

ENVIRONMENTAL ASSESSMENT RECORD

NUMBER: CO-110-2004-006-EA

CASEFILE/PROJECT NUMBER: Operator Number-051466
 Allotment Number(s) 06308-Artesia, 06312-Raven Ridge

PROJECT NAME: Transfer of Artesia and Raven Ridge grazing allotments to Morapos Sheep Company (Oscar Wyatt) for inclusion in grazing permit 051466.

LEGAL DESCRIPTION: (Location of Proposed Action)

County: Rio Blanco and Moffat Counties

Allotment			Legal Description (6 th PM)		
No.:	Name:	BLM Acres:	Twp:	Rge:	Section(s)/Lot(s) or Portions of:
06308	Artesia	40,099	4N	R104W	34, 35
			4N	R102W	25, 26, 27, 28, 33, 35, 36
			4N	R101W	30
			3N	R102W	17, 18, 19, 20, 29, 30, 31, 32
			3N	R103W	7, 8, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
			3N	R104W	21, 2, 3, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
			2N	R102W	7, 18, 19
			2N	R103W	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29
			2N	R104W	1, 2, 3, 10, 11, 12
06312	Raven Ridge	8,466	2N	R103W	18, 19, 20, 29, 30, 31, 32, 33, 34
			2N	R104W	13, 23, 24, 25, 36
			1N	R104W	1
			1N	R103W	3, 4, 5, 6, 8, 10, 11

APPLICANT: Morapos Sheep Company, Oscar Wyatt

NEED FOR PROPOSED ACTION: Morapos Sheep Company has provided to the BLM the required applications for transfer of the Artesia and Raven Ridge Allotments. The Morapos grazing permit #051466 would be modified to show the acquisition of the Artesia (6308) and Raven Ridge (6312) allotments. The current Grazing Permit expires in 2007, and the new Permit will match this date. The U.S. Bureau of Land Management has the authority to transfer the livestock grazing permit/lease consistent with the provisions of the *Taylor Grazing Act, Public*

Rangelands Improvement Act, and Federal Land Policy and Management Act.

In order to graze livestock on public land, the livestock producer (permittee) must hold a grazing permit. The grazing permittee has a preference right to receive the permit, if grazing is to continue. The land use plan allows grazing to continue.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

ALTERNATIVE A - No Action, Continue Current Management with Transfer: The proposed action would be a transfer of the Artesia and Raven Ridge grazing allotments. These allotments would be included with the Raven Park and Little Toms Draw Grazing Allotments under permit #051466 for a 3 year period, until 2007 which is the expiration of the current grazing permit for Morapos Sheep. Raven Park and Little Toms Draw Grazing Allotments grazing programs were modified and analyzed under an environmental assessment during the 1997 grazing season and issued a 10 year permit. The Artesia and Raven Ridge allotments would be authorized under the current permit schedule. Over the next three years an allotment management plan would be prepared incorporating all four allotments into one grazing program. The Permitted Use and Proposed grazing schedules are shown below.

ALTERNATIVE A - PERMITTED USE --GRAZING PERMIT #051431					
Allotment #	Allotment Name	Public Land Acreage	Livestock Active Use (AUMs)	Suspended Use (AUMs)	Total Permitted Use (AUMs)
6308	Artesia	44,000	3960	986	4946
6312	Raven Ridge	8,673	800	324	1124
TOTAL		52,673	4760	1310	6070

ALTERNATIVE A - PROPOSED GRAZING SCHEDULE					
ALLOTMENT	NUMBER CLASS	BEGIN PERIOD	END PERIOD	%PL	AUMs
Artesia	4148 Sheep	11/28	02/28	100	2537
Artesia	4147 Sheep	03/01	05/30	100	1691
Raven Ridge	1200 Sheep	11/20	02/28	100	797

Monitoring and Evaluation: Three study sites on Raven Ridge allotment were established in 1965 and 1980. Eight study sites are located on the Artesia allotment. These study sites were established in key areas to monitor grazing use and consist of a permanent, repeatable photo

point and a permanent, repeatable line transect used to measure vegetative cover and frequency. All study sites were established under the protocol developed in the Grazing Allotment Monitoring Plan for the White River Resource Area.

These 11 sites will continue to be used in monitoring vegetation changes that result from implementation of the management plan. Actual use reports and climatic conditions will also be used for evaluations. Data collected will be evaluated utilizing the objectives of this environmental assessment and, the objectives of the land use plan and the Colorado Public Land Health Standards as the basis to judge the success of the grazing management.

The initial evaluation report will specify where problems exist, identify additional monitoring or management sideboards (if any) that may be required, and specify when the next evaluation will be conducted. At a minimum, a second evaluation would take place on the tenth year prior to renewal of the grazing permit.

ALTERNATIVE B - Proposed Action: The proposed action would also be a transfer of the Artesia and Raven Ridge grazing allotments. These allotments would be included with the Raven Park and Little Toms Draw Grazing Allotments under of permit #051466 for a 3 year period, until 2007 which is the expiration of the current grazing permit for Morapos Sheep. Raven Park and Little Toms Draw Grazing Allotments grazing programs were modified and analyzed under an environmental assessment during the 1997 grazing season and issued a 10 year permit.

In 1982, a decision schedule was developed for the Artesia allotment based on the White River Resource Are Grazing EIS completed the previous year. Two years later, in 1984 an Allotment Management Plan (AMP) for the Artesia allotment was approved, along with a modification of the Grazing Permit. Within a few years the former permittee stopped following the grazing rotation, outlined in the AMP. As a result, the minimum rest periods specified within the Grazing EIS were not being met. Until another AMP can be prepared, the schedule will match the 1982 decision schedule. Over the next three years an allotment management plan will be prepared incorporating all four allotments. A total of 1310 AUMs of Suspended AUMs will be removed (986 AUMs from Artesia and 324 AUMs from Raven Ridge). Currently there is no information indicating that the AUMs carried as Suspended Use would be restored to Active Use. In the event carrying capacities increase above the preference, the BLM has the ability to monitor, document and modify the permitted use. The proposed permitted use and grazing schedules for this alternative are shown below.

ALTERNATIVE B - PROPOSED PERMITTED USE --GRAZING PERMIT #051431					
Allotment #	Allotment Name	Public Land Acreage	Livestock Active Use (AUMs)*	Suspended Use (AUMs)**	Total Permitted Use (AUMs)
6308	Artesia	44,000	3960	0	3960
6312	Raven Ridge	8673	800	0	800

ALTERNATIVE B - PROPOSED PERMITTED USE --GRAZING PERMIT #051431				
TOTAL	52,673	4760	0	4760

**Suspended use would be removed from the preference.

ALTERNATIVE B - PROPOSED GRAZING SCHEDULE					
ALLOTMENT	NUMBER CLASS	BEGIN PERIOD	END PERIOD	%PL	AUMs
Artesia	4182 Sheep	12/01	02/28	100	2557
Artesia	4182 Sheep	03/1	04/20*	100	1402
Raven Ridge	1200 Sheep	11/20	02/28	100	797

*Off date from 1982 decision.

Monitoring and Evaluation: Same as Alternative A.

ALTERNATIVE C - No Grazing Alternative, Deny the Grazing Transfer:

This alternative consists of denying the transfer of the grazing permit. No grazing would occur on the Raven Ridge and Artesia allotments.

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP)

Date Approved: July 1, 1997

Page or Decision Number: page 2-22 through 2-26

Alternative B (Proposed Action) would achieve the ROD/RMP Livestock Grazing Management objectives, found on page 2-22:

--to maintain or enhance a healthy rangeland vegetative composition and species diversity, capable of supplying forage at a sustained yield to meet the demand for livestock grazing, and

--to provide for adequate forage plant growth and/or regrowth opportunity necessary to:
 1) replenish the plants food reserves; and 2) produce sufficient seed to meet the reproduction needs necessary to maintain an ecological presence in the plant community. This objective will be accomplished by developing a grazing program which allows for the forage plants requirements for growth and reproduction.

Also as stated on page 2-10, the goal of the livestock management program is to improve the rangeland forage resource by managing toward a desired plant community. “In the future, allotment categorization, levels of management, and permit modifications could be made if additional information suggests that this is warranted in order to achieve or make significant progress toward achieving the Colorado Standards for Rangeland Health” (43 CFR 4180).]

The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3).

COMPLIANCE WITH SECTION 302 OF FLPMA RELATIVE TO THE COMB WASH GRAZING DECISION:

A review of applicable planning documents and a thoughtful consideration of new issues and new demands for the use of the public lands involved in the allotment has been made. This analysis concludes that the current multiple use allocation of resources is appropriate.

STANDARDS FOR PUBLIC LAND HEALTH:

The following table is a summary of the assessment of public land health standards for each allotment. Specific discussion of the assessment of each standard is located in the critical elements section below.

Artesia Allotment						
STANDARDS FOR PUBLIC LAND HEALTH						
	Alternative A Current Situation		Alternative B Proposed Action		Alternative C No Grazing	
[Standard]	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving
#1-Upland Soils	29964	10135	37497	2602	38798	1301
#2-Riparian Systems	3.6		3.6		3.6	
#3-Plant Communities	25456	14643	32228	7871	36845	3254
#3-Animal Communities	Refer to wildlife assessment.					
#4-Special Status, T&E Species	Refer to Special Status Species, Animals and Plants assessment					

Artesia Allotment						
STANDARDS FOR PUBLIC LAND HEALTH						
	Alternative A Current Situation		Alternative B Proposed Action		Alternative C No Grazing	
[Standard]	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving
#5-Water Quality	Refer to Water Quality assessment					

Raven Ridge Allotment						
STANDARDS FOR PUBLIC LAND HEALTH						
	Current Situation		Preferred Alternative		No Grazing	
[Standard]	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving
#1-Upland Soils	8232	234	8232	234	8232	234
#2-Riparian Systems	0		0		0	
#3-Plant Communities	8232	234	8232	234	8232	234
#3-Animal Communities	Refer to wildlife assessment.					
#4-Special Status, T&E Species	Refer to Special Status Species, Animals and Plants assessment					
#5-Water Quality	Refer to Water Quality assessment					

AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS/MITIGATIVE MEASURES:

CRITICAL ELEMENTS

An X in the “Not Affected” column in the table below indicates that the critical element has been analyzed and will not be affected by the proposed action or the no action alternative. Affected elements are addressed in the paragraphs following the table.

Not Affected	Critical Element	Specialist Signature	Date
X	Air Quality	CHollowed	12/10/03
	Cultural Resources		
	Floodplains, Wetlands, Riparian Zones, and Alluvial Valleys		
	Native American Concerns		
	Prime and Unique Farmlands		
	Threatened and Endangered Animals		
	Threatened and Endangered Plants		
X	Wastes, Hazardous or Solid	M O'Mara	12/15/03
	Water quality, Surface or Ground		
	Wilderness Area, Wild and Scenic Rivers		
	Areas of Critical Environmental Concern		
	Environmental Justice		
	Invasive, Non-Native Species/Reclamation		
	Noxious Weeds		

CULTURAL RESOURCES:

Affected Environment: A review of the WRFO cultural database indicates that there are 149 total cultural and/or paleontological properties recorded within the proposed transfer allotments. Currently there are six sites that have been officially determined to be eligible for nomination to or listing on the National Register of Historic Places. Thirty three resources have been officially determined Not-Eligible and probably represent Isolated Finds. The files also list four sites as being in the Need-Data category with the remaining properties having no known eligibility determinations. Sites/properties may range from Isolated Finds to open camp sites, rock art sites, sheltered camp sites or open lithic sites.

Impact of No Action, Continue Current Management with Transfer Alternative: Impacts to resources from trampling, particularly in concentration and trailing areas would continue at the present rate, rock art sites would continue to be susceptible to impacts from animals rubbing on the rock to scratch and overhangs would continue to be concentration

areas where any architectural features would continue to be susceptible to damage from trampling which would knock down walls etc. Artifact displacement during wet soil conditions would continue to disturb surficial contexts as mud adheres to animal hooves or artifacts are shifted and trampled deeper into the soil as animals traverse the area.

Impact of Proposed Action Alternative, Remove Suspended Preference: Impacts under this alternative would be similar to the impacts described under the Continue Current Management with Transfer Alternative except that there would be an increase in potential impacts as the numbers of live stock increase.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Under the No Grazing Alternative there would be no impacts from grazing to the resources present on either of the two allotments proposed for transfer.

Mitigative Measures: As time and staffing permit (and efforts shall be made to make those resources available in AWP submissions) a more thorough review of the office database shall be undertaken and resources records that suggest that certain sites might have more scientific interest or other values shall be revisited, the site records updated as necessary and the level of impacts from grazing, if any shall be thoroughly documented. Measures to reduce or eliminated impacts from grazing will be included in any new AMP's or permit renewals as appropriate.

Signature of specialist: Michael Selle 12/15/2003

FLOODPLAINS, WETLANDS, RIPARIAN ZONES, AND ALLUVIAL VALLEYS: (This includes all information related to Public Land Health Standard 2.)

Affected Environment: There are no floodplains, wetlands or alluvial valleys on Artesia or Raven Ridge allotments. The Artesia allotment contains 3.6 acres of riparian habitat located in Stinking Water Creek immediately south of the Town of Blue Mountain. This creek channel is perennial and in functioning condition. The stream system has stable channel banks and riparian vegetation composed of coyote willows and reed grass. The water in this stream comes from artesian wells north of Blue Mountain. These wells are on private land and could be sealed by the landowner. There is no riparian habitat on the Raven Ridge allotment.

Impact of No Action, Continue Current Management with Transfer Alternative: This stream system is completely dependant on the artesian wells. Riparian function or vegetation has not been shown to be affected by livestock grazing at past use levels or those of this alternative.

Impact of Proposed Action Alternative, Remove Suspended Preference: Same as the no action alternative.

Impact of No Grazing Alternative, Deny the Grazing Transfer: There would be no change in riparian condition.

Mitigative Measures: None

Signature of specialist: Robert Fowler 12-15-03

THREATENED AND ENDANGERED ANIMALS: (This includes all information related to animals in Public Land Health Standard 4.)

Affected Environment: White-tailed prairie dogs are widely distributed in these allotments. Prairie dogs provide prey and habitat for a host of wildlife associates, including the State-threatened burrowing owl and, more recently, reintroduced populations of black-footed ferret. Although their distribution and density are highly variable, larger contiguous aggregations of prairie dog are found in Coyote and Coal Oil Basins and along the Highway 40 corridor. Prairie dog distribution and abundance in the remainder of the allotment is generally limited by rugged topographic features, rock outcropping, juniper breaks, and heavy shrub cover. Here, prairie dogs are generally confined to small (<40 acre), widely separated colonies though several larger colonies of 200-500 acres located in Twin Wash south of Coal Reef. Prairie dog abundance is highly variable over time with periodic crashes in populations attributable to outbreaks of disease (primarily sylvatic plague).

The northern third of the Raven Ridge allotment encompasses much of the Coyote Basin Black-footed Ferret Management Area—an area managed to promote the establishment of a self-sustaining population of ferrets. In conjunction with Utah’s adjacent ferret management area, these prairie dog towns have supported a reproducing population of black-footed ferret over the past 2-3 years. The remaining prairie dog colonies within the Artesia allotment are not specifically identified for focused management of black-footed ferret, but remain available for occupation and colonization (i.e., as developed in “A Cooperative Plan for Black-footed Ferret Reintroduction and Management”).

Impact of No Action, Continue Current Management with Transfer Alternative:

Burrowing owl begin nesting as early as mid-April with hatching occurring as early as mid-May. By the nature of their subterranean nests, burrowing owls are relatively immune from the transient effects of herded sheep during the incubation and early brood period. There is no indication, nor have there been any implications, that current grazing-related vegetation effects in this area are having an adverse influence on insect or small animal prey important to burrowing owl.

Besides known occupation of the Raven Ridge allotment, dispersal of ferrets from the Coyote Basin or Wolf Creek Management Areas could result in ferret occupation of the Artesia allotments prairie dog colonies. Any ferrets reintroduced in northwest Colorado and

northeast Utah are part of an experimental, nonessential population as established in the Final Rule (Federal Register, October 1, 1998). In the context of the Endangered Species Act, these animals are treated as a proposed species, which allows considerable relaxation of regulations pertaining to consultation procedures, private land participation, and land use/management options. It was recognized in the Final Rule and in the Wolf Creek/Coyote Basin Ferret Reintroduction and Management Plan that ongoing livestock operations are considered compatible with ferret reintroduction efforts and the long-term maintenance of habitat suitable for black-footed ferrets.

Impact of Proposed Action Alternative, Remove Suspended Preference: same as Alternative A

Impact of No Grazing Alternative, Deny the Grazing Transfer: same as Alternative A

Mitigative Measures: None

Signature of specialist: Ed Hollowed 12/12/03

THREATENED AND ENDANGERED PLANTS: (This includes all information related to plants in Public Land Health Standard 4.)

Affected Environment: The Raven Ridge and Artesia allotments contains the Raven Ridge ACEC which was designated for the protection of rare and endemic or rare and are considered as a BLM sensitive species. Many of these sensitive species are endemic to the Green River geologic formation. This formation is limited to the Uintah Basin of Utah and the Piceance Basin/Roan Plateau of Colorado. Exposures of the Parachute Creek Member of the Green River Formation along Raven Ridge provide the habitat for five sensitive plant species, two of which are rare throughout their range of distribution. The other three are rare in Colorado but more common in the Uintah Basin of Utah. The following species: *Penstemon grahamii* (PEGR) and *Penstemon albifluvis* (PEAL), both category 1 Candidate Species for listing as threatened or endangered species, occur only on Raven Ridge in Colorado, and along the White River in eastern Utah. Other species of concern include *Cryptantha rollinsii* (CRRO), *Eriogonum ephedroides* (EREP), and *Parthenium ligulatum*(PAL1) which also occur occur on exposures of the Parachute Creek . The following chart shows the plant species of concern on the Raven Ridge ACEC.

Species	Common Name	Federal Status	State List	Area
<i>Eriogonum ephedroides</i>	Ephedra Buckwheat	3C	2	Raven Ridge
<i>Penstemon albifluvis</i>	White River Penstemon	1	1	Raven Ridge
<i>Penstemon</i>	Graham Beardtongue	1	1	Raven Ridge

grahamii				
Parthenium ligulatum	Ligulate Feverfew	3C	2	Raven Ridge
Cryptantha rollinsii	Rollins Cat's Eye	-	2	Raven Ridge

Federal Status 1-Candidate for formal listing, 3C-Former candidate for federal listing.
State list 1-Federal threatened or endangered plant species and species that are rare throughout their range; List 2- Plant species that are rare in Colorado but relatively common elsewhere within their range.

Impact of No Action, Continue Current Management with Transfer Alternative: The sites on which the plants are found provide little in the way of forage and are not used by livestock. On the Raven Ridge allotment there is no livestock grazing during the growing season, which allows for the growth requirements of the native plant communities. On the Artesia allotment, with current management grazing times extending into May there could be a possibility that initial growth of sensitive plant species could be affected by not being able to produce sufficient seed to meet the reproduction needs necessary to maintain an ecological presence in the plant community. If populations are found, and monitoring shows that there impacts resulting from grazing, these populations would be protected. Any proposal for protection of these narrow endemics would require completion of an environmental assessment, which would determine the best means of protection.

Impact of Proposed Action Alternative, Remove Suspended Preference: The sites on which the plants are found provide little in the way of forage and are not used by livestock. On the Raven Ridge allotment there is no livestock grazing during the growing season, which allows for the growth requirements of the native plant communities. On the Artesia allotment, this alternative would allow time for the animals to move out of the area prior to spring and would allow adequate time for the plants to re-grow and meet their requirements for reproduction and carbohydrate storage. Additionally the development of a grazing management program will allow for specific mitigation to be identified and implemented. If populations are found, and monitoring shows that there impacts resulting from grazing, these populations would be protected. Any proposal for protection of these narrow endemics would require completion of an environmental assessment, which would determine the best means of protection.

Impact of No Grazing Alternative, Deny the Grazing Transfer: There would be no impacts to the sensitive plant species in the area

Mitigative Measures: BLM will inventory and monitor threatened, endangered and sensitive plant species to determine their location and density. Populations determined to be impacted by management will be protected or avoided.

Signature of specialist: Tamara Meagley 12-15-03

WATER QUALITY, SURFACE OR GROUND: (This includes all information related to Public Land Health Standard 5.)

Affected Environment: The allotments are in the White River watershed with the exception of Sand Spring Wash (see table below) which is the Green River drainage. Major drainages are Dripping Rock and Stinking Water. These drainages are within the Lower White River identified in the Unified Watershed Analysis as a problem watershed. The table below identifies the watersheds within the allotments with the corresponding acres within the allotments.

GIS MAP CODE	DRAINAGE NAME	ACRES OF DRAINAGE IN ALLOTMENT
<i>Green River Basin</i>		
G.CC.SS	Sand Spring Wash	2067
<i>White River Basin</i>		
W.CG	Coal Gulch	60
W.DR	Dripping Rock	27335
W.DR.TW	Twin Wash	2768
W.DRTW.ET	East Twin Wash	1050
W.DRTW.WT	West Twin Wash	742
W.HA	Hard Away Draw	886
W.RW	Red Wash	1787
W.RW.BC	Box Canyon	1354
W.RW.LD	Long Draw	889
W.ST	Stinking Water	11518
W.ST.CO	Coal Oil Gulch	5971
W.ST.WC	Willow Creek	764
W.STWC.SD	Spencer Draw	211
WR	White River	1545

Water quality data is available for Stinking Water Creek. Collected data ranges in flow from 0.002 cfs to over 25 cfs. Specific conductivity is high for this type of drainage even at higher flows. The collected range of data is from 5,000 up to 25,000 micromohs. Although these values are high, they do not prevent the drainage from meeting state standards.

There is one spring located in section 35, T4N, R102W. Inventory data from this spring indicates the spring to be of better quality than surrounding drainages. BLM does have a water right on this spring filed in case 85CW559.

Impact of No Action, Continue Current Management with Transfer Alternative: Impacts from the no action alternative would be similar to the preferred alternative.

Impact of Proposed Action Alternative, Remove Suspended Preference: Removing the suspended AUM's would theoretically be favorable to watershed conditions simply because it would allow for a healthier vegetative cover. Utilizing rest, pasture rotation and shortened grazing seasons would also allow the vegetation condition to improve. Any improvement to

vegetation cover would also help to reduce sediment transport, which is the major water quality contaminant for the Lower White River.

Impact of No Grazing Alternative, Deny the Grazing Transfer: By implementing the no grazing alternative, impacts to vegetation would not occur.

Mitigative Measures: Based on continuing compliance monitoring for vegetation improvement BLM will identify if additional actions were needed to comply with the *Clean Water Act*.

Signature of specialist: CHollowed 12/10/03

WILDERNESS AND WILD AND SCENIC RIVERS:

Affected Environment: Approximately 3,636 acres (or 70%) of pasture 8, Allotment #6308 are located within the Willow Creek Wilderness Study Area (WSA). WSAs are managed as to not impair wilderness characteristics. Wilderness characteristics, as identified by the BLM are naturalness, opportunities for solitude or opportunities for primitive and unconfined recreation. At present approximately 1500 feet of constructed fence exist in T3N R102W SWSW of section 4 and one identified “way” traverses Red Wash beginning at T4N R102 section 34 and ending at T4N R102W section 28 to access unused stock water developments. At present, the “way” and water development are unused, unmaintained and not mentioned in the current grazing permit.

Impact of No Action, Continue Current Management with Transfer Alternative:
At present no appreciable impacts to wilderness character.

Impact of Proposed Action Alternative, Remove Suspended Preference:
If less AUMs are approved theoretically less vegetative and soils impacts would occur thereby enhancing natural processes are more desirable within wilderness.

Impact of No Grazing Alternative, Deny the Grazing Transfer: No impacts to wilderness character will occur.

Mitigative Measures: The permittee will contact BLM for approval prior to any motorized or mechanized use for range management activities within the WSA portion of the Artesia Allotment. BLM will research the allotment file to determine it is a grandfathered activity in accordance with the interim management policy for wilderness study areas.

Signature of specialist: Chris Ham 12/16/03

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Affected Environment: The Raven Ridge ACEC was designated to provide intensive management and protection of sensitive plant species. All of the rare and sensitive plant species in the Affected Environment are endemics of the Green River Geologic formation. This geologic formation is found uplifting throughout this allotment. The sites on which the plants are found provide little in the way of forage and are not used by livestock. If populations are found, and monitoring shows that there are impacts resulting from grazing, these populations would be protected. Any proposal for protection of these narrow endemics would require completion of an environmental assessment, which would determine the best means of protection.

Impact of No Action, Continue Current Management with Transfer Alternative: The sites on which the plants are found provide little in the way of forage and are not used by livestock. On the Raven Ridge allotment there is no livestock grazing during the growing season, which allows for the growth requirements of the native plant communities. On the Artesia allotment, with current management grazing times extending into May there could be a possibility that initial growth of sensitive plant species could be affected by not being able to produce sufficient seed to meet the reproduction needs necessary to maintain an ecological presence in the plant community. If populations are found, and monitoring shows that there impacts resulting from grazing, these populations would be protected. Any proposal for protection of these narrow endemics would require completion of an environmental assessment, which would determine the best means of protection.

Impact of Proposed Action Alternative, Remove Suspended Preference: The sites on which the plants are found provide little in the way of forage and are not used by livestock. On the Raven Ridge allotment there is no livestock grazing during the growing season, which allows for the growth requirements of the native plant communities. On the Artesia allotment, this alternative would allow time for the animals to move out of the area prior to spring and would allow adequate time for the plants to re-grow and meet their requirements for reproduction and carbohydrate storage. Additionally the development of a grazing management program will allow for specific mitigation to be identified and implemented. If populations are found, and monitoring shows that there impacts resulting from grazing, these populations would be protected. Any proposal for protection of these narrow endemics would require completion of an environmental assessment, which would determine the best means of protection.

Impact of No Grazing Alternative, Deny the Grazing Transfer: There would be no impacts to the sensitive plant species in the area

Mitigative Measures: BLM will inventory and monitor threatened, endangered and sensitive plant species to determine their location and density. Populations determined to be impacted by management will be protected or avoided.

Signature of specialist: Tamara Meagley 12-15-03

INVASIVE, NON-NATIVE SPECIES/RECLAMATION: (This includes vegetation information related to Public Land Health Standard 3.)

Affected Environment: Currently there are no known outbreaks on noxious weeds on either the Artesia or Raven Ridge allotments. White River Field Office policy is to actively control initial outbreaks of noxious weeds, thus preventing spread and increased costs of control. Weeds of concern for this area are the Knapweeds, burdock, Canada, bull and musk thistle. These weeds have been shown to be readily transported by livestock and vehicles. All of these species are adapted to disturbed soil conditions which are generally associated with oil and gas development. Cheatgrass is a problem on both of these allotments and dominates areas that have been disturbed in the past. For the most part, cheatgrass is dominant on sheep bedding areas, winter feeding areas, and lowland drainage bottoms. The bureau no longer allows feeding on the public lands.

Impact of No Action, Continue Current Management with Transfer Alternative: The current grazing schedule Artesia has an off date of date of May 30th, which exceeds the last date of dependable growth by 20 days each year. Refer to vegetation section for further discussion. The Raven Ridge allotment has no grazing during the growing season. Under this grazing management scheme, native vegetation vigor would be maintained providing competition against noxious weed invasion. Grazing permittees are important to the discovery and control of noxious weeds.

Impact of Proposed Action Alternative, Remove Suspended Preference: Under this alternative the off date would be April 20th allowing 20 days of rest during the critical spring growth period. Native vegetation is expected to improve in cover and composition, providing greater competition against noxious weed invasion and spread, in comparison with the no action alternative.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Denying the grazing transfer would prevent livestock use of these allotments. Over the short term, native vegetation would improve in condition and productivity, thus decreasing the opportunity for noxious weed invasion and establishment. Over the long term, brush species would increase in dominance, thus decreasing the grass and forb component in the interspaces. These spaces would be suitable habitat for cheatgrass. There would not be a grazing permittee monitoring the rangelands for noxious weed outbreaks.

Mitigative Measures: BLM will maintain coordination with the grazing permittee and other

users of these allotments to monitor noxious weed outbreaks. BLM and the permittee will promptly control all noxious weed outbreaks in a manner consistent with BLM policy.

Signature of specialist: Robert Fowler 12-8-03

NON-CRITICAL ELEMENTS

An X in the “Not Affected” column in the table below indicates that the non-critical element has been analyzed and will not be affected by the proposed action or the no action alternative. Affected elements are addressed in the paragraphs following the table.

Not Affected	Non-Critical Element	Specialist Signature	Date
X	Access and Transportation	Scott Pavey	11/19/03
X	Forest Management	R. Fowler	11-6-03
X	Geology and Minerals	Paul Daggett	11/01/2003
X	Hydrology and Water Rights (See Water Quality above)	CHollowed	12/10/03
X	Land Status/Realty Authorizations	Penny Brown	10/22/03
X	Fire Management	K. Holsinger	10/29/03
	Paleontology		
	Rangeland Management		
X	Recreation	Chris Ham	11/17/03
	Soils		
X	Visual Resources	Chris Ham	11/17/03
X	Wildlife Aquatic	Ed Hollowed	12/12/03
	Wildlife Terrestrial		
X	Wild Horses	V. Dobrich	11-14-2003

PALEONTOLOGY:

Affected Environment: The proposed transfer allotments contain within their boundaries elements of the Parachute Creek Member of the Green River Formation, Mesa Verde Formation, Wasatch Formation, Uinta Formation, Chinle and Morrison Formation (Tweto 1979) which the BLM has classified as Category I formations meaning they are known to produce scientifically important vertebrate fossils. Other formations which may be present and outcropping include the Segoe, Castlegate, Curtis, Entrada, Curtis and Glen Canyon sandstones which are either Category II formations or have not been fully classified at this time. The Mancos Shale is also present in portions of the allotment. The Mancos shale is known to produce non-vertebrate marine fossils for the most part and is only rarely known to produce important fossil remains.

Impact of No Action, Continue Current Management with Transfer Alternative: Livestock trampling is known to cause damage to fossil resources where the exposed outcrops are reasonably horizontal. The smaller species such as rodents, birds, small reptiles and smaller mammals such as *omomyidae* are particularly susceptible to destruction from cattle trampling. Current data is not adequate to quantify the extent of potential damage to scientifically important fossil resources in the proposed transfer allotments.

Impact of Proposed Action Alternative, Remove Suspended Preference: Impacts under this alternative would be similar to the impacts described above. The removal of the suspended preference would not affect the number of grazing animals.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Under the No Grazing/Deny the Grazing Transfer alternative there would be no new impacts to fossil resources from grazing activity.

Mitigative Measures:

Prior to the initiation of any construction, all range improvements that occur on mapped areas of Category I formations where the bedrock is exposed shall be inventoried by an approved paleontologist with a report detailing the results of the inventory and any recommended mitigation to mitigate impacts to fossils present shall be submitted to the BLM.

BLM will make efforts during the AWP/AMP process to gather inventory data that will permit more thorough documentation of impacts to fossil resources due to livestock grazing.

Signature of specialist: Michael Selle 12/15/2003

RANGELAND MANAGEMENT:

Affected Environment: An allotment management plan (AMP) was completed for the Artesia and Raven Ridge allotments in 1984. This AMP described an eight pasture grazing rotation on the Artesia allotment. The grazing permittee found this rotation did not function and the AMP was cancelled. Also in the AMP, spring grazing on the Raven Ridge allotment was not allowed because of conflicts with ACEC values.

The following chart shows the actual use made during the period 1993 to 2003. Use made during 1993 to 2000 was by J.P. Sheep Company. No use was made during the 2000-2001 grazing season, and John Maneotis used the allotments during the period 2001 to 2003. The average use during the period 1993 to 2000 for the Artesia allotment is 2336 AUMs. The average use of the Raven Ridge allotment during the period 1993 to 1997 is 547 AUMs.

TABLE OF AUTHORIZED USE 1993 TO PRESENT

Grazing Year	Artesia Allotment	Raven Ridge Allotment
93-94	2915	521
94-95	2375	635
95-96	3249	359
96-97	2146	676
97-98	2367	0
98-99	2162	0
99-00	1142	0
00-01	Acquired by Bank	Approved non-use
01-02	529	250
02-03	779	569

The White River Grazing E.I.S of 1981 projected a carrying capacity of 3,128 AUMs on the Artesia allotment. However, this projected carrying capacity was never fully implemented. The Grazing Decision of 1982 stated a reduction of 1008 AUMs to a carrying capacity of 4200 AUMs on the Artesia Allotment. Then, a transfer of 240 AUMs to create the Cassion Allotment changed the Carrying Capacity from 4200 to 3960 AUMs, which is current.

The White River Grazing E.I.S of 1981 projected a carrying capacity of 359 AUMs on the Raven Ridge allotment. This was modified by agreement in 1986 to an Active preference of 800 AUMs and 324 AUMs of voluntary non-use.

Impact of No Action, Continue Current Management with Transfer Alternative: The grazing Permit authorizes maximum use allowable for an allotment in terms of livestock class, period of use and total AUMs available for use. There is the opportunity to address specific resource issues, such as plant communities dominated by cheatgrass, within the confines of the grazing permit. Specific to these resource issues are the Coal Oil Basin (6)

and the Buck (7) Pastures, which will require no grazing for an indefinite period to assist in the reestablish of desirable vegetation types.

Preliminary data indicates that the current preference can not be justified. A grazing period that goes to the end of the dependable growth period would further negatively impact vegetation resources, and likely would lead to an additional decrease in the carrying capacity because of declining vegetation condition and productivity. Under this alternative, a grazing program would be developed incorporating all of the allotments controlled by Morapo's Sheep Company. As a part of development of this plan, a detailed analysis of carrying capacity would be undertaken.

Impact of Proposed Action Alternative, Remove Suspended Preference: Under this alternative the active preference would remain available and the suspended preference would be removed. Current indications are that these suspended AUMs are not available. During the development of the allotment management plan, including all of Morapos Sheep allotments, an analysis of carrying capacity would be conducted. The result of this analysis would be a modification of the preference, independent of the active or suspended preference. Routine vegetation monitoring would be used to verify or modify the preference.

The end date for the allotment would be April 20, which would allow approximately 20 days of regrowth after authorized grazing ends.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Under this alternative, the transfer would not be approved. The BLM would have to amend the ROD/RMP to retire the grazing permit, as this alternative would not be in compliance with the current RMP.

Mitigative Measures: None

Signature of specialist: Robert Fowler 12-9-03

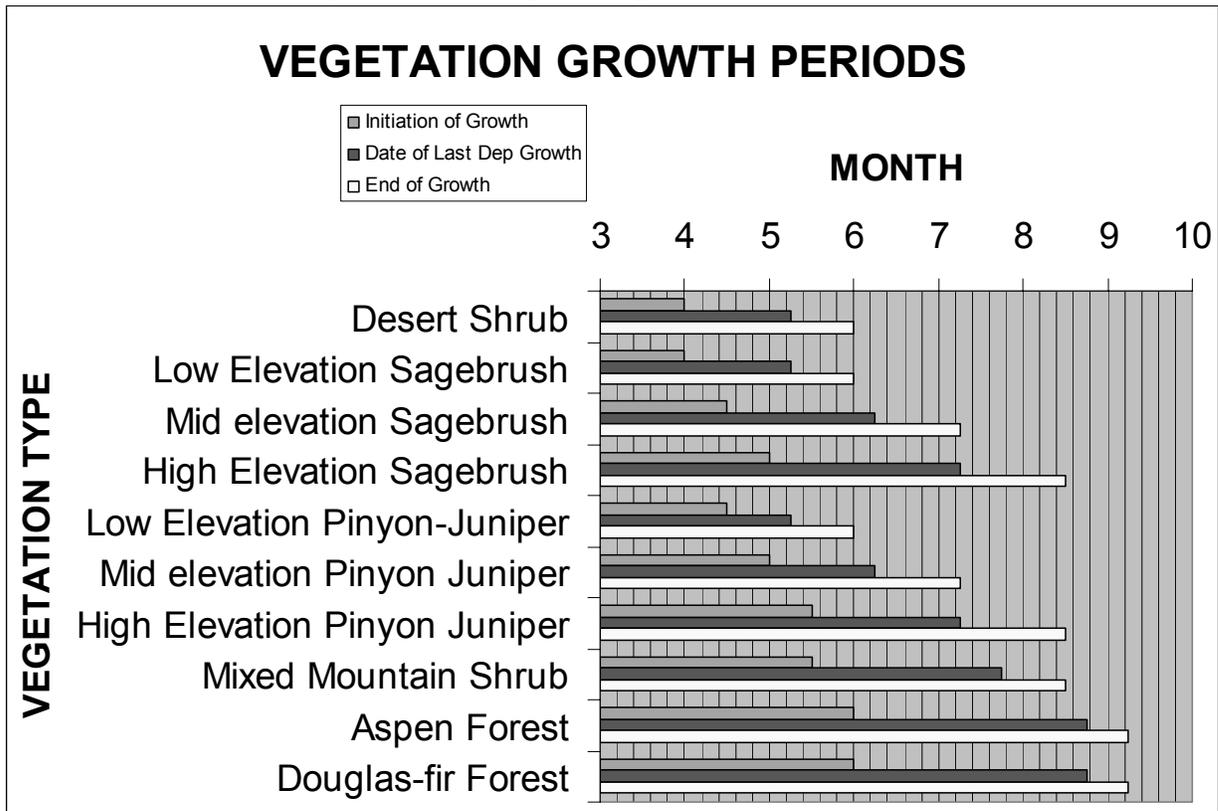
VEGETATION:

Affected Environment: The Artesia and Raven Ridge allotments are made up of several lower elevation vegetation associations. The range of vegetation is salt desert shrub to low elevation pinyon/juniper. The Soils section shows the range sites and the acres occupied by these vegetation associations. Average precipitation for the allotments is approximately ten inches per year, with precipitation evenly divided between winter snows and summer thundershowers. The most reliable growth period is immediately following spring runoff when soil temperatures become conducive to plant growth. This narrow growth window is evident in the Vegetation Growth Period Chart below (Colorado State University, *Utilization of Vegetation Growth Periods, 2000*). Information about the health of the plant communities in these allotments is incomplete. As a result, we are unable to complete an in depth analysis

of vegetation conditions, or trends in community development. A few specific vegetation resource problems have been identified, which include:

- Under the management of the J.P. Sheep Company, the crested wheatgrass seeding was heavily used, this along with a wild fire (1989) that burned from Snake John Reef to highway 13, thus negatively impacted the forage component. Rest and very limited use of the seeding during 2000 to 2002 has allowed recovery of this area.
- Grazing which occurred during the 2001-2002 grazing season coupled with severe drought negatively impacted the Coal Oil Basin area of the allotment. Grazing use was not allowed, in the Coal Oil Basin, during the 2002-2003 grazing season.
- A compliance visit of the Buck pasture north of Highway 40 showed the flats to be dominated by cheatgrass and are in poor condition overall.

These allotments fall into the growth periods for the Desert Shrub/Low Elevation Sagebrush/Low Elevation Pinyon-Juniper vegetation associations. The following is a graph (Colorado State University 2000) showing the Vegetation Growth Periods.



The onset of growth is in April with the last date of dependable growth is the tenth of May. The end of the growth period is June 1.

Impact of No Action, Continue Current Management with Transfer Alternative: The AUMs maintained as Suspended Non-Use would be retained, but would be unavailable for use. Under this alternative, the Artesia allotment would be grazed with approximately 4000

sheep until May 30, which is to the end of the dependable vegetation growth period. There would be no opportunity for plant regrowth or replenishment of carbohydrate reserves. Over time, desired forage species would decrease in cover and frequency within the plant community, thus allowing cheatgrass, a non-native annual, to dominate the plant community. There are approximately 10,135 acres which are not meeting the standards for public land health consisting of Billings and Chipeta soils, and 4,507 acres of alkaline slopes range sites. Because of the harsh soil and moisture conditions of these range sites are not expected to show any change.

On the Raven Ridge allotment, approximately 1200 sheep would be authorized to graze until February 28th of each year. There would be no grazing during the growing season, allowing desirable forage species to complete their life cycle each year. Native plant species are expected to improve in cover and composition. There are approximately 234 acres which are not meeting the standards for public land health consisting of torrifluent and alkaline slopes range sites. Because of the harsh soil and moisture conditions, these range sites are not expected to show any change.

Impact of Proposed Action Alternative, Remove Suspended Preference: The AUMs maintained as Suspended Non-Use would be removed from the Grazing Permit and would not be available for use. Under this alternative, the Artesia allotment would be grazed with approximately 4000 sheep until April 20th, allowing approximately twenty days of regrowth after the end of the grazing period. There would be opportunity for plant regrowth and replenishment of carbohydrate reserves. Over time, desired forage species would increase in cover and frequency within the plant community, thereby providing competition against the domination of cheatgrass. The crested wheatgrass seedings (Pasture 3) would continue to be managed to prevent decadence.

Impacts on the Raven Ridge allotment would be the same as Current Management alternative.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Under this alternative, no grazing would occur on the allotment. On those areas dominated by cheatgrass there are two possibilities; one that native plants would invade and over time displace the cheatgrass, or wildfire frequency would increase, therefore perpetuating a monoculture of cheatgrass. Over the short term the native plant communities would benefit from the ability to regrow and complete reproduction. Over the long term these plant communities would decrease in species frequency and composition. The crested wheatgrass seedings would become rank and forage would be unavailable.

Mitigative Measures: None

Signature of specialist: R Fowler 12-8-03

SOILS:

Affected Environment: All allotments covered by the grazing permit have had soils inventoried in the Rio Blanco County soil surveys. The following table lists public land acreage of soils present along with the corresponding range sites for each allotment.

Artesia Allotment (06308) – Pasture 1 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Turley fine sandy loam, 0-3%slopes	Alkaline Slopes	93	137.09
Chipeta-Killpack silty clay loam, 3-15%slopes	Clayey Saltdesert	18	14.69
Deaver-Chipeta silty clay loam, 3-35%slopes	Clayey Saltdesert/Clayey Saltdesert	X121	168.17
Massadona Silty Clay Loam, 0-12%slopes	Clayey Slopes	138	152.86
Chipeta-Walknolls Complex, 5-15% slopes	Clayey Saltdesert/Saltdesert breaks	19	928.73
Potts-Begay fine sandy loams, 2-7%slopes	Loamy Saltdesert/Sandy Saltdesert	66	1959.62
Rock Outcrop	None	78	201.85
Schooner-Rock outcrop Complex, 5-45%slopes	PJ woodlands/None	122	494.48
Eghelm loamy fine sand, 0-3%slopes	Saltdesert Overflow	91	60.83
Avalon-Mack complex, 1-12%slopes	Semidesert Loam/Loamy Saltdesert	12D	47.30
Wallson-Tricera Complex, 3-15%slopes	Semidesert SL/Semidesert SL	93	1071.93
Torriorthents-Rock Outcrop,Sandstone Complex,VS	Stoney Foothills	101	306.62
		Total:	5544.17

Artesia Allotment (06308) – Pasture 2 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Turley fine sandy loam,3-8%slopes	Alkaline Slopes	94	803.17
Chipeta-Killpack silty clay loam, 3-15%slopes	Clayey Saltdesert	18	599.90
Deaver-Chipeta silty clay loam, 3-35%slopes	Clayey Saltdesert/Clayey Saltdesert	X121	84.86

Massadona Silty Clay Loam, 0-12% slopes	Clayey Slopes	138	102.78
Deaver-Avalon complex, 5-45% slopes	Clayey Slopes/Semidesert Loam	202	111.31
Chipeta-Walknolls Complex, 5-15% slopes	Clayey Salt desert / Salt desert breaks	19	286.69
Potts-Begay fine sandy loams, 2-7% slopes	Loamy Salt desert/Sandy Salt desert	66	527.48
Torrifluents-gullied, Rock outcrop, Badlands	None	5	340.15
Rentsac-Piceance complex, 2-30% slopes	PJ woodland/Rolling Loam	75	670.26
Rentsac-Moyerson-Rock Outcrop, complex, 5-65% slps	PJ Woodlands/Clayey Slopes	74	702.27
Redcreek-Rentsac complex, 5-30% slopes	PJ woodlands/PJ woodlands	70	62.66
Forelle loam, 3-8% slopes	Rolling Loam	64	648.84
Eghelm loamy fine sand ,0-3% slopes	Salt desert Overflow	91	316.95
Avalon-Mack complex, 1-12% slopes	Semidesert Loam/Loamy Salt desert	12D	102.53
Wallson-Tricera Complex, 3-15% slopes	Semidesert SL/Semidesert SL	93	28.36
Avalon-Persayo-Degater complex, 3-30% slopes	Semidesert Loam / Semidesert Loam / Clayey Slopes	225	258.94
Torriorthents-Rock Outcrop, Sandstone Complex, VS	Stoney Foothills	91	49.23
		Total:	5696.37

Artesia Allotment (06308) – Pasture 3 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Turley fine sandy loam, 3-8% slopes	Alkaline Slopes	94	720.80
Chipeta-Killpack silty clay loam, 3-15% slopes	Clayey Salt desert	18	41.38
Chipeta-Walknolls Complex, 5-15% slopes	Clayey Salt desert / Salt desert breaks	19	2446.23
Potts-Begay fine sandy loams, 2-7% slopes	Loamy Salt desert/Sandy Salt desert	66	1301.24
Torrifluents-gullied, Rock outcrop, Badlands	None	78	473.76
Rentsac channery loam, 5-50% slopes	Pinyon Juniper woodlands	73	214.22
Rentsac-Piceance complex, 2-30% slopes	PJ woodland/Rolling Loam	75	37.44

Redcreek-Rentsac complex, 5-30%slopes	PJ woodlands/PJ woodlands	70	366.09
Forelle loam, 3-8%slopes	Rolling Loam	33	44.89
Torriorthents-Rock Outcrop. Sandstone Complex, VS	Stoney Foothills	91	502.77
		Total:	6148.82

Artesia Allotment (06308) – Pasture 4 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Turley fine sandy loam, 3-8%slopes	Alkaline Slopes	94	496.10
Billings-Torrifluents complex, gullied, 0-5%slopes	Alkaline Slopes/None	8	72.92
Chipeta-Killpack silty clay loam, 3-15%slopes	Clayey Saltdesert	18	23.47
Chipeta-Walknolls Complex, 5-15% slopes	Clayey Saltdesert / Saltdesert breaks	19	1107.10
Torrifluents-gullied, Rock outcrop, Badlands	None	78	2231.20
Piceance fine sandy loam, 5-15%slopes	Rolling Loam	64	16.65
Nihill channery sandy loam, 5-50%slopes	Saltdesert Breaks	55	28.24
Torriorthents-Rock Outcrop, complex, 15-90%slopes	Stoney Foothills	91	334.60
		Total:	4310.28

Artesia Allotment (06308) – Pasture 5 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Turley fine sandy loam, 3-8%slopes	Alkaline Slopes	94	533.81
Billings-Torrifluents complex, gullied, 0-5%slopes	Alkaline Slopes/None	8	817.46
Chipeta-Killpack silty clay loam, 3-15%slopes	Clayey Saltdesert	18	2751.35
Deaver-Chipeta silty clay loam, 3-35%slopes	Clayey Saltdesert/Clayey Saltdesert	X121	10.36
Moyerson stony clay loam, 15-65%slopes	Clayey Slopes	53	950.22
Moyerson-Rentsac Complex, 15-45%slopes	Clayey Slopes/PJ woodlands	9E	9.83
Chipeta-Walknolls Complex, 5-15% slopes	Clayey Saltdesert / Saltdesert breaks	19	466.11
Massadona-Youngston loams, Moist, 1-8%slopes	Foothill Swale	200	0.03

Kinnear fine landy loam, 1-5%slopes	Loamy Saltdesert	46	114.95
Potts-Begay fine sandy loams, 2-7%slopes	Loamy Saltdesert/Sandy Saltdesert	66	129.35
Torrifluvents-gullied, Rock outcrop, Badlands	None	78	1284.65
Blazon, moist-Rentsac Complex, 6-65%slopes	Pinyon-Juniper woodland	10	139.72
Rentsac-Piceance complex, 2-30%slopes	PJ woodland/Rolling Loam	75	166.44
Rentsac-Moyerson-Rock Outcrop, complex, 5-65%slps	PJ Woodlands/Clayey Slopes	74	1991.11
Redcreek-Rentsac complex, 5-30%slopes	PJ woodlands/PJ woodlands	70	299.66
Forelle loam, 3-8%slopes	Rolling Loam	33	487.32
Nihill channery sandy loam, 5-50%slopes	Saltdesert Breaks	55	95.36
Eghelm loamy fine sand, 0-3%slopes	Saltdesert Overflow	91	61.63
Avalon-Mack complex, 1-12%slopes	Semidesert Loam/Loamy Saltdesert	12D	300.49
Avalon-Persayo-Degater complex, 3-30%slopes	Semidesert Loam / Semidesert Loam / ClayeySlopes	225	386.93
Torriorthents-RockOutcrop, complex, 15-90%slopes	Stoney Foothills	91	35.00
		Total:	11031.78

Artesia Allotment (06308) – Pasture 6 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Billings silty clay loam, 0-5%slopes	Alkaline Slopes	7	1637.29
Chipeta silty clay loam, 3-25%slopes	Clayey Saltdesert	18, 17, 16	4118.62
Rock outcrop, Badlands	None	78, 5	443.10
		Total:	6199.01

Artesia Allotment (06308) – Pasture 7 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Deaver-Chipeta silty clay loam, 3-35%slopes	Clayey Saltdesert/Clayey Saltdesert	X121	435.12
Massadona Silty Clay Loam, 0-12%slopes	Clayey Slopes	138	60.34

Deaver-Avalon complex, 5-45%slopes	Clayey Slopes/Semidesert Loam	202	9.53
Massadona-Youngston loams,Moist, 1-8%slopes	Foothill Swale	200	6.88
Rock Outcrop-Torriorthents Complex,Very Steep	None	RL	127.68
Avalon-Mack complex, 1-12%slopes	Semidesert Loam/Loamy Saltdesert	12D	23.95
Avalon-Persayo-Degater complex, 3-30%slopes	SemidesertLoam/ Semidesert Loam/Clayey Slopes	225	25.04
Torriorthents-Rock Outcrop,Sandstone Complex,VS	Stoney Foothills	101	8.51
		Total:	697.05

Artesia Allotment (06308) – Pasture 8 – Soil Series / Range Sites			
Soil Series (% Slopes)	Range Site	Map Unit	BLM Acres
Deaver-Chipeta silty clay loam, 3-35%slopes	Clayey Saltdesert/Clayey Saltdesert	X121	665.00
Massadona Silty Clay Loam, 0-12%slopes	Clayey Slopes	138	45.03
Martinsdale-Boettcher Complex, 1-15%slopes	Deep Loam, Dry Exposure	125	972.68
RockOutcrop-Torriorthents Complex,Very Steep	None	RL	962.50
Schooner-Rock outcrop Complex, 5-45%slopes	PJ woodlands/None	122	939.80
Almy loam, 3-15%slopes	Rolling Loam	92C	30.01
Eghelm loamy fine sand, 0-3%slopes	Saltdesert Overflow	91	316.71
Torriorthents-RockOutcrop, Sandstone Complex,VS	Stoney Foothills	101	440.98
		Total:	4372.72

Raven Ridge Allotment (06312) – Soil Series / Range Sites			
Soil Series (% Slope)	Range Site	Map Unit	BLM Acres
Turley fine sandy loam, 3-8%slopes	Alkaline Slopes	94	1757.33
Billings-Torrifluvents complex,gullied, 0-5%slopes	Alkaline Slopes/None	8	59.26
Chipeta-Walknolls Complex, 5-15% slopes	Clayey Saltdesert/Salt desert breaks	19	222.62
Clifterson channery loam, 1-15%slopes	Loamy Saltdesert	22	98.59
Badland, Rock Outcrop	None	78	3273.81

Rentsac-Moyerson-RockOutcrop,complex, 5-65%slps	PJ Woodlands/Clayey Slopes	74	22.71
Walknolls channery sandy loam, 5-50%slopes	Saltdesert Breaks	97	1329.38
Colorow sandy loam	Sandy Saltdesert	25	22.25
Torriorthents-RockOutcrop, complex, 15-90%slopes	Stoney Foothills	91	1887.35
Total:			8673.30

Soils of greatest concern for these allotments include the Billings Clay Loam and Billings Torrifluent Complex gullied which are found in the drainages, and the Chipeta Silty Clay Loam and Chipeta-Killpack Silty Clay Loams found on the uplands. All of these soils have high salinity, rapid runoff and erosion hazard of moderate to very high. The vegetation of these soils is primarily a salt desert shrub containing greasewood, matt saltbush, Gardner saltbush and various grasses and forbs. These soils are relatively unproductive, producing approximately 350 pounds of vegetation per year. Cheatgrass is a problem in these plant communities and is dominant in the Billings Clay Loam and Billings Torrifluent Complex. These soils make up 10,135 acres or 19% of these allotments.

Impact of No Action, Continue Current Management with Transfer Alternative: Under the no action alternative the Billings and Chipeta soils, described above, are expected to maintain their current degraded vegetation condition. Problems with excessive runoff and erosion are expected to continue until implementation of an allotment management plan.

Impact of Proposed Action Alternative, Remove Suspended Preference: Under the proposed action the vegetation on the Billings and Chipeta soils is expected to improve. Given the harsh site characteristics, improvements in vegetation cover and composition are not expected to be dramatic. Decreases in runoff and erosion are expected to mirror vegetation improvement.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Removal of livestock may expect a decrease in erosion on sites which would be disturbed by the mechanical action of sheep hooves. In some areas, particularly on the Billings soils, erosion of gullies may be significantly reduced due to a removal of influences by sheep.

Mitigative Measures: None

Signature of specialist: Robert Fowler 12-15-03

WILDLIFE TERRESTRIAL:

Affected Environment: Affected Environment: These allotments serve as low density winter range for deer and elk (i.e., October through April), as well as year-round range for a

small number of pronghorn (averaging less than 50) that are associated with the Coal Oil Basin and Utah populations.

A small number of greater sage grouse are resident to the Twin Wash/Dripping Rock Creek watershed. Sage grouse distribution and use of these habitats remains poorly understood. Winter distribution appears to be most consistent along the Highway 40 corridor, with winter sign also having been recorded in larger sage basins in Twin Wash. A single strutting ground complex, 2 miles northeast of Mormon Gap supported at least 20 males through 1989, but there has been no confirmation of activity on this site for several years. Although no evidence of sage grouse was found south of Highway 64 during brief site inspections in December 2003, evidence of nesting in the vicinity of the lek has been documented. Wyoming sagebrush throughout the Artesia allotment varies from 10-25% and is generally of a height and conformation amenable to grouse nesting and/or winter use. The Raven Ridge allotment is not known to support sage grouse.

Herbaceous understories in the Artesia allotment south of Highway 64 are predominated by crested wheatgrass that had been seeded in the past to bolster livestock forage supplies and suppress cheatgrass expression. This wheatgrass component is currently subject to limited and localized livestock use and generally provides effective supplemental nest and brood cover within and on the perimeter of sagebrush crowns and, considering site conditions, often strong interstitial cover. Although understory plant diversity appears very low, the crested wheatgrass, when grazed sufficiently to remove wolfy accumulations of litter within the crowns, is considered superior to the inescapable alternative of cheatgrass.

Sagebrush ranges north of Highway 64 are generally more xeric, lower elevation ranges that are generally regarded as marginal habitat for nesting and brood rearing. Stand suitability is limited by an abbreviated growing season, droughty, sandy or saline soils that support sparse herbaceous understories, strong complements of annual weeds (cheatgrass, mustard, pepperweed), and limited availability of mesic growth that provides important brood habitat components.

Impact of No Action, Continue Current Management with Transfer Alternative: Deer and, particularly, pronghorn depend heavily on woody forage through the later fall, winter, and early spring months. Big sagebrush, with lesser quantities of saltbush, fulfills this role on both allotments. Although dual dormant season use of shrubs by sheep and big game has potential to elicit forage competition, during allotment inspection in the winter of 2003 there was no widespread indication (i.e., leader growth, form class) that sagebrush or other forage shrubs were subjected to inappropriate levels of use. Current levels of dual use by sheep and big game does not appear to detract from plant vigor or adequacy of winter forage supplies. Dormant season use of herbaceous growth by elk and sheep likely aids in enhancing the utility of bunchgrasses (especially crested wheatgrass south of Highway 64) for subsequent use by pronghorn and deer in spring.

The most likely prospect for direct forage competition exists during the early part of the growing season when big game and sheep make concurrent use of emerging herbs (especially forbs favored by pronghorn). This situation is unlikely on these two allotments since livestock and deer likely focus heavily on the allotment's abundant cheatgrass growth. Livestock are also moved through a number of pastures, leaving herbaceous production across the remainder of the allotments fully available for spring use by relatively few big game animals (30-50).

This allotment is burdened by a large proportion of range dominated by weedy annuals. These ranges cannot be expected to support a diverse and abundant complement of native forbs that are important sources of nutrition, especially for populations of pronghorn and sage grouse that remain through the later spring and summer months. The current grazing regimen generally allows for modest recovery of plants that are taken later in the growing period and can limit and alternate such use among the allotments' 8 pastures. It is unknown if, or to what degree, current grazing authorizations are influencing the vigor or reproductive capacity of these native components, but it is likely that the overall trend is at least static. Regardless of reasonable grazing practices applied to these allotments (within the scope of authorized use), it is unlikely that notable short term gains would be made in herbaceous composition on those portions of the allotment dominated by annuals without major management intervention (e.g., herbicide application and supplemental seeding).

Spring sheep use on portions of the allotments (i.e., 1 or 2 of the 8 pastures) would coincide with the sage grouse strutting and nesting period, with livestock leaving the allotment 1 to 2 weeks before the peak of hatch. Without appropriate attention, concentrated and persistent human and animal activity in close proximity to lekking grouse could disrupt reproductive display sufficient to depress reproductive success. Although residual herbaceous cover and regrowth opportunities are an important determinant in the ultimate success of nesting, hatching and brood-rearing functions, its application on much of these ranges is enigmatic, where grazing has little, if any, influence on understory attributes on degraded ranges (i.e., cheatgrass) or where without substantial dormant season use, crested wheatgrass accumulates residuals within the crown that degrades understory utility. As discussed above, sheep use is having no apparent influence on the condition or distribution of sagebrush as a key winter habitat component.

Impact of Proposed Action Alternative, Remove Suspended Preference: Proposed winter livestock use and its effects on wildlife would be similar to those discussed in Alternative A. The notable difference in this alternative involves a reduction in the intensity and duration of livestock use during the growing season. This alternative involves an overall reduction of 289 AUMs of spring use representing a 35% reduction in core growing season use. An additional 20 days of plant regrowth (additional 25%) would be afforded by this proposal. Although the effects of this alternative may be initially subtle, decreasing the intensity and duration of livestock use in spring would almost certainly favor elevated vigor in native herbaceous plants and predispose degraded rangelands to accelerated recovery timeframes in the long term. These incremental and long term influences would complement

the restoration of sage grouse nesting and brood range utility as well as bolster the nutritional status of pronghorn and deer during lactation and later stages of gestation.

Impact of No Grazing Alternative, Deny the Grazing Transfer: Although eliminating grazing in the spring may offer some localized benefit over current grazing regimens, in comparison with the limited growing season use associated with the Proposed Action, it is unlikely that noticeable differences in vigor or reproductive capacity of native perennial vegetation could be attributable to total rest. Removing the influences of livestock grazing would not alter the fact that intensive management intervention would be required to disrupt annual weed domination of these ranges.

Removing livestock would certainly lead to a rapid accumulation of litter in the crested wheatgrass seedings south of Highway 64 and perhaps in those areas dominated by cheatgrass throughout the allotments. Heavy litter accumulations in bunchgrass types reduces these ranges' utility for sage grouse nesting and brood rearing as well as the availability of herbaceous material for deer and pronghorn use in spring, summer, and fall. Extensive and uninterrupted accumulations of litter among sagebrush canopies might also be expected to increase fire risk (i.e., increasing the frequency and extent of fire incidents), which may ultimately result in long term reductions in the extent of sagebrush communities suitable for year-round use by sage grouse and pronghorn and winter use by deer.

Mitigative Measures: Sheep camps or bedding areas should be located no closer than one mile from the sage grouse lek in pasture 3 west of the Bonanza road during the period between 1 March and 15 April. Lek location will not be presented in this document.

Signature of specialist: Ed Hollowed 12/12/03

CUMULATIVE IMPACTS: No cumulative impacts were identified

Signature of specialist: Robert Fowler 12-15-03

11. PERSONS/AGENCIES CONSULTED:

Transfer documents from the grazing permittee's representative were received in October.

FONSI/DR
CO-110-WRFO-2004-006EA

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. The approved mitigation measures result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION AND RATIONALE: It is my decision to implement Alternative B, transferring the Artesia and Raven Ridge allotments to Morapos Sheep Company. These allotments will be included with the grazing allotment under permit #1466 for a 3 year period. The allotment will be billed prior to use. The grazing periods for the Artesia and Raven Ridge allotments will provide a period of deferment from livestock grazing during the critical growing season. This grazing rest period is consistent with the minimum rest periods developed in the RMP and consistent with Livestock Grazing Guidelines developed for public lands in Colorado. The proposed action offers the best option in attaining Colorado Public Land Health Standards and in achieving the vegetation management objectives presented in the RMP.

GRAZING PERMIT SCHEDULE					
ALLOTMENT	NUMBER CLASS	BEGIN PERIOD	END PERIOD	%PL	AUMs
Artesia SCHEDULE 1	4182 sheep	12/01	02/28	100	2557
Artesia SCHEDULE 2	4182 sheep	03/01	04/20	100	1402
Raven Ridge SCHEDULE 3	1200 Sheep	11/20	02/28	100	797

MITIGATION MEASURES/TERMS AND CONDITIONS:

1. No supplemental feeds- except salt or mineral block can be placed on public land without prior authorization from the Field Manager.
2. The operator is responsible for informing all persons who are associated with the Allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any Allotment activities and grazing activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the identified area can be used for grazing activities again and,

3 As time and staffing permit (and efforts shall be made to make those resources available in AWP submissions) a more thorough review of the office database shall be undertaken and resources records that suggest that certain sites might have more scientific interest or other values shall be revisited, the site records updated as necessary and the level of impacts from grazing, if any shall be thoroughly documented. Measures to reduce or eliminated impacts from grazing will be included in any new AMP's or permit renewals as appropriate.

4. Prior to the initiation of any construction, all range improvements that occur on mapped areas of Category I formations where the bedrock is exposed shall be inventoried by an approved paleontologist with a report detailing the results of the inventory and any recommended mitigation to mitigate impacts to fossils present shall be submitted to the BLM.

5. BLM will make efforts during the AWP/AMP process to gather inventory data that will permit more thorough documentation of impacts to fossil resources due to livestock grazing.

6. BLM will inventory and monitor threatened, endangered and sensitive plant species to determine their location and density. Populations determined to be impacted by management will be protected or avoided.

7. The permittee will contact BLM for approval prior to any motorized or mechanized use for range management activities within the WSA portion of the Artesia Allotment. BLM will research the allotment file to determine it is a grandfathered activity in accordance with the interim management policy for wilderness study areas.

8. BLM will Maintain coordination with the grazing permittee and other users of these allotments to monitor noxious weed outbreaks. BLM and the permittee will promptly control all noxious weed outbreaks in a manner consistent with BLM policy.

9. Sheep camps or bedding areas should be located no closer than one mile from the sage grouse lek in pasture 3 west of the Bonanza road during the period between 1 March and 15 April. Lek location will not be presented in this document.

COMPLIANCE PLAN:

The White River Field Office Range Management Program will monitor compliance with the renewed grazing permit and it's associated terms and conditions and with the allotment management plan. Livestock grazing will be monitored by the range staff and other area personnel, as appropriate, to assure compliance.

Monitoring will be as described in the White River Resource Area, Monitoring Plan. The first

evaluation of the grazing system will be conducted during the fourth year allowing one complete cycle of the grazing system. Data from all study sites will be collected near the end of the critical growing season on the fourth year. Data collected will be evaluated utilizing the objectives of the management plan, the objectives of the land use plan and the Colorado Public Land Health Standards as the basis to judge the success of the grazing management system.

The initial evaluation report will specify where problems exist, identify additional monitoring or management sideboards (if any) that may be required, and specify when the next evaluation will be conducted. At a minimum, a second evaluation would take place on the tenth year prior to renewal of the grazing permit. Changes will be made to the permit and allotment management plan, based on monitoring and evaluations, when necessary to further protect land health.

SIGNATURE OF PREPARER:

Robert J. Fowle

SIGNATURE OF ENVIRONMENTAL COORDINATOR:

Scott P...

DATE SIGNED:

12/17/03

SIGNATURE OF AUTHORIZED OFFICIAL:

Kent C. Walter

DATE SIGNED:

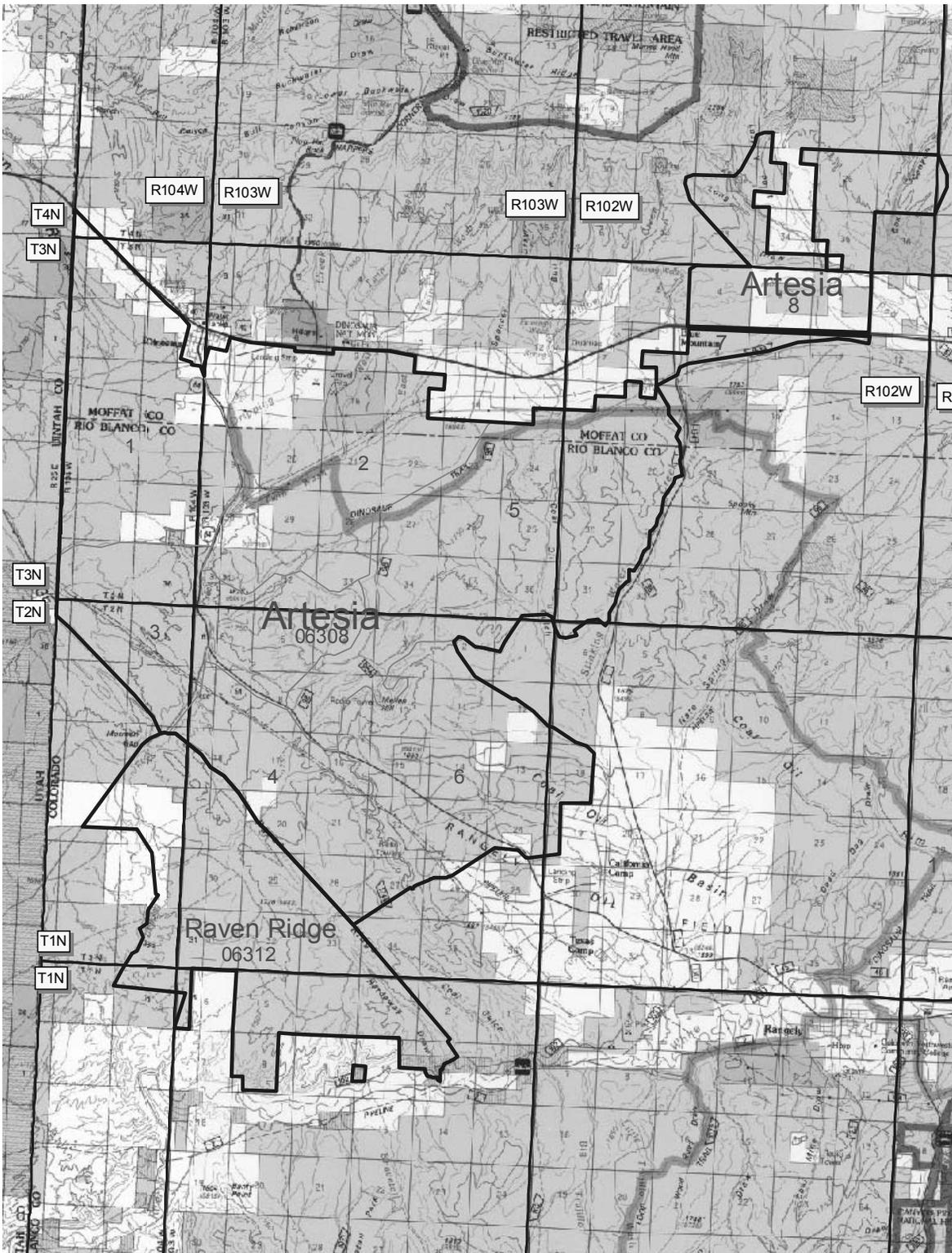
12/18/03

Attachments:

- 1) Figure 1 - Map of the Artesia (06308) and Raven Ridge (06312) Allotments
- 2) Map of the Location of the Proposed Action.

Supporting documentation is contained in the studies and the grazing case files at the White River Field Office for each of the allotments.

Figure 1 - Map of the Artesia (06308) and Raven Ridge (06312) Allotments:



Location of Proposed Action CO-110-2004-006-EA

