Springs parcel. This access will exit the county road on the smallest parcel and provide access to the largest parcel. It is anticipated that this access will be in place by October 1, 2006.

Proposed Action: The Proposed Action is to complete a land exchange pursuant to Section 206 of the Act of October 21, 1976 as amended, 43 U.S.C. 1716. The parties to the exchange are the BLM, Robin L. Morley, and Phantom Canyon Ranch Land and Cattle Company, LLC; a Colorado Limited Liability Company.

Disposal of the federal lands and minerals is in conformance with the land use decisions and management actions identified in the Royal Gorge Resource Management Plan Record of Decision (RMP/ ROD) issued in May 1996. The federal lands fall into two specific designations for land ownership adjustments – Category I and Category III (see page 2-5-12 of the ROD and approved RMP and the RMP Land Ownership Adjustment Map) and have been divided into the following four geographic units, the Soda Springs Parcel, Penrose Commons Parcel, Brush Hollow Parcel, and Dakota Ridge Parcel.

The Soda Springs Parcel (470 acres), the Brush Hollow Parcel (240 acres), and a portion of the Penrose Commons Parcel (110 acres) are designated in the RMP as Category I lands. Category I lands are suitable for sale because they are difficult and uneconomic to manage with no significant resource values that would warrant retention in federal ownership (see pages 3-9 and 3-85 of the Proposed RMP and Final EIS). However, Category I lands are also available for exchange if the result is clearly in the best interest of the public and management will be improved (see page 2-5-12 of the ROD and approved RMP).

The Dakota Ridge Parcel (280 acres) and the remaining 804.09 acres in the Penrose Commons Parcel are designated Category III lands in the RMP. Category III lands are lands suitable for disposal by land exchange, if the result is in the public interest and management will be improved (see page 3-85 of the Proposed RMP and Final EIS and page 2-5-12 of the ROD and approved RMP).

The proponent's objective in the exchange is to enhance its grazing operation; utilizing the selected federal land (as well as its adjacent private land) in its livestock grazing operation. If exchanged, all of the selected federal land will be used in the pasture rotation with the proponent's private lands, much as they are today.

Acquiring the 2,242.43 acres of nonfederal lands offered in the exchange is subject to the land use decisions and management actions identified in the RMP/ROD. The nonfederal lands are contiguous to or surrounded by substantial acreages of BLM-administered lands identified in the RMP as Category II lands, or lands for retention and long-term management (page 2-5-12 and the RMP Land Ownership Adjustment Map). Acquisition of the nonfederal lands would bring threatened/endangered and sensitive species and other valuable resources into federal ownership and further consolidate federal ownership in the vicinity for more effective natural resource management.

The nonfederal land would be managed in accordance with existing management prescriptions outlined in the RMP for adjacent and surrounding public lands; the federal lands would be managed and used in accordance with local land use planning in a manner that is compatible with uses on adjacent private lands. No supplemental planning, activity planning, or land use planning amendments would be necessary to accommodate the land exchange.

With clearing and reconstruction of existing roads and trails and some new trail construction, a 12-mile long trail for hiking and horse riding would be extended across the Cooper Mountain parcel from Oil Well Flats to Phantom Canyon. Motorized uses by the public would not be permitted.

The single transaction land exchange proposal involves disposal of 8 scattered and isolated parcels of federal land consisting of 1,904.09 acres, to acquire a private inholding consisting of 2,242.43 acres. Both the federal and nonfederal lands are in northeastern Fremont County. The federal lands are located about 3 to 7 miles north and northwest of Penrose, Colorado. The nonfederal lands are located about 9 miles northwest of Penrose.

To avoid unmanageable split estate, the mineral estate and the surface estate on the selected federal lands will be conveyed to the proponent. The United States owns all minerals by prior patent reservations on 1,762.43 acres of the offered non-federal lands. The remaining mineral estate (480 acres) in the nonfederal lands will be reconveyed to the United States with the surface.

There are no water rights involved on the offered lands; this has been verified by the Colorado State Office Water Rights specialist.

The Commitment to Insure Title on the offered lands lists several exceptions that will not be insured, including the following:

1. Reservations to the United States for a right of way for ditches and canals constructed by the authority of the United States in the land patents issued for all of the offered land, and all of the coal and other mineral rights in the patent recorded May 31, 1927 in Book 213, Page 255 and November 15, 1943 in Book 242, Page 272.
2. Reservation of the right of a proprietor of a vein or lode mining claim to pursue extralateral rights on the lands included in United States patents recorded September 8, 1923 in Book 158, Page 420 and April 20, 1909, in Book 54, Page 333.
3. Exception for the apparent lack of access to and from the nonfederal land via a public street, road or highway, or via a privately granted easement; and the effect of the apparent lack of access upon the marketability of the title to the land.

Once BLM acquires title to the offered land, the encumbrances listed in items 1 and 2 will become a moot point since the rights will merge; the title company may agree to remove these so they will not appear on the policy of title insurance. Considering the private lands are surrounded by existing

public lands, the third exception will not impact the BLM's ability to effectively administer these lands should title transfer to the United States.

The RGFO has determined that, should the exchange be completed, these exceptions will not interfere with its proposed management of the nonfederal land and will request that they be waived in the title opinions issued by the Regional Solicitor

The federal lands have been surveyed, and no additional Cadastral Survey requirements are needed. The land boundaries are, however, very irregular and would be difficult to identify on the ground if they remained in federal ownership. The exchange would consolidate the land ownership patterns and eliminate potential federal/private land use conflicts. It is not necessary to reserve public access across any of the federal lands. There are no Wilderness Study Areas, Areas of Critical and Environmental Concern, Wild and Scenic Rivers, or unpatented mining claims on the selected federal lands.

Patent conveying the federal lands to the proponent will be subject to existing rights, whether or not of record, and the following:

1. Those rights for Fremont County road purposes recognized under Revised Statute 2477 (43 U.S.C. 932), by right-of-way Colorado 44142, across the W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ of section 30, T. 17 S., R. 68 W., and the W $\frac{1}{2}$ SE $\frac{1}{4}$ of section 24, T. 18 S., R. 69 W., all in the Sixth Principal Meridian, Colorado.
2. Those rights for electrical power transmission and access road purposes reserved to the Department of Energy, Western Area Power Administration, by right-of-way Colorado 0128242, under the Act of October 21, 1976 (43 U.S.C. 1767), across the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of section 14, T. 18 S., R. 69 W., Sixth Principal Meridian, Colorado.
3. Those rights for access road purposes as will be granted to Summit Pressed Brick and Tile Company, its successors and assigns, by nonexclusive road easement Colorado 69295FD under the Act of October 21, 1976 (43 U.S.C. 1715), across the W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 30, T. 17 S., R. 68 W., Sixth Principal Meridian, Colorado.
4. A right-of-way for ditches and canals constructed by the authority of the United States. Act of August 30, 1890 (43 U.S.C. 945).

Notification was sent to the grazing lessees on May 25, 2005. All of the grazing lessees have waived their right to the two-year continuation of their privileges upon transfer of the federal land out of federal ownership.

Fremont County would continue to receive payment in lieu of taxes since the federal and nonfederal lands are within the county.

The lands have been appraised and the fair market value determined as follows:

<u>Parcel Identifier</u>	<u>Acres</u>	<u>Appraised Value</u>
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Soda Springs (Tract A)	20.00	\$ 50,000.00
Soda Springs (Tract B)	450.00	315,000.00
Penrose Commons	914.09	594,000.00
Dakota Ridge*	280.00	168,000.00
Brush Hollow	240.00	222,000.00

Total Value of Federal Land: 1904.09 \$1,349,000.00

*To equalize values, 150 acres has been deleted from the Dakota Ridge parcel.

Total Value of Non-Federal Land: \$1,345,000.00

Equalization of appraised values will be achieved by a cash equalization payment of \$4,000.00 made by the proponent.

No Action Alternative: Under this alternative, the proposed land exchange would not occur, and the ownership and management of the public lands would remain the same. However, the public land parcels are still identified for disposal in the RMP and would continue to be considered for disposal. Under the No Action Alternative, these parcels would likely be sold and, as stated in the Highest and Best Use Analysis of the appraisal report, eventually subdivided into rural residential home sites.

The BLM would not acquire the inholding, consolidate lands, increase efficiency of public land management, increase public recreation opportunities, or acquire and protect important wildlife and riparian habitat.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: Land exchanges are BLM's preferred method for accomplishing land tenure adjustments identified in land use plans, unless conditions warrant selling the land under the authority of the Federal Land Policy and Management Act and using the proceeds as authorized by the Federal Land Transaction Facilitation Act (FLTFA).

The Soda Springs parcel consists of two non-contiguous tracts surrounded by a large developed subdivision (totaling approximately 3,100 acres) consisting of lots that contain more than 35 acres. This subdivision was bought by a land developer in August 2002 for \$2,000,000 or \$650 per acre. The Soda Springs parcel is also located near a state section (T. 17 S., R. 68 W., section 36), totaling 640 acres with county road access. In January 2001, the state offered its parcel for competitive sale at no less than the appraised value, which was \$590,000 or \$922 per acre. The state-owned parcel, however, did not sell, probably because of its small size and high per-acre value. Although the Soda Springs parcel may have residential development potential, market evidence indicates that land developers are interested in much larger blocks of land such as large, intact ranch property. The per-acre value of a large ranching property is lower because of its

size; and after investing in the development infrastructure (such as road construction, utility services, and surveys), subdivision developers are still able to turn a profit. The larger portion of the Soda Springs parcel does not have legal public access, making the property less desirable for purchase, both by developers and individual landowners. As a result, based on the parcel's size and restricted access, the Royal Gorge Field Manager determined that offering the Soda Springs parcel for sale is not likely to generate any significant competitive interest from the public.

The Brush Hollow parcels consist of two non-contiguous tracts of land surrounded by state-owned property and private property owned by the exchange proponent. Only 80 acres of the parcel has legal access, making the likelihood of competitive interest in the entire parcel unlikely. The small size of the entire parcel, the lack of access to the larger tract, and the surrounding land ownership pattern make it unlikely that anyone other than the exchange proponent would be interested in acquiring the land. Offering the parcel for sale is therefore unlikely to generate additional competitive interest from the public at large.

The Dakota Ridge parcel is one tract of land and is not legally accessible by the general public. The size of the parcel, physical geography, and the lack of access make it unlikely that offering the parcel for sale would generate competitive interest from the public.

The Penrose Commons parcel consists of three non-contiguous tracts of land. The tracts included in the Penrose Commons parcel are adjacent to and represent a logical addition to a large block of land owned by the exchange proponent. The size of the entire parcel, physical geography, and the surrounding land ownership pattern make it unlikely that anyone other than the exchange proponent would be interested in acquiring the land. Offering the parcel for sale is therefore unlikely to generate additional competitive interest from the public at large.

The Cooper Mountain parcel is not an inholding within, or adjacent to, a federally designated area, as those terms are defined in FLTFA, so funds generated by FLTFA sales would not be available to acquire the property. When all factors were considered, the Royal Gorge Field Manager determined that a land exchange is a better alternative than a public land sale for disposing of the federal land to accomplish BLM's land tenure adjustment goals and objectives and to accomplish acquisition of lands with important resource values.

NEED FOR THE ACTION: Robin L. Morley and Phantom Canyon Ranch Land and Cattle Company, LLC, a Colorado Limited Liability Company have submitted a proposal to BLM for an exchange of private and public lands. The BLM is authorized to complete land exchanges under Section 206 of the Federal Land Policy and Management Act (FLPMA) as amended, after a determination is made that the public interest will be served. In making this determination, the BLM evaluates 1) the opportunity to achieve better management of federal lands; 2) the needs of the state and local residents and their economics; and 3) securing important resource management objectives including, but not limited to, protection of fish and wildlife habitat, riparian habitat, river frontage, forest products, cultural resources, recreation opportunities and watersheds.

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: 5-66, 5-67, Land Ownership Adjustment Map

Decision Language: Decision #5-66: Land ownership adjustments will be made with the following guidance: exchange could be used when the result is clearly in the best interest of the public and management will be improved; identified parcels for acquisition or retention will provide values for public use and have access; all uses will be equally considered in analyzing proposals.

Decision #5-67: Land ownership adjustments include: 18,076 acres for disposal and 5,664 acres for disposal through exchange, lease, or transfer, and 108,662 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.

ISSUES AND CONCERNS: The Council on Environmental Quality's "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act" encourages agencies to limit the issues to be addressed in environmental assessments to those issues identified as a result of the public notification and scoping process. As a result of the internal scoping process, there were no issues identified that need to be addressed in the environmental assessment. The following public comment was received in response to the Notice of Exchange Proposal: "I am concerned that if/after this exchange of land takes place it will not stay in its natural state and will become some type of developed private land. I would like to see the Dakota Ridge Parcel north and east of my property designated as restricted from development to allow this land to stay in its natural state and also provide a buffer zone between my property and the possible future development of the private land". The Bureau of Land Management will not include deed restrictions in Federal land patents unless required by law or executive order, clearly supported by the environmental documentation. Therefore, this concern will not be addressed in this EA.

There are four management concerns identified for this land exchange, of which three are a part of every land exchange proposal. These three management concerns include effects on floodplains and wetlands under Executive Orders 11988 and 11990, threatened and endangered species under Section 7 of the Threatened and Endangered Species Act of 1973, as amended, and cultural resources under the National Historical Preservation Act. Each of the management concerns is discussed below.

Concern 1. Wetlands: *Will there be a net gain or loss of wetlands to the public?*

Wetlands, an ecological resource with functions important to water quality, hydrology, wildlife and recreation, are protected by the Clean Water Act. It is the policy of the federal government to have no net loss of wetlands. Therefore, land exchanges must result in the federal government acquiring acreage of wetlands equal or greater to what is being disposed of. The proposed land exchange would result in no decrease in wetland habitat for the federal government. No wetlands would be exchanged away, and considerable riparian and other wetlands would come into federal ownership. The offered non-federal lands are not specifically inventoried for exact quantity of riparian or wetland acreage at present, but conservatively estimated to be approximately 20 acres. Because of the headwater nature of Cooper Mountain, between 1 and 2% of the total acquisition acreage would be wetland resulting in a substantial net gain of these resources.

Concern 2. Threatened and Endangered Species: *Will the land exchange negatively impact any threatened or endangered species or critical habitat for the species?*

The occurrence of any threatened or endangered plant or animal species must be evaluated in any federal action. If any of these species or their habitat is found on any of the selected federal parcels, appropriate mitigation measures must be taken to ensure that the habitat will not be adversely affected. If any of these species or their habitat is found only on the acquired private land parcels, management of the habitat would come under the direction of the BLM. The BLM has determined that the proposed exchange does not include selected federal parcels that contain habitat for any candidate or listed species. The proposed exchange adds to federal ownership lands that are considered critical habitat for the Mexican spotted owl. The entire acquired private land parcel (2242.43 acres) has been designated as Mexican spotted owl critical habitat by the US Fish and Wildlife Service.

Concern 3. Cultural Resources: *Will the public lose any cultural or historical resource of significance? If any significant resources exist on selected federal lands, will they be protected if disposed of by the federal government?*

Cultural resources on federal lands are protected under the National Historic Preservation Act (NHPA). Cultural resource surveys are conducted whenever an action is proposed on federal lands. If potential resources are discovered, mitigation measures are enacted to evaluate the eligibility for the NRHP. If any of these sites are eligible, appropriate mitigation measures must be implemented to protect the resource. Cultural inventories have been completed on all the selected federal land parcels. No cultural resources, eligible for the National Register of Historic Places, were discovered or recorded on any of the selected federal land parcels involved in the proposed land exchange.

Concern 4. Land Tenure: *Will the land exchange result in "better land management"?*

Disposal of the selected federal land parcels is consistent with the stated objective of the RMP, which call for the BLM to dispose of, by sale, parcels that are difficult and uneconomical to manage with no significant resource values. Exchange can be used when the result is clearly in the best interest of the public, and BLM management will be improved. Because of the limited

public access, management of lands with no significant resource values is difficult and uneconomical. Consolidation of BLM ownership patterns to large blocks of lands will result in a more efficient stewardship of public lands.

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: Air quality in the affected area is, generally, good. The largest contributors to degraded air quality are probably vehicle traffic on unsurfaced or gravel surfaced county roads and off highway vehicle traffic.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: Air quality will not be negatively impacted if this parcel is acquired by the Federal government. Access is currently very limited and would likely remain so under Federal management. No specific mitigation would be necessary.

Disposal:

Soda Springs: Under private ownership it is likely that air quality might be improved over the existing situation. Elimination of public use of off highway vehicles in the area would remove or greatly reduce one of the largest on-site contributors to air quality degradation.

Penrose Commons: Same as for Soda Springs.

Brush Hollow: Same as for Soda Springs.

Dakota Ridge: Same as for Soda Springs.

No Action Alternative: Continuation of the existing situation will result in continued generation of dust from off highway vehicles on the public lands. Currently, no air quality standards are exceeded and no specific mitigation would be necessary.

CULTURAL RESOURCES

Affected Environment: Both historic and aboriginal cultural resources are present in the area of potential effect (APE). The relative remoteness, distance from permanent water and ruggedness of the terrain (in some spots) render the APE less desirable for habitation than other locations nearby. Therefore, the presence of no sites eligible for the National Register of Historic Places was not surprising. BLM recorded eight isolated finds (5FN1941-1944, 5FN1952, 5FN1953, 5FN1991 and 5FN1002) and two open lithic locales (5FN1989 and 5FN1990) in the APE.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: Unknown because the BLM does not inventory acquisition parcels for cultural resources.

Disposal:

Soda Springs: No effect on historic properties.

Penrose Commons: No effect on historic properties.

Brush Hollow: No effect on historic properties.

Dakota Ridge: No effect on historic properties.

No Action Alternative: No effect on historic properties.

ENVIRONMENTAL JUSTICE

Affected Environment: There are no minority or low-income populations in or near and of the four parcels in the project area.

Environmental Consequences/Mitigation:

Proposed Action: The proposal as it affects any of the four parcels will not have a disproportionately high and adverse human health or environmental effect on minority or low-income populations.

No Action Alternative: The No Action Alternative 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 involved in the proposed action or the alternatives.

Environmental Consequences/Mitigation: There are no impacts to prime or unique farmlands in the proposed action or the alternatives. No mitigation is required.

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

Affected Environment: All selected lands are in the Arkansas River watershed but are entirely upland in nature. Runoff drains during heavy precipitation via small tributaries either to Beaver, Brush Hollow, Eight Mile, or Six Mile Creeks; all of which are ephemeral. There are no known wetland areas on any selected parcel, only dry washes and headwater canyons. This is verified by field reconnaissance and through checking BLM riparian vegetation layer. The lands lie in a dry precipitation band of 12-14 inches on average annually. Elevation is low enough that snowpack does not accumulate and drainages are not even intermittent. The acquisition parcel

on Cooper Mountain is entirely different. This high elevation mountain receives considerably more precipitation, (24-28 inch zone) including a building snow-pack through out the winter-spring months that maintains perennial stream flow in Felch Gulch and Six mile Creek serving as those streams headwaters. Numerous earthen stock ponds have been built on top of Cooper Mountain. Condition of all the riparian/wetland resources is not inventoried at present, but observed to be in an improving state.

Environmental Consequences/Mitigation:

Proposed Action: There is no loss to public land riparian wetland or floodplain resources by disposal of any of the offered land. There could be cumulative impact upon down gradient drainage ways if the land use is changed from public "natural state" ownership to another form of land use such as development. It is unlikely these lands will remain with the same type of land use in perpetuity, and with an uncertain fate, non-BLM floodplain resources could be impacted. The acquisition parcel on Cooper Mountain is in a relatively natural state and likely will retain that condition under BLM jurisdiction. There is without doubt a net gain in riparian/wetland environments coming into BLM jurisdiction. There is no reasonable mitigation necessary to offset lost floodplain resources as a result of the proposed action, but awareness of change in land use should be considered. Selection of the no action alternative could degrade Cooper Mountain's existing surrounding public lands if the mountain top is developed in the future, which would be fairly certain without the selection of the proposed action.

Finding on the Public Land Health Standard for Riparian Systems: This proposed action does not directly cause any change to a public land floodplain, riparian or wetland resource. Acquisition of Cooper Mountain brings these values into public ownership.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The offered and selected parcels represent a wide variety of ecological sites. These sites are prone to invasion by a wide variety of invasive species, if severe soil disturbance occurs.

Environmental Consequences/Mitigation: The proposed action or the alternative will not result in any additional soil disturbance. No mitigation is required.

MIGRATORY BIRDS

Affected Environment: The disposal parcels are all located at lower elevations and consists of primarily pinyon pine and juniper habitat. Some small areas of mountain grassland and mountain shrub habitat exist within the pinyon-juniper habitat. Shrubs such as currant and mountain mahogany are abundant, especially on south slopes. Pinyon-juniper habitat supports the largest nesting bird species list of any upland vegetation type in the West. The richness of the pinyon-juniper vegetation type, however, is important due to its middle elevation. Survey tallies in pinyon-juniper are similar in species diversity to the best riparian. Several species are found in the pinyon-juniper habitat and include: black-chinned hummingbird, gray flycatcher, Cassin's kingbird, gray vireo, pinyon jay, juniper titmouse, black-throated gray warbler, Scott's

oriole, ash-throated flycatcher, Bewick's wren, mountain chickadee, white-breasted nuthatch, and chipping sparrow.

Ponderosa pine, mixed conifer, mountain grassland and mountain shrubland habitats are found at the higher elevations of Cooper Mountain, the parcel to be acquired by BLM. On Cooper Mountain these sites are very dry and warm areas, with less than 25 in of precipitation annually. Mature ponderosa pine forests on dry sites are open, with mature trees achieving wide separation as they compete for limited soil moisture. Grassy ground cover is maintained by frequent low-intensity fires. Ponderosa pines are the largest conifers in Colorado and Gambel oak is a common component of the understory, typically in a shrubby form. Other common understory shrubs include mountain mahogany and wax currant. Tree species sometimes found mixed with ponderosa pine are junipers, pinyon pine, aspen, white fir, and Douglas-fir. Birds typical of these habitat types include Merriam's turkey, Williamson's sapsucker, pygmy nuthatch, western bluebird, band-tailed pigeon, Mexican spotted owl, Grace's warbler, flammulated owl, red-breasted nuthatch, violet-green swallow, western tanager, and chipping sparrow. Higher elevation mixed conifer forests are found on north-facing slopes in the area. These sites also include small areas of aspen habitat and riparian habitat associated with springs and seeps.

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

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

Flammulated owls prefer old-growth or mature ponderosa pine, apparently due to the presence of large broken-top and lightning-damaged snags and trees for nesting cavities, large cavities excavated by northern flickers and other woodpeckers, open structure of trees and understory for foraging, and high prey availability. They will utilize other habitats with similar structure, such as open mixed-conifer and aspen forests. Key habitat features seem to be the presence of large trees and snags, scattered clusters of shrubs or saplings, clearings, and a high abundance of nocturnal arthropod prey.

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

Peregrine falcons in Colorado breed on cliffs and rock outcrops from 4,500-9000 ft in elevation. The most commonly chosen cliffs lie within pinyon-juniper and ponderosa pine zones. These falcons feed on smaller birds almost exclusively, with White-throated swifts and rock doves being among their favored prey.

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

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

Gray vireo's nest along the western tier of counties, with centers of abundance in Mesa, Montrose, and Montezuma counties. They also nest on the Eastern Slope in Las Animas County. Gray vireos are pinyon-juniper woodland obligates. Gray vireos usually inhabit stands dominated by juniper or thin stands of pure juniper. They construct nests of dry grasses, plant fibers, stems, and hair, often camouflaging them with sagebrush leaves.

Pinyon jays range the semiarid lands of the West. The Colorado Breeding Bird Atlas map shows them south of a diagonal line drawn from the northwest corner to the southeast corner of the state. Pinyon jays are pinyon and juniper obligates in Colorado and nest commonly at the lower elevations of pinyon-juniper woodlands, often where junipers dominate. A few nest in ponderosa pine. They prefer extensive stands far from high human activity.

Black-throated gray warblers are fairly common summer residents in pinyon-juniper woodlands across the southwestern half of Colorado. Some surveys show these warblers to be the most frequently encountered birds in the pinyon-juniper woodland. Black-throated gray warblers, in Colorado, are pinyon-juniper obligates, preferring tall, dense pinyon-juniper woodlands.

Virginia's warblers in Colorado nest between 5,000-9,000 ft elevations. They breed most abundantly in the western quarter of the state, along the eastern slope foothills, and in the Upper Arkansas River drainage. Virginia's warblers nest in dense shrublands and on scrub-adorned slopes of mesas, foothills, open ravines, and mountain valleys in semiarid country. They use scrubby brush, pinyon-juniper woodland with a well-developed shrubby understory, ravines covered with scrub oak and dense shrublands--especially Gambel oak. They also breed in open ponderosa pine savannahs that have a dense understory of tall shrubs.

Grace's warblers breed from southwestern Colorado and southern Utah, south through central Arizona, western New Mexico, and into north-central Mexico. Grace's warblers inhabit open ponderosa pine forests with pines 16 ft tall, especially with a shrubby understory, usually Gambel oak.

Environmental Consequences/Mitigation: In order to be in compliance with the Migratory Bird Treaty Act, BLM would need to avoid actions that "take" migratory birds. Generally this requires a seasonal restriction that requires that all vegetation disturbances be avoided from May 15 thru July 15. This is the breeding and brood rearing season for most Colorado migratory birds. In the case of a land exchange, no habitat disruption is proposed, therefore no seasonal restriction is recommended. Comments below are intended to describe how the land exchange will affect migratory birds.

Proposed Action:

Acquisition:

Cooper Mountain: Cooper Mountain is a large contiguous parcel that is surrounded by other public lands. It is primarily ponderosa pine and mountain shrub habitat, interspersed with open meadows and occasional riparian areas formed by springs and seeps. Because it is a large tract and upon acquisition will form an even larger area of public land, the benefits to all wildlife species will be significant. This exchange will add to a large core wildlife habitat area. The potential was for this parcel to be developed into homesites which would have had significant impacts to all wildlife species.

Disposal:

Soda Springs, Penrose Commons, Brush Hollow, and Dakota Ridge: All of these scattered parcels are located in low, dry pinyon-juniper habitat. With the exception of Brush Hollow the parcels are located on rough, rocky hogbacks on steep slopes. The likelihood of these parcels being developed is low due to the extreme topography. Transfer to private ownership will have minimal impacts to migratory birds since it is doubtful that habitat alterations will ever be accomplished.

No Action Alternative: Under this alternative Cooper Mountain would remain in private ownership and could potentially be developed as home sites. Impacts to wildlife habitat could be extensive.

NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: See cultural resources section above.

Environmental Consequences/Mitigation: BLM conducted consultation for Area of Potential Effect as part of the Gold Belt Travel Management Plan in 2003. At that time, the following tribes were contacted: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Lakota Tribe, Comanche Tribe of Oklahoma, Crow Creek Lakota Tribe, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Northern Ute Tribe, Oglala Lakota Tribe, Pawnee Nation of Oklahoma, Rosebud Sioux Tribe, Shoshone Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, Ute Mountain Ute Tribe. The tribes identified no areas of concern.

Proposed Action:

Acquisition:

Cooper Mountain: Unknown because the BLM does not conduct Native American consultation regarding acquisition parcels.

Disposal:

Soda Springs: No concerns.

Penrose Commons: No concerns.

Brush Hollow: No concerns.

Dakota Ridge: No concerns.

No Action Alternative: No concerns.

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

Affected Environment: This Environmental Assessment (EA) will analyze the effects of implementing the land exchange on threatened, endangered, proposed, candidate, and sensitive species. While sensitive species are not federally protected, it is BLM policy to manage these species to prevent future listing, thereby affording them the same level of protection as Threatened and Endangered (T&E) species in BLM programs. Only those species that may be affected by the implementation of this exchange will be addressed in this section. Those species (Threatened, Endangered, Candidate and BLM Sensitive) that occur in the project area and may be affected by the exchange are listed below.

1. Mexican spotted owl	Threatened-Critical Habitat
2. Bald eagle	Threatened
3. Mountain plover	BLM Sensitive
4. Black-tailed prairie dog	BLM Sensitive
5. Peregrine falcon	BLM Sensitive
6. Northern goshawk	BLM Sensitive

Species Descriptions

Mexican Spotted Owl: The MSO currently occupies a broad geographic area but does not occur uniformly throughout its range. Instead the owl occurs in disjunct localities that correspond to isolated mountain systems and canyons. The range of the MSO in the United States has been divided into six recovery units (RUs) as identified in the Recovery Plan. The planning area is included in the Southern Rocky Mountain-Colorado RU.

Mexican spotted owls (MSO) breed sporadically and do not nest every year. In good years most of the population will nest; whereas, in other years only a small portion of pairs will nest successfully, reasons for this pattern are unknown. MSO reproductive chronology varies somewhat across its range. In Colorado, courtship apparently begins in March with pairs roosting together during the day and calling to each other at dusk. Eggs are laid in early April. Incubation begins shortly after the first egg is laid, and is performed entirely by the female. The northern spotted owl incubates for approximately 30 days, and it is assumed that the MSO incubates for a similar period. During incubation and the first half of the brooding period, the female leaves the nest only to defecate, regurgitate pellets, or to receive prey from the male, who does all or most of the foraging. The eggs usually hatch in early May with the nestling owls generally fledging four to five weeks after hatching, then dispersing in mid September to early October.

The MSO was listed as a threatened species on April 15, 1993. Two primary reasons were cited for listing: historical alteration of its habitat as a result of timber management practices, specifically the use of even-aged silviculture, plus the threat of these practices continuing. The

danger of catastrophic wildfire was also cited as a potential threat for additional habitat loss. Riparian areas were also noted as an area of concern.

The general distribution of MSO in the planning area occurs northeast of Canon City (east of Fourmile Creek), north of Highway 50 between Canon City and Penrose, and west of Highway 115 from Penrose to Colorado Springs. The northern boundary is Pikes Peak. Suitable habitat is located on the eastern and southern slopes of Pikes Peak, Beaver Creek Wilderness Study Area, Phantom Canyon and associated side canyons. MSOs have not been found west of Canon City.

In March of 2001, the US Fish and Wildlife Service designated Critical Habitat for the MSO. The entire habitat for MSOs that occur on BLM lands in Colorado is within the RGFO. Critical habitat was reevaluated in 2004 and new critical habitat boundaries were identified. While a large area has been designated, the Recovery Plan makes it clear that only those areas that contain the primary constituent elements necessary to support MSO's need to be considered critical habitat. The parcels that will be exchanged to private ownership are located outside critical habitat; however, the Cooper Mountain parcel is located within MSO critical habitat.

All the MSO habitats found in canyons on public lands in the Pikes Peak area are located in extremely rugged canyon habitats with steep canyon walls, cliffs, potholes and ledges. Stringers of mixed conifer vegetation are found in the canyon bottoms in these areas. The primary constituent elements essential to the conservation of the MSO include those physical and biological features that support nesting, roosting and foraging. In canyon habitats the primary constituent elements include the following attributes: cooler, often more humid conditions than surrounding areas; clumps or stringers of trees and/or canyon walls containing crevices, ledges, or caves; high percent of ground litter and woody debris; riparian or woody vegetation.

Twenty canyon complexes were surveyed by BLM since 1991. These areas have all been surveyed with trained and certified biologists using the standard survey protocol. These 20 sites represent 48,128 acres of habitat. MSO's have been documented in 10 of these sites, with five sites containing nesting pairs. Protected Activity Center's (PACs) have been established for seven sites. PAC's were delineated in 1993 with the completion of the Recovery Plan for the MSO. PAC's were established with the intent to protect the best available habitat for the MSO. PAC's are approximately 600 acres in size, which provides for the nest site, several roost sites and the most proximal and highly used foraging areas. There are no PAC's or portions of PAC's in the acquisition parcel but three PAC's are very near the Cooper Mountain parcel that BLM will acquire. The disposal parcels do not contain habitat suitable for MSO.

Bald Eagle: Colorado populations of bald eagles typically nest in large cottonwood trees along rivers and reservoirs. Eagle densities reach their peak during the winter months when migrants arrive from the north. The bald eagle is a common winter (December through February) visitor to the Arkansas River valley. Typically, up to five birds can be found from Leadville to Canon City, and up to five birds can be found from Canon City to Pueblo Reservoir. An active bald eagle nest is located on private land along Fourmile Creek north of Canon City. These birds could be expected to forage on public lands. However, use by eagles is so incidental that preferred or critical areas such as roosting or feeding sites have not been identified. Bald eagles may also be found along the Arkansas River east of Florence at the Blue Heron ponds,

which were recently acquired by BLM. The area was formally a gravel mining operation and is devoid of large cottonwood trees, except for the eastern and western edges that contain a few large trees suitable as roosting sites for eagles. Bald eagles roosting on the property have not been documented. In addition bald eagles have never been documented using any properties involved in this exchange.

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.

Breeding habitat for mountain plovers in Colorado can generally be described as flat, dry land with very short vegetation and a fairly high percentage of bare ground. Mountain plovers have never been documented in the exchange area and there is very little suitable habitat. A very small portion of the Brush Hollow parcel may be suitable habitat.

Black-tailed Prairie Dog: On February 3, 2000 after extensive biological review, the USFWS determined that the black-tailed prairie dog warranted listing under ESA as a Threatened species. However, because of other higher priority work, the USFWS delayed listing the black-tailed prairie dog, but re-evaluates the status of the species every 12 months. The BLM considers the black-tailed prairie dog as sensitive species.

In the summer of 2001, Colorado started aerial surveys for black-tailed prairie dogs throughout their historic range. Based on known locations of black-tailed prairie dogs, transects were developed for each county to give a 95% confidence interval to the resulting data. Transects were flown at 100 – 150' elevation. Geographic Positioning System (GPS) technology was used to track both the flight lines and the leading and trailing edge of each active black-tailed prairie dog colony located on the transect. The survey has been completed and 2,799 acres of prairie dogs were located in Fremont County. Of the total for Fremont County 2,352 acres were located on private lands and 447 acres on public lands. The public land acres are State Land Board lands. There were no black-tailed prairie dogs documented on lands administered by BLM. Statewide 631,000 acres of black-tail prairie dogs were documented. Black-tail prairie dog populations on public lands managed by BLM within the exchange area have not been documented. There are 240 acres of grassland habitat in the Brush Hollow area managed by BLM that potentially could provide habitat for the species.

Peregrine Falcon: Peregrine falcon habitat includes nesting and hunting sites, as well as migration and wintering areas. Typical nesting sites are cliffs more than 200 feet high that overlook water and permit extensive views of the surrounding area. Prey abundance and diversity provided by these situations are major factors in eyrie (nest) selection. Peregrines may travel up to 17 miles from nesting cliffs to hunting areas. Preferred hunting habitats include cropland, meadows, river bottoms, marshes and lakes that provide an abundance of avian prey. Birds are occasionally reported in Colorado during the winter, but most peregrines migrate to

Central and South America. Peregrine falcons in the area are found in the roughest, most rugged, inaccessible areas BLM manages. Large canyon complexes with extensive rock are typically used during the breeding season. Peregrine falcons occupy three sites during the breeding season within the exchange area. In 1988 a pair became established in Beaver Creek near Victor. This site was an historic eyrie and was one of the first to be re-occupied as the population recovered. This site has been producing young since being re-occupied. A new eyrie was established in 1994 in Little Turkey Creek southwest of Colorado Springs and a new eyrie was established in lower Beaver Creek in 1998. Both these sites have successfully fledged young. Recovery goals for nesting peregrines were exceeded several years ago. Colorado documents over 100 nesting pairs of peregrines each year. The peregrine was downlisted from a federal threatened species to a state listed species of special concern as recovery progressed. The BLM considers the peregrine falcon a sensitive species. There is no nest habitat in the exchange area.

Northern Goshawk: Northern goshawks are associated with coniferous and mixed forests through much of the Northern hemisphere. Studies of nesting habitat show that goshawks nest in older-aged forests with variable tree species. The most consistent vegetative characteristic of goshawk nest sites is high percent canopy closure. Stand structure ranges from dense multi-layered stands in Oregon to open park-like understories in Colorado and California. Average tree size is just as variable with mean tree diameters ranging from 8-20 inches in Colorado. Goshawks appear to prefer north to east aspects for nest sites as stands on these aspects are typically denser and more suitable. Knowledge of the foraging habitat is poor but the goshawk is a height zone generalist, taking prey from the ground-shrub, shrub-canopy, and canopy layers. Available evidence suggests that two important resources, food and nest habitat, are the principle mechanisms limiting goshawk densities. Specifically, populations may be limited by shortage of nest sites; and where nest sites are readily available, densities may be limited by food abundance and availability. Goshawks are rare on public lands managed by BLM in southern Colorado due to the lack of suitable habitat.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: The acquisition of this parcel will result in several benefits to wildlife. Mexican spotted owls occupy several canyons in the immediate vicinity of this parcel and owls could be expected to regularly use the acquisition parcel while moving from canyon to canyon. Owls may also utilize the area for hunting and foraging. The entire parcel is within critical habitat designated by the US Fish and Wildlife Service in 2004. A bald eagle nest is located along Fourmile Creek approximately 3 miles east of the parcel. Bald eagles could also be expected to utilize the parcel for hunting and foraging, although on a limited basis. Peregrine falcon eyries (nests) are located within hunting distances of the acquisition parcel and birds may utilize the area for foraging. The goshawk, a BLM sensitive species, is rare on public lands due to the lack of habitat, however, suitable habitat is found on Cooper Mountain within the ponderosa pine and mixed conifer vegetation types. The acquisition will have no benefits to any other species listed above because there is no habitat available for these species in the area.

Disposal:

Soda Springs, Penrose Commons, Brush Hollow, Dakota Ridge: these four parcels are located in lower elevation pinyon-juniper habitats that do not provide preferred habitat for several species. Mexican spotted owls prefer mixed conifer forests within canyon settings for breeding. Neither of these parcels are identified as critical habitat. Extensive surveys for spotted owls throughout this area have never documented birds breeding within the pinyon-juniper habitat type. Bald eagles nest along Fourmile Creek which is within hunting distance of these parcels. However, low elevation, dry pinyon-juniper habitat is generally not preferred foraging habitat. The Brush Hollow parcel contains a small area of shortgrass prairie habitat suitable for mountain plover. Mountain plover have never been documented this far west in Fremont County and would not be expected to occur at this site. Black-tailed prairie dogs have not been found on the parcel despite suitable habitat being available. There is no outstanding hunting habitat for peregrine falcons despite being within the foraging range of falcons. There is no habitat for northern goshawk on any of these parcels.

No Action Alternative: This exchange provides a good opportunity to acquire excellent habitat for Mexican spotted owl, goshawk and peregrine falcon. It is an opportunity to preserve quality habitat, provide habitat connectivity and increase core habitat in an area that potentially could have been developed into home sites. The habitat that is being lost is of less value to wildlife since it is similar to much of the adjacent habitat. In addition it is habitat that is already fragmented by surrounding land uses. Completion of this exchange is a positive move towards T&E and sensitive species habitat conservation.

Finding on the Public Land Health Standard for Threatened & Endangered species:

Completion of this exchange will improve public land health standards for T&E species by bringing into public ownership a large block of land that is critical for species conservation.

WASTES, HAZARDOUS OR SOLID

Affected Environment: Currently, the public lands included in this proposal all have some record of the dumping of solid waste by the public. Dumping of hazardous waste has not been reported on any of the public land parcels. Dumping is a problem because these lands are inter-mixed with private lands, access is unlimited and they are in close proximity to the places where people live.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: Dumping of solid waste (and hazardous wastes) would likely be reduced from the public lands as a whole if acquired by the Federal Government. Access into this parcel is extremely limited and the lands lie at a greater distance from the locations where

people currently live. No specific mitigations for dumping would be needed. The acquisition would not result in the use, storage or disposal of hazardous materials on public lands.

Disposal:

Soda Springs: This parcel currently has a history of dumping as a result of the current road access and it's proximity to where people live. If this parcel was transferred to private ownership as a result of this land exchange there might actually be a benefit to public lands as dumping by members of the public would likely decrease as these lands were fenced and access other wise limited. These federal lands have been surveyed for the presence of environmental contaminants and determined to be appropriate for disposal.

Penrose Commons: Same as for Soda Springs parcel.

Brush Hollow: Same as for Soda Springs parcel.

Dakota Ridge: Same as for Soda Springs parcel.

No Action Alternative: If this proposal does not result in an exchange of lands, it's likely that dumping on the public land will continue to be a problem. Over time, it is likely to increase as population density increases and tipping fees at the local landfill increase. Eventually, it is likely that hazardous materials or wastes might also be dumped in the area.

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

Affected Environment: The Proposed Action involves lands that have varying degrees of water on them. The offered private lands are located in a relatively moist, high elevation location that contains the headwaters of Felch Creek, Sixmile Creek, and other unnamed perennial drainages. The selected federal lands are mainly lower elevation upland areas that are dissected by ephemeral washes that rarely flow. All surface and ground water in the area is currently meeting state and BLM water quality standards.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: The Proposed Action would have no direct impact on either surface or ground water quality. Management of the lands would remain similar to the current conditions.

Disposal:

Soda Springs: The Proposed Action would have no direct impact on either surface or ground water quality. Indirectly, if the lands are developed by the new owner; any new access roads and the accompanying lot development would increase runoff, erosion and any contaminants that may occur from the failure of individual sewage disposal systems.

Penrose Commons: The Proposed Action would have no direct impact on either surface or ground water quality. Indirectly, if the lands are developed by the new owner;

any new access roads and the accompanying lot development would increase runoff, erosion and any contaminants that may occur from the failure of individual sewage disposal systems.

Brush Hollow: The Proposed Action would have no direct impact on either surface or ground water quality. Indirectly, if the lands are developed by the new owner; any new access roads and the accompanying lot development would increase runoff, erosion and any contaminants that may occur from the failure of individual sewage disposal systems.

Dakota Ridge: The Proposed Action would have no direct impact on either surface or ground water quality. Indirectly, if the lands are developed by the new owner; any new access roads and the accompanying lot development would increase runoff, erosion and any contaminants that may occur from the failure of individual sewage disposal systems.

No Action Alternative: If the No-Action alternative is selected, lands on the offered parcels would be subject to development, any new access roads and the accompanying lot development would increase runoff, erosion and any contaminants that may occur from the failure of individual sewage disposal systems effecting down gradient BLM lands. The lower elevation parcels would stay with the current management and would not be subject to commercial development. This would keep the water quality in the lower areas as it currently is.

Finding on the Public Land Health Standard for Water Quality: Currently, all the lands in question are meeting Public Land Health Standards for Water Quality. If the Proposed Action or No-Action Alternative is chosen, both surface and ground water standards would continue to be met.

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

Affected Environment: The Proposed Action does not include lands with these special designations.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: No impacts.

Disposal:

Soda Springs: No impacts.

Penrose Commons: No impacts.

Brush Hollow: No impacts.

No Action Alternative: The No Action Alternative does not affect lands with these special designations.

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:

Acquisition:

Cooper Mountain: This parcel falls in the general soil legend description of Rogert-Wetmore-Rock outcrop.

Disposal:

Soda Springs: This parcel is located in the soils legend of Ustic Torriorthents-Rock outcrop-Coaldale.

Penrose Commons: This parcel is in the soils legend of both Travessilla-Ustic Torriorthents-Roygorge and Kim-Nunn-Ft Collins.

Brush Hollow: This parcel is primarily in the soils legend of both Kim and Manvel-Penrose-Minnequa.

Dakota Ridge: This parcel is primarily in the Kim soils legend.

Environmental Consequences/Mitigation: This review is based on reports; a field inspection was not done.

Intensive management of soils has not been conducted on the proposed acquisition parcel. It is reported as being grazed during the summer months, which would tend to be detrimental to vegetation variety and vigor. This would tend in the long term to have a less favorable benefit to the overall soil health of the land and could increase soil erosion potential and sedimentation lode. The current soil health of the land is not known but presumed to be at least marginally meeting standards. If the parcel is obtained through this exchange, it is likely that, as a minimum, grazing would be more intensely managed.

The parcels proposed for disposal have not been intensively managed for soils health. All but the Brush Hollow parcels are not easily accessed by the public and receive little recreational use. Road and trail development from motorized vehicles is limited. They would be considered in most areas of the individual parcels to be meeting the health of the land standard for soils. The Brush Hollow parcels are reported to have several trails and open areas being used for ATV and recreational travel vehicle use. The parcels are accessible by county road and in some cases by public trespass over private surface and state lands. Such trails without implementation of a more intense travel management/recreation use plan will continue to be over used, increasing the potential for soil erosion cuts during storm events.

Proposed Action: Under the Proposed Action, the management of the soils on the acquired parcel will be changed from private management to federal management under the BLM land use plan. Any use of this parcel under the BLM land use plan would take into

consideration the soil health of the land standards prior to permitting various activities that could occur. This would include activities such as travel management, grazing, and other recreational activities. Any proposed mineral operations on the parcel related to soil disturbance would not change, since the mineral ownership is already federal and, as such, would require appropriate BLM review prior to approving permit operations.

The soils on the parcels proposed for disposal would no longer be managed by the BLM. Management will be subject to the private land owners who acquire the land. Since minerals are proposed for disposal with the surface, soil disturbance would be managed by a combination of the landowner and the state agency responsible for permitting mining or oil and gas operations. Actual impacts to the health of the land are only conjecture of probable management by any new landowners.

Acquisition:

Cooper Mountain: Probable static or improving soils management by BLM

Disposal: All parcels

Short term soil management is unlikely to change. Possible subdivision of properties could occur, resulting in increased road density and road construction. This will remove more soils from functioning soils, change natural storm event water discharge, and possibly increase soil sedimentation and erosion potential. Some state and federal requirements could reduce potential impacts from subdivision.

No Action Alternative: Current soil management would remain under private surface ownership. BLM would still be involved with mineral management and soils protection related to any mineral/mining activities. Soil management would probably not change to a great extent on the other parcels with exception of the Brush Hollow parcels. If these parcels remain in BLM management, continued degradation of the vegetation and soils will require BLM to alter current minimal management on these lands to more intensive management to control vehicle and recreation use.

Finding on the Public Land Health Standard for Upland Soils:

VEGETATION (includes a finding on Standard 3)

Affected Environment: Elevation on the various properties varies from approximately 6,000 ft. to 9,000 feet. Depending on the elevation, significant plant growth usually begins in mid-to-late May or early June. Generally, the night-time temperatures in early to mid September begin to fall low enough to significantly reduce and eventually halt plant growth. Precipitation records indicate that July and August are usually 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.

Vegetation types vary from pinyon/juniper woodlands at lower elevations through ponderosa pin/gamble oak communities to spruce/fir woodlands and pockets of aspen at higher elevations and on north facing slopes. Most of the parcels are interspersed with small meadows

or large parks of open grasslands. At lower elevations the parks are dominated by blue gramma and sand dropseed. Other grass species such as western wheatgrass, three-awn, sideoats gramma, bottlebrush squirreltail, needle-and-thread grass and Indian ricegrass are also present. Shrubs and half-shrubs such as cholla, soapweed, snakeweed, rabbitbrush, currant, Gambel oak, fringed sage and mountain mahogany also exist in the area. As elevation increases grass species such as mountain muhley, prairie junegrass, pine dropseed, Parry oatgrass, Timothy, bluegrass and mountain brome grasses increase.

Most of the areas exhibit vegetative production and species composition appropriate to the area. The areas include steep, rocky hillsides that are occupied by pinyon/juniper woodlands. These woodlands are generally characterized by low amounts of herbaceous plant cover and relatively little species diversity. However, given the steep hillsides, limited potential for soil development and limited moisture retention, the current pinyon/juniper plant community is probably the most productive and diverse plant community able to occupy these sites. These areas generally meet public land health standards for the sites.

However, at some of the lower elevations, areas exist where the pinyon/juniper woodlands are encroaching on some of the sites that historically were more open grasslands or parks. These areas usually are characterized by decreasing amounts of herbaceous plant cover and diminishing species diversity. At some of the higher elevations on the offered parcel, ponderosa pine and spruce/fir vegetation is also encroaching on some of the open meadows and parks. Where these woodlands are encroaching on other vegetative communities, the areas are likely moving away from meeting vegetative and soil standards.

Environmental Consequences/Mitigation:

Proposed Action: Disposal of each of the following units would result in similar environmental impacts on vegetative resources:

Soda Springs:

Penrose Commons:

Brush Hollow:

Dakota Ridge:

BLM manages each of these parcels with the intent of meeting all applicable Public Land Health Standards, including meeting standards for plant communities. Public lands are managed to protect vegetative resources and to help achieve diverse and resilient vegetative communities, given the natural restraints of local environmental factors. Disposal of these parcels into private ownership would mean that BLM would no longer have the responsibility for ensuring that these standards are met and vegetative communities are protected. However, much of the area is dominated by steep, rocky hillsides that are currently occupied by pinyon/juniper woodlands. These woodlands are already characterized by low amounts of herbaceous plant cover and relatively little species diversity. It is unlikely that transfer of these parcels into private ownership would result in any large-scale changes in the plant communities.

Some of the disposal parcels that include more open parks, meadows or grasslands, may be more susceptible to damage to vegetative resources if transferred into private ownership. However,

the proposed action states that "The proponent's objective in the exchange is to enhance its grazing operation; utilizing the selected federal land (as well as its adjacent private land) in its livestock grazing operation. If exchanged, all of the selected federal land would be used in the pasture rotation with the proponent's private lands, much as they are today....". Therefore, it seems likely that the change to private ownership would result in few changes in the influences on the current plant communities and in little change in the current condition of the vegetative communities.

Acquisition of the Cooper Mountain parcels would generally result in positive environmental impacts to vegetative resources on the parcel. Historically, under private ownership, this parcel was utilized for livestock grazing for most of the summer growing season resulting in little or no rest and recovery periods for forage species. In areas such as Cooper Mountain, season long grazing use tends to reduce plant vigor and cover over time and to decrease the diversity in the plant communities. Acquisition of the Cooper Mountain parcel by BLM would result in changes in livestock management that would allow for sufficient rest and/or recovery periods from grazing use that would greatly benefit the condition of the plant community.

Acquisition of the Cooper Mountain parcels would also benefit vegetative resources on public land on an area-wide basis. The Royal Gorge Field Office currently manages substantial areas of public land dominated by lower elevation, pinyon/juniper woodlands. As previously stated, these woodlands may be the most productive and diverse plant community able to occupy their current sites but they are still very limited in the amount of biotic diversity and habitat that they provide. The Cooper Mountain parcel is located at a higher elevation and provides more diverse and productive vegetative communities than most of the public lands managed by BLM in the Canon City area. The exchange of lower elevation, less diverse vegetative communities and habitats for the more productive and diverse communities present on the Cooper Mountain parcels would result in a increased variety of vegetative and habitat found on public land in the Canon City area.

No Action Alternative: Under the No Action Alternative, the vegetative resources and communities on the Cooper Mountain parcel would not be subject to BLM management or land health standards. This may leave vegetative communities on this parcel somewhat more susceptible to possible damage from improper management or alternative land uses under less stringent, private management. The overall diversity of vegetative communities and habitats on public lands would not be increased in the Canon City area under this alternative. Vegetative resource on public lands on the disposal parcels would remain under BLM management and would continue to be subject to applicable standards for public land health.

Finding on the Public Land Health Standard for Plant and Animal Communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Most of the areas exhibit vegetative production and species composition appropriate to the area. The areas include steep, rocky hillsides that are occupied by pinyon/juniper woodlands. These woodlands are generally characterized by low amounts of herbaceous plant cover and relatively little species diversity. However, given the steep hillsides, limited potential for soil development and limited moisture retention, the current pinyon/juniper plant community is probably the most productive and

diverse plant community able to occupy these sites. These areas generally meet public land health standards for the sites.

However, at some of the lower elevations, areas exist where the pinyon/juniper woodlands are encroaching on some of the sites that historically were more open grasslands or parks. These areas usually are characterized by decreasing amounts of herbaceous plant cover and diminishing species diversity. At some of the higher elevations on the offered parcel, ponderosa pine and spruce/fir vegetation is also encroaching on some of the open meadows and parks. Where these woodlands are encroaching on other vegetative communities, the areas are likely moving away from meeting vegetative and soil standards. Portions of the Brush Hollow parcel are also currently being adversely impacted by unauthorized OHV use resulting in deteriorating vegetative conditions on the site.

In summary, with some exceptions mentioned above, the areas are meeting applicable Public Land health Standards for Plant Communities.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: All selected lands are in the Arkansas River watershed but are entirely upland in nature. Runoff drains during heavy precipitation via tributaries to Beaver, Brush Hollow, Eight Mile, or Six Mile Creeks; all are ephemeral. There is no perennial aquatic habitat known to exist on any parcel, only dry washes and headwater canyons as verified by field reconnaissance and through checking BLM riparian vegetation layer. The lands lie in a precipitation band of 12-14 inches annually and do not support surface water other than a few days after a storm. Elevation is low enough that snow-pack does not accumulate and drainages are not even intermittent. The acquisition parcel on Cooper Mountain is entirely different. This high elevation mountain receives considerably more precipitation, (24-28 inch zone vs. 12-14 on the selected lands) including a building snow-pack through out the winter-spring months that maintains perennial stream flow in Felch gulch and Six mile Creeks serving as those streams headwaters. No known fisheries are on the Cooper Mountain, but the streams, seeps, draws, etc. would support numerous garter snakes, chorus frogs, probable leopard frogs, toads along with a host of non-aquatic wildlife that base their food webs on the biota generated out of the aquatic habitat here. Numerous earthen stock ponds have been built on top of Cooper Mountain as well. Condition of these aquatic habitats is not inventoried at present, but observed to be in an improving state.

Environmental Consequences/Mitigation:

Proposed Action: There is no loss to public aquatic habitat by disposal of any of the offered land. There could be cumulative impact upon down gradient waters if the land use is changed from public "natural state" ownership to another form of land use such as development when entering private status. It is unlikely these lands will remain with the same type of land use in perpetuity but depending upon their fate, non-BLM streams could be impacted. The acquisition parcel on Cooper Mountain is in a relatively natural state and likely will retain that condition under BLM jurisdiction. There is without a doubt a substantial net gain in aquatic habitat coming into BLM jurisdiction. There is no mitigation necessary to off set lost aquatic

habitat as a result of the proposed action. Selection of the no action alternative could degrade Cooper Mountain's existing surrounding public lands if the mountain top is developed in the future and development sediment enters streams on public land.

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

(partial, see also Vegetation and Wildlife, Terrestrial): This proposed action does not directly cause any change to a public land aquatic habitat, aquatic wildlife population, or wetland resource. Acquisition of Cooper Mountain does bring these values into public ownership.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The exchange area consists of a variety of habitat types. The habitat type descriptions are taken from the Partners in Flight, Colorado Bird Conservation Plan and are for the Southern Rocky Mountain Physiographic Region. Information for some species, particularly ungulates, is from the Colorado Division of Wildlife. The habitat classification used for this effort is described in the Colorado Bird Conservation Plan. It identifies 13 vegetation-based categories (alpine tundra, aspen, grassland, high elevation riparian, lowland riparian, mixed conifer, mountain shrubland, pinyon-juniper, ponderosa pine, sagebrush shrubland, semi desert shrubland, spruce-fir, and wetlands). Of these 13 categories, 6 (grassland, riparian, mixed conifer, mountain shrubland, pinyon-juniper, and ponderosa pine) will be described. The others either do not occur in this portion of Colorado, occur in very small amounts and do not warrant discussion in this effort or are covered in other sections in the EA (wetlands).

HABITAT DESCRIPTION

Riparian: This habitat type consists of foothills riparian forests. The foothills riparian forests are distributed along stream systems in the foothills, lower mountains and mountain parks from 5,500-10,000 ft elevation. In some areas the riparian forest is dominated by a deciduous component, especially narrowleaf cottonwood, a variety of willow species, box elder, mountain alder and river birch. In other areas Colorado blue spruce and other coniferous trees dominate, and conifers often form a mixture with cottonwoods. The understory of these systems is typically rich, with a wide variety of shrubs and herbaceous plants. Riparian areas represent a transition zone between the aquatic ecosystem and the drier uplands. Riparian zones are well defined, unique, and highly productive areas which are sensitive to disturbance. However in most western riparian systems 75% of the bird species use riparian areas during some part of their life cycle.

Grassland: Shortgrass habitat within the exchange area is dominated by the low-growing warm-season grass blue grama. Western wheatgrass is also present, along with taller vegetation, including widespread prickly-pear cactus and cholla in the south. Mixed grass (needle-and-thread, side-oats grama) communities occur locally as does mountain grasslands dominated by Arizona fescue and mountain muhly. Grasslands are typically intermixed within other habitat types such as pinyon-juniper and ponderosa pine forests. Large expanses of open grassland habitat are rare in the planning area.

Mountain Shrubland: Mountain shrubland is typically found in the transition zone between semi-arid pinyon-juniper woodlands and the forest above. Mountain shrubland in the exchange area

consists primarily of gambel oak and other associated shrubs, including serviceberry, mountain mahogany, chokecherry, and snowberry. Gambel oak is a large shrub or small tree and is probably the best known of the mountain shrubs. The mountain shrubland habitat is widely distributed throughout the exchange area. Mountain mahogany is the most common shrub species associated with gambel oak in the planning area. It grows with and adjacent to oak, but on drier sites. Chokecherry is a large shrub common to mountain shrublands, but it rarely dominates large areas. Snowberry is a lower stature species that often grows with gambel oak. Other shrubs occurring in mountain shrubland communities (e.g., squaw currant, curl-leaf mountain mahogany, and mountain spray) do not become widespread dominants.

Pinyon-Juniper: Pinyon-juniper habitat extends over the smaller parcels to be exchanged at lower elevations in the exchange area. The pinyon-juniper habitat type is evergreen woodland situated above desert or grassland vegetation and below mountain shrub. Colorado pinyon pine is the predominate pinyon species in the area and Rocky Mountain juniper is also dominate. Proportions of juniper and pinyon within this habitat type vary greatly, and pure stands of either tree may occur. Typically, as elevation increases pinyon dominance increases, juniper density decreases, total tree density increases, and trees become larger. Depending on site variables, pinyon-juniper may range from an openly spaced savanna to a closed forest. Pinyon-juniper understories vary from completely open to quite dense, the densest understories occurring in open canopy woodland/oak communities. Soils underlying pinyon-juniper often are shallow, rocky and low in fertility.

Mixed Conifer: This forest type is found at elevations of 5,600-10,000 ft, where it is transitional between ponderosa pine and spruce-fir forests. At lower elevations, ponderosa pines are common, with Douglas-fir on north-facing slopes and in drainages. Mixed conifer gives way to spruce-fir at higher elevations. Other tree species present include blue spruce, white fir, lodgepole pine, limber pine, and bristlecone pine. The stand- and landscape-level structure of mixed conifer forests is shaped by fire, blowdown, and insect infestations (western spruce budworm, Douglas-fir bark beetle, and Douglas-fir tussock moth).

Ponderosa Pine: In Colorado, ponderosa pine is found at 5,600-9,000 ft. It is a very dry and warm forest, with less than 25 in of precipitation annually. Mature ponderosa pine forests on dry sites are open, mature trees achieve wide separation as they compete for limited soil moisture, and a grassy ground cover is maintained by frequent low-intensity fires. On more mesic sites, typical of the ponderosa pine habitat of the exchange area, ponderosa stands are dense, and closed-canopy stands are common. Ponderosa pine distribution at local scales is influenced by soil moisture and fire. Ponderosa forests are shaped primarily by fire, which affects species composition and forest structure. Ponderosa forests evolved with frequent, low-intensity fires that cleared understory vegetation and other tree species with lower fire tolerance, but left unharmed the large ponderosa pines with their thick bark. Most ponderosa forests in the exchange area are young in age.

SPECIES DESCRIPTIONS

Elk: The elk is a large cervid whose general body color is pale tan or brown. Elk are among the better studied big game mammals of North America. Once the animals ranged well eastward on the Great Plains, but today they are associated with semi-open forests or forest edges adjacent to parks, meadows, and alpine tundra. Generalist feeders, elk are both grazers and browsers. In the northern and central Rocky Mountains, grasses and shrubs compose most of the winter diet, with the former becoming of primary importance in the spring months. Forbs become increasingly important in late spring and summer, and grasses again dominate in the fall. Browse constituted over 56 percent of the winter diet. Elk breed in the fall with the peak of the rut in Colorado occurring in late September.

In the exchange area the species ranges throughout Cooper Mountain. In recent years elk have expanded their range to lower elevations and now occupy less traditional habitat's, however they would be considered rare on the parcels to be exchanged to private ownership.

Mule Deer: Mule deer are medium-sized cervids with conspicuously long ears and a coarse coat. Mule deer occupy all ecosystems in Colorado from grasslands to alpine tundra. They reach their greatest densities in shrublands on rough, broken terrain, which provide abundant browse and cover. In the Rocky Mountains, fall and winter diets of mule deer consist of browse from a variety of trees and shrubs. In the spring and summer, browse contributes 49 percent of the diet, and forbs and grasses make up about 25 percent of each. Mule deer seem to be able to survive without free water except in arid environments. Over much of Colorado the species is migratory, summering at higher elevations and moving down slope to winter range. During midwinter, deer moved to lower elevations and foraged on more protected south-facing exposures. This latter movement is timed with severity of weather. Spring and summer ranges are most typically mosaics of meadows, aspen woodlands, alpine tundra-subalpine forest edges, or montane forest edges. Montane forests and piñon-juniper woodlands with good shrub understory are often favored winter ranges.

Mule deer are found in the exchange area in all ecosystems. Highest densities are found in mountain shrub and mixed conifer communities at approximately 7500 ft elevation. Mule deer in the area frequently use wet, hay meadows on private lands, especially in the spring. Deer densities are slowly increasing after several years of below average populations.

Black Bear: A medium-sized bear, this species is Colorado's largest surviving carnivore. Color varies greatly, from black to pale brown and blond. Black bears can survive in practically any habitat that offers sufficient food and cover. In Colorado the species is most common in montane shrublands and forests, and subalpine forests at moderate elevations, especially in areas with well-developed stands of oakbrush or berry-producing shrubs such as serviceberry and choke-cherry. However, the animals also occupy habitats ranging from the edge of the alpine tundra to the lower foothills and canyon country. Black bears in Colorado probably breed from early June to perhaps mid-August. Cubs are born in the den in late January or February, while the mother is in hibernation. Litter size is two or three. Black bears are typically solitary, except for family groups (a sow and cubs), or aggregations at concentrated food resources, where bears may show a relatively high tolerance for each other. Black bear populations are difficult to estimate. Black bears are locally common in suitable habitats in the higher elevations of the exchange area, but occur in all habitat types throughout the area. Highest population densities

occur in the montane shrublands.

Mountain Lion: The mountain lion is the largest cat in the United States. Its' color is brownish to reddish brown. Colorado individuals are among the largest representatives of the species. Mountain lions inhabit most ecosystems in Colorado, including the eastern plains according to periodic reports. They are most common in rough, broken foothills and canyon country, often in association with montane forests, shrublands, and piñon-juniper woodlands. Mountain lions have the widest distribution of any mammal in the New World. In Colorado the species is still common in much of the western two-thirds of the state, although largely eliminated from the eastern plains. Mountain lions are common in the exchange area and some of the highest densities in the state are found in the Canon City area.

Raptors: A variety of raptor species occur in the exchange area. The following species have been documented as occurring regularly in the area: golden eagle, peregrine falcon, prairie falcon, red-tailed hawk, Coopers hawk, sharp-shinned hawk, goshawk and kestrel. These species rarely occur due to the small amount of suitable habitat in the planning area: ferruginous hawk, rough-legged hawk, Swainsons hawk, harrier, and osprey.

Golden eagles are common in the area and nest in suitable habitats, primarily cliffs and rock outcroppings. The large amount of canyon habitat found in Beaver Creek, Phantom Canyon, Shelf Road and along the Fourmile Creek drainage provide abundant nest sites. Peregrine breeding pairs nest on cliffs and forage over adjacent coniferous and riparian forests. Migrants and winter residents occur mostly around reservoirs, rivers, and marshes, but may also be seen in grasslands, agricultural areas, and less often in other habitats.

Prairie falcons are widespread in the area utilizing cliff and rock habitats. Red-tailed hawks are the most common broad-winged hawk found in the area at all elevations and most habitat types. The forest hawks: Coopers hawk, goshawk and sharp-shinned hawk occur in smaller numbers due to the absence of large tracks of forested landscape. Kestrels can be found at the lower elevations. Ferruginous, rough-legged, and Swainsons hawk are primarily plains species that would occasionally be seen at the southern end of the exchange area. Northern harriers and osprey are also rarely seen on BLM lands in the area.

Merriam's Turkey: The Merriam's turkey is a fairly common resident in foothills and mesas of southern Colorado, primarily from Montezuma County east to Archuleta County and from Las Animas County east to southwestern Baca County and north to Fremont County. The Merriam's turkey is very common in the exchange area in suitable habitat. Merriam's are found primarily in ponderosa pine forests with an understory of gambel oak. Tall pines are used during all seasons for roosting. In the planning area it is often found in other foothill shrublands (mountain mahogany), pinyon-juniper woodlands, foothill riparian forests, and in agricultural areas. Turkeys are found in large flocks during the winter months in the Garden Park area feeding in agricultural areas, in the Beaver Creek State Wildlife area, and along Fourmile Creek west of Marigold. During the spring birds disperse to habitats adjacent to the winter ranges and can be found throughout the planning area, except at higher elevations. The Cooper mountain parcel contains excellent turkey habitat and birds are common there, especially in the spring and summer months. An occasional turkey could be found on the parcels to be exchanged but it

would be uncommon.

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition:

Cooper Mountain: Acquisition of this parcel of land is significant from a wildlife perspective because it consolidates a large block of public land. It removes an inholding of private land that had the potential to further fragment wildlife habitat if it had been developed. This type of exchange benefits all wildlife species, especially those that are sensitive to human impacts.

Disposal: Soda Springs, Penrose Commons, Brush Hollow, and Dakota Ridge all occur at lower elevations in the pinyon-juniper habitat. They are smaller isolated parcels of public land surrounded by subdivisions and other developments. While these parcels are locally important to some wildlife species, the value of the exchange to wildlife is in the acquisition of the Cooper mountain parcel. This acquisition outweighs the impacts to those species that utilize the disposal parcels. While BLM cannot anticipate the future uses of the disposal parcels, the topography of these areas would suggest that they would remain open space.

No Action Alternative: This exchange provides a good opportunity to acquire excellent habitat for elk, mule deer, black bear, mountain lion and Merriam's turkey. It is an opportunity to preserve quality habitat, provide habitat connectivity and increase core habitat in an area that potentially could have been developed into home sites. The habitat that is being lost is of less value to wildlife since it is similar to much of the adjacent habitat. In addition it is habitat that is already fragmented by surrounding land uses. Completion of this exchange is a positive move towards wildlife habitat conservation.

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

(partial, see also Vegetation and Wildlife, Aquatic): Completion of this exchange will improve public land health standards for plant and animal communities by bringing into public ownership a large block of land that is critical for species conservation.

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

RANGE MANAGMENT

Affected Environment:

Acquisition Parcel: The Cooper Mountain Acquisition parcel is currently surrounded by BLM land on 3 sides and state land on the east. Adjacent BLM grazing allotments are currently authorized for dormant season (fall or winter) grazing use. The Cooper Mountain parcel is currently designated as base property for a BLM grazing permit for the Phantom Canyon Allotment. Livestock owned by the (Dick) Chess family have historically grazed the Cooper Mountain parcel during the summer and fall and on other, lower elevation private property and the Phantom Canyon Allotment during the winter and spring.

Historically there have been problems caused by livestock drifting off of the Cooper Mountain parcel onto adjacent public land within the Phantom Canyon or Oil Well Flats grazing allotments during the summer when grazing use on the Phantom Canyon or Oil Well Flats allotments is not desirable and is unauthorized. Problems have occurred specifically when cattle have drifted onto public land along Eightmile Creek within the Phantom Canyon Allotment during the summer. Grazing use along the riparian during the hotter seasons of the year can be particularly damaging to riparian conditions and vegetation resources during this period.

Disposal Parcels: The parcels identified for disposal are included in the following allotments:

<u>Disposal Parcel</u>	<u>Allotment</u>	<u>Permittee</u>
Soda Springs:	South Beaver School #5019	Phil & Sandra Thomas #500053
Penrose Commons: (T18S, R69W, S. 11, 14)	Unallotted	Unallotted
Penrose Commons: (T18S, R68W, S. 7) (T18S, R69W, S.1, 12)	Soda Mountain #15032	Steve Dowd #500083
Brush Hollow:	Brush Hollow # 5183	Joe & Toni Shenise #505410
Dakota Ridge: (N½ of section 17)	Sixmile Park #5223	Thorson Estate #505384
Dakota Ridge:	Sixmile #15011	Unallotted

(S½ of section 17)

Grazing use on the allotments is currently scheduled as follows:

<u>Allotment</u>	<u>Number</u>	<u>Kind</u>	<u>Grazing Period</u>		<u>% Public Land</u>	<u>Type Use</u>	<u>AUMs</u>
			<u>Begin</u>	<u>End</u>			
S. Beaver School	4	Cattle	3/01	2/28	100%	Custodial	48
Soda Mountain	30	Cattle	9/15	4/15	100%	Active	210
Brush Hollow	2	Cattle	3/01	2/28	100%	Custodial	10
	2	Horse	3/01	2/28	100%	Custodial	10
Sixmile Park	23	Cattle	11/1	3/31	47%	Active	54
Sixmile	48	Cattle	11/1	5/31	19%	Active	64

Environmental Consequences/Mitigation:

Proposed Action:

Acquisition: Cooper Mountain: Under the proposed action, the Cooper Mountain parcel would become public land and therefore could no longer serve as base property for the Phantom Canyon grazing allotment. BLM grazing regulations allow for the voluntary transfer of grazing preference for the Phantom Canyon Allotment from the Cooper Mountain parcel to other private land in the area. Any application for transfer must be made prior to conveyance of the land to public ownership and is subject to approval by BLM. Furthermore, any other potential property that the permit may be transferred too must meet the definition of base property contained in federal grazing regulations.

The Royal Gorge Resource Management Plan Record of Decision (RMP/ ROD) issued in May 1996 specifies that an environmental assessment (EA) should be prepared before a term permit is issued for acquired lands outside an existing allotment boundary. The RMP also indicates that temporary livestock grazing may be allowed, pending an EA on completion of acquisition of these lands.

While some type of livestock grazing may occur on the Cooper Mountain parcel under the proposed decision, it is unlikely that the parcel would continue to be grazed using the historical summer long grazing approach. Season long, summer grazing generally allows little or no opportunity for rest and/or recovery periods for many forage species. This may result in deteriorating forage conditions and production over time. BLM does not typically employ this type of management on high priority areas (such as the Cooper Mountain parcel) that contain significant resource values or concerns. Future livestock management on the parcel under BLM guidelines would strive to provide proper rest and recovery periods for important forage species. It is likely that the parcel would be grazed for only a portion of the growing season to allow for proper rest and recovery periods, or during the fall when most forage growth has been drastically reduced or ceased. Historic livestock numbers and/or utilization levels may also be adjusted under the proposed acquisition of the Cooper Mountain parcel.

Livestock drift problems from the Cooper Mountain parcel would likely be reduced under the proposed action. If, under BLM management, the Cooper Mountain parcel was grazed for only a portion of the summer, the shorter grazing season would result in less opportunity for cattle to drift onto adjacent allotments. If the parcel were grazed during the fall, any livestock drift onto adjacent allotments or the riparian area along Eightmile Creek would occur during a period when riparian vegetation is already dormant and less susceptible to damage.

Disposal: Soda Springs, Penrose Commons, Brush Hollow, Dakota Ridge: When public lands included under a BLM grazing permit or lease are exchanged, Federal grazing regulations specify the following:

“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....”

BLM regulations also state:

“When public lands are disposed of or devoted to a public purpose which precludes livestock grazing, the permittees and lessees shall be given 2 years' prior notification..... before their grazing permit or grazing lease and grazing preference may be canceled. A permittee or lessee may unconditionally waive the 2-year prior notification. Such a waiver shall not prejudice the permittee's or lessee's right to reasonable compensation for.... the fair market value of his or her interest in authorized permanent range improvements located on these public lands....”

Soda Springs, Brush Hollow Disposal Parcels: These parcels include all of the public land within the South Beaver School and the Brush Hollow Allotments. All of the public land included in these allotments would be disposed of under the proposed action and no further public grazing authorization for these parcels is applicable. Both permittees on the allotments have signed a waiver of their 2-year prior notification. There are no authorized permanent range improvements on public land on the South Beaver School or the Brush Hollow allotments for which a permittee may be eligible for compensation.

Dakota Ridge: This parcel includes portions (but not all) of the public land included in each of the Sixmile Park and Sixmile Allotments. The Dakota Ridge parcel consists almost exclusively of rough, rocky and steep terrain. This parcel contains little or ~~none of the forage available for livestock use on either allotment. Almost all of the~~ authorized grazing use on public land on these allotments occurs on more productive portions of the allotments that would be retained in public ownership. Therefore, no adjustment in the overall amount of grazing use on these allotments would occur under the proposed action. The current permittee on the Sixmile Park Allotment has signed a waiver of the 2-year prior notification. Since there is no current grazing authorization for grazing use on the Sixmile

Allotment, no notification or waiver is necessary for this allotment. There are no authorized permanent range improvements on public land on the Sixmile Park or Sixmile allotments for which a permittee may be eligible for compensation.

Penrose Commons (T18S, R69W, S. 11, 14): Since there is no current grazing authorization for grazing use on the unallotted public land in sections 11 & 14 of T18S, R69W, no notification or waiver is necessary for this parcel. There are no authorized permanent range improvements on public land on this parcel for which any permittee may be eligible to be compensated for.

Penrose Commons (T18S, R68W, S. 7; T18S, R69W, S.1, 12): This disposal parcels includes a portion, but not all, of the public land comprising the Soda Mountain Allotment. The allotment currently consists of 1759 acres of public land. Approximately 554 acres of the allotments would be disposed of under the proposed action. The proposed action would leave the Soda Mountain Allotment consisting of approximately 1205 acres of public land. The 554 acres being conveyed to private ownership under the proposed action contains approximately 65 AUMs of available forage*. After the change in public land acreage under the proposed action, the Soda Mountain Allotment would be reduced by 65 AUMs and scheduled as follows:

<u>Allotment</u>	<u>Number</u>	<u>Kind</u>	<u>Grazing Period</u>		<u>% Public Land</u>	<u>Type</u>	<u>AUMs</u>
			<u>Begin</u>	<u>End</u>			
Soda Mountain	21	Cattle	9/15	4/15	100%	Active	145**

* 65 AUMs based on the following calculations:

10 ac. of Loamy Foothills Range Site w/ an estimated carrying capacity of 5.3 ac./AUM = app. 2 AUMs
 + 544 ac. of Pinyon/juniper range site w/ an estimated carrying capacity of 8.7 ac./AUM = app 63 AUMs
 65 AUMs

** 145 AUMs based on the following calculations:

85 ac. of Loamy Foothills Range Site w/ an estimated carrying capacity of 5.3 ac./AUM = app. 16 AUMs
 + 1120 ac. of Pinyon/juniper range site w/ an estimated carrying capacity of 8.7 ac./AUM = app 129 AUMs
 145 AUMs

The portion of the Soda Mountain allotment included in the Penrose Commons disposal parcel contains two authorized range improvements: a portion of the Soda Mountain Fence (Range Improvement No. 4118) and the Adkins Reservoirs #2 (Range Improvement No. 0124). BLM records show that there was no permittee contribution into construction of either of these projects. Therefore, the permittee is not eligible for any compensation related to the disposal of these improvements. The current permittee on the Soda Mountain Allotment has signed a waiver of their 2-year prior notification.

No Action Alternative: There would be no change to current livestock management on either the acquisition parcel or the disposal parcels. Problems from livestock drift off of the Cooper Mountain parcel would not be expected to improve.

REALTY AUTHORIZATIONS

Affected Environment: The selected Federal lands are encumbered by a right-of-way for an electrical transmission line and accompanying access road reserved to the Department of Energy, Western Area Power Administration (WAPA), by right-of-way Colorado 0128242, under the Act of October 21, 1976 (43 U.S.C. 1767), across the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of section 14, T. 18 S., R. 69 W., Sixth Principal Meridian, Colorado. A reciprocal road easement, COC 69295FD, granted to Summit Pressed Brick and Tile Company under the authority of Section 205 of the Federal Land Policy and Management Act of 1976 as amended (43 U.S.C. 1715), is located across the W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ of section 30, T. 17 S., R. 68 W., Sixth Principal Meridian, Colorado. In addition, there are two Fremont County roads recognized under Revised Statute 2477 (43 U.S.C. 932), by right-of-way Colorado 44142. They are Fremont County Road No. 132 across the W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ of section 30, T. 17 S., R. 68 W., and Fremont County Road No. 42 across the W $\frac{1}{2}$ SE $\frac{1}{4}$ of section 24, T. 18 S., R. 69 W., all in the Sixth Principal Meridian, Colorado. The WAPA right-of-way and Fremont County Road No. 42 are all encumbrances on surrounding private lands owned by the proponent. The offered private lands are not encumbered by any land use authorizations of record.

Environmental Consequences/Mitigation:

Proposed Action: The patent for the selected Federal lands will be issued subject to valid existing rights including the rights-of-way for the WAPA facility and Fremont County roads and, the reciprocal road easement granted to Summit Pressed Brick and Tile Company. Taking into consideration that the WAPA facility and County Road No. 42 are also encumbrances on the proponents surrounding private land, the disposal of the public lands should have little or no effect on these authorized uses.

No Action alternative: Under the no action alternative there would be no potential impact to the rights-of-way for the WAPA facility or Fremont County roads.

RECREATION

Affected Environment: The Proposed Action includes public lands within the Gold Belt Special Recreation Management Area (SRMA). The Royal Gorge RMP directs the management of the SRMA as follows :

A variety of recreational opportunities will be provided and settings will be maintained. Emphasis on maintaining scenic and historical integrity will be emphasized. Facility development will focus on historical and natural resource interpretation, public health, and other visitor needs and will reduce user conflict.

The Proposed Action also affects certain public lands along the Gold Belt Tour National Scenic Byway. The Gold Belt Tour was designated as a BLM Back Country Byway and Colorado Scenic and Historic Byway in 1989. In 2000, it was designated a National Scenic Byway. These designations reflect the outstanding historic, scenic, geological, and recreational values found on public and private lands along the Gold Belt Tour.

The RMP also identified Recreation Opportunity Spectrum (ROS) classes for the public lands affected by the Proposed Action. The ROS is a framework for separating and defining classes of

outdoor recreation opportunity environments. It is a tool to assist BLM in planning for recreation management. The parcels identified for disposal are in the Roaded Natural and Semi-Primitive Motorized classes.

Acquisition:

Cooper Mountain: Currently, recreation use on this parcel is limited because it is in private ownership. The parcel is surrounded by public land that is in the Semi-Primitive Non-Motorized class.

Disposal:

Soda Springs: Recreation use on this parcel is limited due to the lack of a public easement or public right-of-way.

Penrose Commons: This area is currently used primarily for motorized recreation. A large network of trails for motorized use lies just to the east of this parcel on adjacent public lands. Some of these trails extend into this parcel.

Brush Hollow: The 160 acre parcel is not legally accessible to the public; nevertheless, it is used for motorized recreation. The 80 acre parcel is legally accessible and heavily used for motorized recreation.

Dakota Ridge: Recreation use on this parcel is very limited due to the lack of public access from Phantom Canyon Road. This parcel is adjacent to the Gold Belt Tour National Scenic Byway and contributes to the recreation setting and character of this part of the Byway.

Environmental Consequences/Mitigation:

Proposed Action: In general, the Proposed Action would enhance opportunities for semi-primitive, non-motorized recreation on 2,242 acres of public land. It would decrease opportunities for motorized recreation on approximately 1,000 acres of public land. It would increase the total acreage available for recreation with legal public access by approximately 1,200 acres.

Acquisition:

Cooper Mountain: The Proposed Action would provide additional opportunities for semi-primitive, non-motorized recreation including hiking, hunting, and horse riding. With clearing and reconstruction of existing roads and trails and some new trail construction, a 12-mile long trail for hiking and horse riding would be extended across the Cooper Mountain parcel from Oil Well Flats to Phantom Canyon. Motorized uses by the public would not be permitted. The Proposed Action would protect the scenic quality of Cooper Mountain, thereby, enhancing the recreation character and setting of the Gold Belt Tour National Scenic Byway in this area.

Disposal:

Soda Springs: The Proposed Action would not affect recreation because there is no legal public access to this parcel.

Penrose Commons: Motorized recreation use would be displaced from approximately three miles of designated roads and trails, and 914 acres of public lands would no longer be available for recreation in this area.

Brush Hollow: Motorized recreation use (with legal public access) would be displaced from 80 acres. Motorized use would also be displaced from the 160 acre parcel but this use is occurring in trespass because there is no legal public access to this area.

Dakota Ridge: The Proposed Action would not affect recreation use on this parcel. However, Dakota Ridge is a prominent landform along this portion of the Gold Belt Tour National Scenic Byway, and this parcel does contribute to the recreation setting and character of this part of the Byway. Because of this, the Proposed Action would adversely affect the recreation setting and character here if this parcel is developed (home sites, roads, etc.).

No Action Alternative:

Cooper Mountain: This parcel would remain unavailable for public use. Opportunities for semi-primitive, non-motorized recreation would not be enhanced. The scenic quality of Cooper Mountain would not be protected. If this parcel is developed while under private ownership, it would adversely impact the recreation character and setting of the Gold Belt Tour National Scenic Byway in this area.

Soda Springs : This parcel would remain unavailable for recreation use due to the lack of legal public access.

Penrose Commons : Three miles of designated motorized travel routes and 914 acres of public lands would remain available for recreation uses.

Brush Hollow : Eighty acres of public lands would remain available for motorized recreation use. Impacts to vegetation and soils caused by this use would need to be addressed. Trespass on private and State lands to access recreation opportunities on adjoining public land would continue to be a problem on 160 acres.

Dakota Ridge : The parcel would remain unavailable for recreation use due to the lack of legal public access. Its natural scenic qualities would continue to contribute to the recreation setting and character of this part of the Gold Belt Tour National Scenic Byway.

TRANSPORTATION AND ACCESS

Affected Environment: The proposed action involves parcels of BLM and private lands that were analyzed in the Environmental Assessment (EA) for the Gold Belt Travel Management Plan (GBTMP).

When the EA for the GBTMP was started in January, 2002, it was anticipated that the proposed land exchange would be executed prior to the completion of the TMP. Consequently, decisions were made in the GBTMP that established designated travel routes on both the acquisition and disposal lands that are included in this proposal. The travel designations that were established for the disposal lands were implemented in August, 2004. The designations affecting the acquisition lands, however, could not be implemented due to the fact that the proposed exchange had not been completed.

Cooper Mountain: The Cooper Mountain parcel is completely surrounded by BLM lands. Access to the parcel is limited by the rugged and steep terrain of the BLM lands surrounding it. Several very old roads and trails that once provided access to the parcel from Phantom Canyon, Oil Well Flats, and Indian Springs are no longer suitable for motorized uses due to erosion and blockages caused by fallen timber and the growth of trees and brush. The only motorized access route to the parcel is via a privately-controlled four-wheel drive road that originates from the Shoemaker Ranch several miles northwest of the property. BLM has an easement to use this road for administrative access, only. This road and other roads within the parcel were built and used by a previous landowner for logging and ranching operations. The landowner has never allowed the public to use these roads for entering or crossing the parcel.

Soda Springs: The Soda Springs parcel is completely surrounded by private lands that have been subdivided into residential home sites. Due to the lack of any legal public easement or right-of-way, the lands are not available for public use.

Penrose Commons: The Penrose Commons parcel adjoins BLM lands that are managed to provide opportunities for motorized recreation. Most of the routes that were designated for motorized uses in the GBTMP, however, are located on BLM lands that lay to the east of the proposed exchange parcel. Of the thirty-three miles of routes that were designated for motorized uses, approximately three miles are located on the proposed exchange parcel.

Brush Hollow: The Brush Hollow lands consist of two separate parcels that are surrounded by private and State lands. Public access to the eastern 80 acre parcel is provided by County Road F-42 that leads directly into the parcel. Legal public access to the western 160 acre parcel does not exist. The public, however, routinely trespasses through State and private lands to access it. Both parcels are heavily impacted by off-road vehicle activities and are criss-crossed by user created trails. Illegal dumping is also a serious problem in this area. Due to the difficulties of enforcing off-road vehicle uses, and in view of the the pending disposal of these lands, no travel routes on these parcels were designated in the GBTMP.

Dakota Ridge: The Dakota Ridge parcel is completely surrounded by private lands that are not accessible due to the lack of a legal public easement or right-of-way.

Environmental Consequences/Mitigation:

Proposed Action:

The proposed action would result in a net gain of 1,128.34 acres of public lands with legal public access that would be available for public use. Under the proposed action, three miles of designated motorized routes would be lost (Penrose Commons) and four miles of foot and horse trails would be gained (Cooper Mountain).

Acquisition:

Cooper Mountain: Under BLM ownership the 2,242 acres included in the Cooper Mountain parcel would be available for public use and the travel management designations that were made in the GBTMP would be implemented. Access to the parcel would be provided by existing roads and trails that would be limited to foot and horse travel. Some clearing and reconstruction of the existing roads and trails would be required and some new trail construction would also be needed. The completed route would extend across the Cooper Mountain parcel from Oil Well Flats to Phantom Canyon; providing a 12-mile long trail for hiking and horse riding. Motorized uses of the existing roads would only be permitted by authorized personnel for administrative purposes.

Disposal:

Soda Springs: Under current BLM ownership only 20 acres of the Soda Springs parcel that are adjacent to County Road 132 are legally accessible and available for public use. The other 450 acres are not accessible due to the lack of public easements or public right-of-ways. Consequently, disposal of these lands would result in a loss of 20 acres of public lands that would no longer be available for public use.

Penrose Commons: Under current BLM ownership the Penrose Commons parcel is accessible to the public. Disposal of the parcel would displace current motorized recreation uses from three miles of designated roads and trails and access to 914 acres of public lands would no longer be available.

Brush Hollow: Under current BLM ownership the western 160 acre parcel is not legally accessible to the public. Therefore, disposal of western parcel would not displace any legal uses from these lands nor result in a loss of public access to the affected public lands. Disposal of the eastern parcel, however, would displace current motorized uses from the area and result in the loss of public access to 80 acres of public lands.

Dakota Ridge: Under current BLM ownership the Dakota Ridge parcel is not accessible due to the lack of a public easement or public right-of-way. Consequently, disposal of these lands would have no impact on transportation or access to public lands.

No Action Alternative:

Cooper Mountain: Under continued private ownership the Cooper Mountain parcel would remain unavailable for public use. Decisions made in the GBTMP that would establish a 12 mile long foot and horse trail connecting Oil Well Flats and Phantom Canyon could not be fully implemented.

Soda Springs: Under continued BLM ownership 20 acres of the Soda Springs parcel would continue to be available public use and 450 acres would not be available due to the lack of legal public access.

Penrose Commons: Under continued BLM ownership the 914 acres of public lands and 3 miles of designated motorized travel routes included in the Penrose Commons parcel would remain available for public use.

Brush Hollow: Under continued BLM ownership the 80 acres of public lands included in the eastern parcel would remain available for public use. Control of impacts to vegetation and soils caused by off-road vehicle activities would continue to be an administrative problem. Preventing trespass through the private and State lands that adjoin the western 160 acres would continue to be an issue.

Dakota Ridge: Under continued BLM ownership the Dakota Ridge parcel would remain unavailable for public use due to the lack of legal public access.

FOREST MANAGEMENT

Affected Environment: Substantial changes have taken place in the forest condition within the proposed land exchange areas over the past 120 years. These areas are dominated by ponderosa pine, Douglas-fir, white-fir, pinyon pine, and Rocky Mountain juniper. The tree species found are hardy drought tolerant trees that are well suited to the landscape.

The dominant forest type within the area is pinyon pine and Rocky Mountain juniper. These forests are commonly referred to as pinyon-juniper woodlands. It is believed that the pinyon-juniper woodlands were historically restricted to sites that did not readily burn, mainly the sites with shallow soils and rocky ridges. Today many of the more productive sites have become encroached and overgrown with small pinyon and juniper trees. This is due to the lack of disturbance, mainly fire suppression, and dense growth habit of the pinyon/juniper woodlands. There are too many trees per acre competing for limited nutrients, water and sunlight. These dense pinyon-juniper stands are highly susceptible to an uncontrollable crown fire. There are probably a greater proportion of the pinyon and juniper trees found throughout much of the project area today than would have existed under historical disturbance regimes.

A second forest type within the area is ponderosa pine. It is found in pure stands or mixed with other species including but Douglas-fir, white fir, pinyon pine, and Rocky Mountain juniper. Ponderosa pine trees can typically live for 300 to 600 years. Currently, the trees in the project area average around 100-120 years old, so these forests are relatively young. Ponderosa pine survives well on south facing slopes due to its drought tolerance and deep rooting characteristic. Ponderosa pine has many fire-resistant characteristics including thick bark, high crown base heights, thick bud scales, and the tendency for the meristems to be shielded by needles. The historic ponderosa pine fire regime can be characterized as a low intensity surface fire and mixed severity fire regime, with moderately frequent (0-35 yr) return intervals. These frequent surface fires would have created openings in the forest canopy, maintained a variety of tree size and age classes, and kept tree densities low. Ponderosa pine is considered the climax species on droughty soils within the project area. Natural disturbances such as wildfire, insect infestations, and disease outbreaks would often favor the shade intolerant ponderosa pine over more shade tolerant species such as Douglas-fir.

Mixed-conifer stands consisting mainly of Douglas-fir, white fir and ponderosa pine are the next most common forest type within the area. This forest type typically occurs on the moister aspects in the project area, including the steeper north and east facing slopes. Douglas-fir is a long-lived tree that typically reaches 400 years old. It is considered climax species in the absence of disturbance on the moister sites in the project area. Douglas-fir is also well adapted to fire with thick bark, and deep roots. The historical fire regime typically kept this forest type to moist north-facing slopes and was usually low intensity fires.

Environmental Consequences/Mitigation: An increase in public acres will mean an increase in forested public lands. Consolidating public lands increases resource management opportunities.

Proposed Action:

Acquisition:

Cooper Mountain: Limited legal access, limits the public's ability to collect forest products and forest management opportunities. There are some older ponderosa pine trees in this area that survive the settlement of the area due to the limited access and rough terrain.

Disposal:

Soda Springs: No legal access, limiting public gathering of forest products and forest management opportunities.

Penrose Commons: Partial loss of traditional Christmas tree harvesting area with legal access.

Brush Hollow: No legal access, limiting public gathering of forest products and forest management opportunities.

Dakota Ridge: No legal access, limiting public gathering of forest products and forest management opportunities

No Action Alternative: This alternative would result in the loss of an opportunity to consolidate public lands, which would result in a loss of future resource and forest management opportunities

VISUAL RESOURCE MANAGEMENT

Affected Environment: Visual Resource Management (VRM) is a classification system for identifying and characterizing visual resource values. VRM classes were assigned in the RMP for all BLM-administered lands in the Royal Gorge Field Office. Any projects of on-going management on public lands should meet the applicable VRM class objectives. Approximately 1364 acres of the public lands identified for disposal are VRM Class III; VRM Class III areas are moderately valued for visual resources. Management activities under VRM Class III may attract the attention, but should not dominate the view of the casual observer. Approximately 540 acres of the lands identified for disposal are VRM Class II; VRM Class II areas are highly valued for visual resources. Management activities under VRM Class II may be seen, but should not attract the attention of the casual observer. The VRM Class II areas are located on public lands within a corridor (approximately one mile wide) along the county roads that make up the Gold Belt Tour National Scenic Byway and along Fremont County Road 132 (the primary access road to the trailheads for Beaver Creek State Wildlife Area/Wilderness Study Area). The public lands surrounding the acquisition (Cooper Mountain) are VRM class III.

Environmental Consequences/Mitigation:

Proposed Action: In general, the Proposed Action would enhance BLM's capability to effectively manage visual resources and protect a large scenic view shed that is highly visible from several areas of the Gold Belt Tour National Scenic Byway.

Acquisition:

Cooper Mountain: The Cooper Mountain parcel in combination with the surrounding public lands forms an expansive scenic landscape that is visible from both Garden Park/Shelf Road and Phantom Canyon Road. These roads are part of the Gold Belt Tour National Scenic Byway. The Proposed Action would protect this scenic landscape from the visual impacts that would likely result from the development of residential subdivisions (access roads, structures). The public lands acquired under the Proposed Action would be managed for VRM Class III objectives.

Disposal:

Soda Springs: Approximately 300 acres in the Soda Springs parcel are VRM Class II (highly valued for visual resources) because they lie within the scenic corridor along Fremont County Road 132 that provides access to Beaver Creek Wilderness Study Area/State Wildlife Area. The remainder of lands in this parcel are VRM Class III. The public land in this area is surrounded by large tracts of private land that have been

subdivided into homesites. This situation severely limits BLM's capability to effectively manage visual resources in this area.

Penrose Commons: Approximately 80 acres in the Penrose Commons parcel are VRM Class II (highly valued for visual resources) because they lie within the scenic corridor along Fremont County Road 132 that provides access to Beaver Creek Wilderness Study Area/State Wildlife Area. The remainder of lands in this parcel are VRM Class III. The public land in this area is surrounded by large tracts of private land that have been subdivided into homesites. This situation limits BLM's capability to effectively manage visual resources in this area.

Brush Hollow: This parcel is managed for VRM Class III objectives. It is a small, isolated parcel, and this severely limits BLM's capability to effectively manage visual resources.

Dakota Ridge: Approximately 180 acres in the Dakota Ridge parcel are VRM Class II (highly valued for visual resources). The VRM Class II area is located on public lands within a corridor (approximately 1 mile wide) along Phantom Canyon Road, part of the Gold Belt Tour National Scenic Byway. The remainder of the parcel is VRM Class III. Dakota Ridge is a prominent visual feature along this segment of the Byway. Disposal of this parcel would limit BLM's ability to manage visual resources along this segment of the Byway.

No Action Alternative: Under the No Action Alternative, BLM's ability to effectively manage visual resources would decline on the Soda Springs, Penrose Commons, and Brush Hollow parcels because of continued development on and encroachment from surrounding private land.

The Dakota Ridge parcel would remain under BLM management and be managed to retain the existing character of the landscape in this area of the Gold Belt Tour National Scenic Byway.

BLM would lose the opportunity to effectively manage visual resources and protect a large scenic landscape (Cooper Mountain) from development. It is likely that the visual resources in this area of the Gold Belt Tour National Scenic Byway would be adversely impacted by development of the Cooper Mountain parcel.

GEOLOGY

Affected Environment: The proposed action involves parcels of BLM and private lands that were analyzed in the Mineral Potential Determination prepared by Phil Howland and Modifications to the Mineral Potential Determination prepared by Dan Grenard for the Cooper Mountain Land Exchange.

The offered private lands are primarily in a Precambrian terrain. The selected federal lands are located along a Dakota hogback and are adjacent to the mountain uplift.

Environmental Consequences/ Mitigation: The offered private lands on Cooper Mountain have a low to moderate potential for the discovery of pegmatites. The selected federal lands have a moderate to high potential for the discovery of building stone and clay. The major potential appears to be simply surface stone from the Dakota Formation which is located on all parcels designated for disposal, but there are limited quantities of this rock considering terrain and existing subdivisions. There has been no gypsum development in the Ralston Creek deposits for many years and those deposits are small and generally isolated.

There is a moderate to high potential for the discovery of mineral deposits on the selected federal lands (such as surface stone) but the interest and marketability of those minerals is relatively low. It is recommended that the exchange go forward as proposed with all mineral estate being exchanged resulting in combined surface and mineral estates under both the future federal and future private lands.

Proposed Action:

Acquisition: The acquisition of the offered Cooper Mountain private lands will result in the acquisition of approximately 400 acres of new mineral estate and the re-uniting of new surface and existing federal mineral estate. The offered private lands will become federal surface and mineral estate which will become easy to manage from a future mineral development standpoint. Conversely, the private lands will become fee lands in their entirety.

Disposal:

Soda Springs: The Soda Springs parcels are located on Dakota, Plainview, Morrison and Ralston Creek Formation sedimentary rock outcrops and contains one inactive Uranium prospect. There is no current mining activity on the Soda Springs parcel.

Penrose Commons: The Penrose Commons parcels are located on sedimentary rock outcrops consisting of the Dakota, Plainview, Morrison, Ralston Creek and Lykins Formations. There are no active mining permits on the Penrose Commons parcel.

Brush Hollow: The Brush Hollow parcel is located on sedimentary rock outcrops consisting of the Carlile Shale, Greenhorn Limestone, Graneros Shale, and Fort Hayes Limestone. There are no active mining permits on the Brush Hollow parcel.

Dakota Ridge: The Dakota Ridge parcel is located on sedimentary rock outcrops consisting of the Dakota, Plainview, Morrison and Ralston Creek Formations. There are no active mining permits on the Dakota Ridge parcel. Nearby claystone quarries are located closest to this parcel. The clay deposits in these areas are on relatively steep slopes and no mining has occurred on those deposits for many years. This is because the historic underground mining methods utilized on these deposits would be non-economic and surface mining costs would be high particularly when considering the relatively low

thickness of the underlying clay deposits. There is some mining of these deposits in the general area but those deposits are found on more gently dipping or flat lying deposits.

PALEONTOLOGY

Affected Environment: The proposed action involves parcels of BLM and private lands that were analyzed in the Mineral Potential Determination prepared by Phil Howland and Modifications to the Paleontologic Evaluation prepared by Melissa Smeins for the Cooper Mountain Land Exchange.

The offered private lands are primarily in a Precambrian terrain which is not likely to contain paleontological resources. The selected federal lands are located along a Dakota hogback which consists of fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence.

Environmental Consequences/ Mitigation: A limited paleontological survey of Morrison and Plainview/Dakota Formation exposures on selected Federal lands was conducted on August 23, 2004 by Melissa J. Fallin as per the request of Phil Howland's Mineral Potential Determination for the Bureau of Land Management Proposal known as the Cooper Mountain Land Exchange, September 10, 2002.

The Jurassic Morrison Formation and the Cretaceous Dakota and Plainview Formation exposures within the Federal public lands selected for the Cooper Mountain Land Exchange were not found to be paleontologically significant.

Morrison Formation exposures in the nearby Garden Park Fossil Area are classified as class 4 and 5 exposures according to the Paleontology Classification for the Royal Gorge Field Office. Class 5 exposures are uncovered outcrops of the Morrison Formation that have produced vertebrate fossil material. Class 4 exposures are outcrops of the Morrison Formation that are covered with vegetation or are in some way at a reduced risk for either natural or human caused degradation. Morrison Exposures within the Federal parcels selected for exchange are classified as Class 4 exposures; they are covered with dense vegetation and are located on steep cliffs that are not readily accessible to human degradation (see photos in Modifications to the Paleontologic Evaluation).

Dakota and Plainview exposures similar to those found at Skyline drive (see Original Cooper Mountain Land Exchange report) are classified as Class 5 and 4 exposures because they are not covered with vegetation and are readily accessible to human degradation and natural weathering. While these exposures of Dakota/ Plainview sandstones within the selected federal parcels potentially contain dinosaur tracks they are protected by thick vegetative cover and are not readily accessible to human or natural degradation.

Proposed Action:

Acquisition:

Cooper Mountain: The Cooper Mountain parcel contains primarily Precambrian geologic terrain which has a paleontological significance of 1. Class 1 paleontological units are geologic formations that are not likely to contain recognizable fossil remains.

Disposal:

Soda Springs: The Soda Springs parcels are located on Dakota, Plainview, and Morrison and Ralston Creek Formation sedimentary rock outcrops. These are class 3 paleontological units which are fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence.

Penrose Commons: The Penrose Commons parcels are located on sedimentary rock outcrops consisting of the Dakota, Plainview, Morrison, Ralston Creek and Lykins Formations. These are class 3 and class 4 paleontological units. Class 3 paleontological units are fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence. Class 4 paleontological units are Class 5 units which have the highest paleontological significance that have lowered risks of human-caused adverse impacts and/or lowered risk of natural degradation due to thick vegetative cover in this area.

Brush Hollow: The Brush Hollow parcel is located on sedimentary rock outcrops consisting of the Carlile Shale, Greenhorn Limestone, Graneros Shale, and Fort Hayes Limestone. These are class 3 and class 4 paleontological units. Class 3 paleontological units are fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence. Class 4 paleontological units are Class 5 units which have the highest paleontological significance that have lowered risks of human-caused adverse impacts and/or lowered risk of natural degradation due to thick vegetative cover in this area.

Dakota Ridge: The Dakota Ridge parcel is located on sedimentary rock outcrops consisting of the Dakota, Plainview, Morrison and Ralston Creek Formations. These are class 3 and class 4 paleontological units. Class 3 paleontological units are fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence. Class 4 paleontological units are Class 5 units which have the highest paleontological significance that have lowered risks of human-caused adverse impacts and/or lowered risk of natural degradation due to thick vegetative cover in this area.

CUMULATIVE IMPACTS SUMMARY: The geographic area for analyzing cumulative impacts of the Proposed Action and No Action Alternative is Fremont County, Colorado, within the jurisdiction of the Royal Gorge Field Office. This land exchange when added to past, present, and future exchange proposals has an overall cumulative effect of improved management of public lands through consolidation of ownership and a net gain of riparian/wetland habitat. The land exchange will improve management effectiveness through the acquisition of important wildlife and recreation resources and transfer lands with no legal or limited public access to a more appropriate individual. This too, eliminates the conflicts between users of the public land and owners of private property.

The most reasonably foreseeable future use for the federal lands under the RMP timeframe is consolidation with the surrounding private lands for ranching purposes, as stated by the proponent. Therefore, the existing uses on the federal lands will not change substantially when they are transferred into private ownership.

Existing uses on the non-federal lands will not change when they are transferred into federal ownership. They will be consolidated with surrounding public lands and managed in accordance with the RMP prescriptions for the surrounding public lands.

PERSONS / AGENCIES CONSULTED: The general public has been notified by publication of the NOEP in the local newspaper. Notices of the proposed exchange were published in the Canon City Daily Record on May 25, 2005, June 1, 8, and 15, 2005. These public notices invited interested parties to submit comments to the Royal Gorge Field Office for a period of 45 days. The Notice of Exchange Proposal (NOEP) has been sent to the grazing lessees, the adjoining landowners, the elected officials of both local and state governments, and the Western Area Power Administration.

INTERDISCIPLINARY REVIEW:

<u>Name</u>	<u>Title</u>	<u>Area of Responsibility</u>
Lindell Greer	Realty Specialist	Realty
Keith Berger	Resource Advisor	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
Dan Grenard	Geologist	Minerals, Paleontology
Tom Grette	Range Management Spec.	Farmland, Weeds
Tony Mule'	Cadastral Surveyor	Cadastral Survey
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
Dave Walker	Transportation Planner	Transportation, Access
Monica Weimer	Archaeologist	Cultural, Native American
Jeff Williams	Range Management Spec.	Range, Vegetation
Pete Zwaneveld	Planning/Environmental Coord.	NEPA, Envir. Justice