

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-048-EA

CASEFILE/PROJECT NUMBER: Jolley H. Allotment (06831)

PROJECT NAME: Grazing Lease Renewal for Gus and John Halandras (0501531) on the Jolley H Allotment (Section 15).

LEGAL DESCRIPTION:

- Township 2 South, Range 94 West
Sections 9, 10, 15, 16, 21, 22, 25, 27, 28, 33, 34, 35, & 36
- Township 3 South, Range 94 West
Sections 1, 2, 3, 10, 11, & 12
- See Figure 1 (Map of the Jolley H Allotment)

APPLICANT: Gus and John Halandras (0501531)

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: John and Gus Halandras (lessee) have a base property lease for grazing preference on the Jolley H Allotment from Sam and Ann Potter (lessor), owner of the base property. Therefore, in accordance with this property lease and term, John and Gus Halandras have obtained the grazing lease (0501531) with the BLM for grazing preference on the Jolley H Allotment, which will expire on April 1, 2004. The Halandras' have held this grazing lease with the BLM since 1990. This grazing lease renewal process has begun to reissue the grazing lease in accordance with the National Environmental Policy Act (NEPA).

The Jolley H Allotment consists of three pastures, with the North Pasture (Pasture 1) containing approximately 794 acres of public land and 583 acres of private land. The Twelvemile Creek Pasture (Pasture 2) contains approximately 845 acres of public land and 2,244 acres of private land. The Flag Creek Pasture (Pasture 3) contains approximately 351 acres of public land and 2,096 acres of private land. For the entire allotment, approximately 1,779 acres are public and 5,134 acres are private for a grand total of 6,913 acres.

This allotment is a Section 15 grazing lease and has been categorized as a “C” (Custodial) Allotment, on which no significant problems, issues, and/or resource conflicts have been identified. Current management and land health of the allotment are in a satisfactory state.

Within the Jolley H Allotment, the majority of the forage component for livestock use is located on private land (72%), versus BLM administered lands (28%), as indicated by the % Public Lands (P.L.) within the proposed action. Also, the majority of watering localities for livestock are located on private land, thus livestock use is concentrated within these areas.

In 2003, BLM completed an environmental assessment (CO-WRFO-01-168-EA) and approved a temporary, non-renewable grazing lease issued to John and Gus Halandras for a conversion from sheep to cattle for the 2003 grazing season only. The rationale behind this decision was that the base property lease with Sam Potter (lessor) expired after the 2003 grazing season, and to facilitate a prompt change in class of livestock before the start of the 2003 grazing season. Also, in 1999, BLM completed another environmental assessment (CO-017-WR-99-47) for a temporary, partial change in kind of livestock for the 1999 grazing season only, as requested by the applicant.

Proposed Action: The class of livestock would be permanently changed from sheep to cattle and the grazing lease (0501531) for the Jolley H Allotment (06831) would be renewed to John and Gus Halandras (lessees). This BLM grazing lease would be established upon the base property lease between the Halandras and Sam and Teresa Potter (lessors), which will expire on 04/01/07. The proposed action would consist of a livestock operation as outlined below and applied for by John Halandras.

Allotment (Jolley H)		Livestock		Date		Total AUMs	% PL	BLM AUMs (Permitted Use)
Pasture Name	No.	Number	Kind	On	Off			
Pasture 1 (North)	06831	100	Cattle	05/01	05/20	66	44%	29
Pasture 1 (North)	06831	100	Cattle	08/26	09/20	85	44%	38
Pasture 2 (Twelvemile Ck)	06831	100	Cattle	06/26	08/31	220	26%	57
Pasture 3 (Flag Ck)	06831	100	Cattle	05/11	06/25	151	15%	23
Totals--						522		147

A straight conversion factor of five sheep to one cow will not be used to establish the animal unit equivalent, as this is based upon all factors being equal. A ratio of approximately eleven sheep to one cow will be used to convert the permitted use AUMs, as the amount of cattle use will be reduced proportionate to the amount of lands suitable for cattle distribution, plant communities, and use levels by cattle during recent grazing years. A significant portion of the allotment contains steep slopes (greater than 35%) along the Hogback and Flag Creek, which are more suited for sheep use than cattle. Cattle have a greater tendency to congregate along the stream channels and more level localities, thus lessening their utilization of these steep slopes. The

AUM proposal, in part, reflects these tendencies of cattle. Also, the applicant’s proposal of running 100 head of cattle, and grazing / browsing variations in relation to vegetation types located on the allotment are factored into the AUM totals.

The Percent Public Land (% PL) for the grazing lease has been modified from 35% for all pastures to actual % PL for each individual pasture, as outlined in the Jolley Section 15 Lease Rangeland Analysis. The % PL references the relationship of the forage component for private versus BLM rangelands, thus prorating BLM Permitted Use AUMs from the total AUMs.

As outlined under the proposed action, the grazing system will provide the plant communities in the Jolley H. Allotment adequate opportunity for regrowth and seed production following grazing. The critical growing season for this locality is generally from May 1 to June 30, with some variations dependent upon the year. The grazing time frames, outlined above, include only part of the critical growing season on each pasture. Therefore, each plant will have a higher probability for growth and/or regrowth to reach maturity for an increased level of plant vigor and maintenance of the existing vegetative communities.

The Jolley H Allotment currently has 4 separate BLM pastures, known as pastures 1, 2, 3, and 4. Gus and John Halandras (Sam Potter-lessor) control pastures 1-3 (North, Twelvemile Ck, & Flag Ck), and Bill Robinson (0500126) (Big Mountian Ranch-lessor) controls the southern pasture (4). Since this allotment has geographically separated pastures and separate grazing lessees, pasture 4 (Bill Robinson) will be removed from the Jolley H Allotment and made into a new allotment, known as the Mullen Gulch Allotment and assigned allotment number 00011.

Also, pastures will be renamed from numeric numbers to local topography names (Pasture 1-North, Pasture 2-Twelvemile Creek, and Pasture 3-Flag Creek).

No Action Alternative: Under this alternative current management would continue, and the previous management practices of a sheep operation as outlined on a previous grazing lease would be retained. This would constitute renewal of the grazing lease for the Jolley H. Allotment (06831) to John and Gus Halandras as outlined in the table below.

Allotment		Livestock		Date		Total AUMs	% PL	BLM AUMs (Permitted use)
Name	No.	Number	Kind	On	Off			
Jolley H	06831	1500	Sheep	05/01	07/14	740	35%	259
Jolley H	06831	1500	Sheep	09/01	10/13	424	35%	148
Totals--						1164		407

No Grazing Alternative: No grazing would be authorized on the Jolley H Allotment. The grazing lease would not be renewed, and livestock grazing use on this allotment would be discontinued.

Terms and Conditions:

Under either the No Action or the Proposed Action Alternatives the following terms and conditions of the expired lease would remain unchanged in the renewed lease:

1. Any changes in grazing use must be applied for and approved prior to the grazing period.
2. Each year a billing notice is issued which specify, for the current year, the allotment(s), number and kind of livestock, period(s) of use, animal unit months of use, and the grazing fees due. These billing notices when paid, become part of this grazing lease.
3. Grazing fees are due upon issuance of a billing notice and must be paid in full prior to making any grazing use under this grazing lease, unless otherwise provided for in the terms and conditions of this grazing lease.
4. No grazing use can be authorized under this grazing lease during any period of delinquency in the payment of amounts due in settlement for unauthorized grazing use.
5. Grazing use authorized under this grazing lease may be suspended, in whole or in part, for violation by the permittee/lessee of any of the provisions of the rules or regulations now or hereafter approved by the Secretary of the Interior.
6. This grazing lease is subject to cancellation, in whole or in part, at any time because of:
 1. Non-compliance by the permittee/lessee with rules and regulations now or hereafter approved by the Secretary of the Interior.
 2. Loss of control by the permittee/lessee of all or part of the property upon which it is based.
 3. A transfer of grazing preference by the permittee/lessee to another party.
 4. A decrease in lands administered by the Bureau of Land Management within the allotment(s) described herein.
 5. Repeated willful unauthorized grazing use.
7. This grazing lease is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth non-discrimination clauses. A copy of this Order may be obtained from the Authorized Officer.
8. The permittee/lessee must own or control and be responsible for the management of the livestock authorized to graze under this grazing lease.
9. The Authorized Officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze under this grazing lease.

10. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
11. In order to improve livestock distribution on public lands, all salt blocks and/or mineral supplements will not be placed within 1/4 mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulation through a written agreement or decision in accordance with 43 CFR 4130.3-2(c).
12. In accordance with 43 CFR 4130.8-1(F): Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but not to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR 4140.1(b)(1) and shall result in action by the Authorized Officer under 43 CFR 4150.1 and 4160.1-2.

NEED FOR PROPOSED ACTION: The current Bureau of Land Management's (BLM) Grazing Lease (0501531), which authorizes livestock grazing on the Jolley H. Allotment, expires on April 1, 2004. Additionally, the applicant has applied for a permanent change in the class of livestock from sheep to cattle. The applicant proposes to run a maximum of 100 head of cow/calf pairs to take advantage of a more favorable market and to utilize forage resources not used in their previous sheep operation. This lease is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. The BLM has the authority to renew the livestock grazing lease consistent with the provisions of the *Taylor Grazing Act*, *Public Rangelands Improvement Act*, *Federal Land Policy and Management Act* and the *White River Resource Area's Resource Management Plan/Environmental Impact Statement (EIS)*. This Plan/EIS has been amended by the Standards for Public Land Health in the State of Colorado. The Public Land Health Standards will be addressed in this Environmental Assessment (EA).

This environmental assessment will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the lease which improve or maintain public land health standards. The public will benefit from lands which are maintained in a healthy condition and provide sustainable resources for a variety of uses. The terms and conditions, as outlined on the grazing lease, will also meet the public's need to prevent injury to public grazing lands through managed livestock use, thus averting soil deterioration and negative vegetative transformations. In doing so, the grazing lease will provide for orderly use to stabilize the livestock industry dependent upon public rangelands, and for other purposes as stated under the *Taylor Grazing Act*.

In order to graze livestock on public lands administered by the BLM, the livestock producer (permittee/lessee) must hold a valid grazing permit or lease. When permitted livestock are on public lands, the permittee/lessee can conserve forage on other lands to meet future livestock requirements. Livestock producers are dependent on this permitted grazing use on public lands to ensure the economic viability of his/her ranching operation.

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

Date Approved: July 1, 1997

Decision Number/Page: Record of Decision; Livestock Grazing, pgs 2-23 through 2-26.

Decision Language: See pages 2-23 through 2-26 of the White River ROD/RMP.

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (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 the following table and in specific elements listed below:

Standard	Current Situation		
	Acres Achieving or Moving Towards Achieving Standards	Acres Not Achieving standards	Causative Factors
1. Upland Soils	1,779	0	N/A
<p>Plant communities on the allotment are in good condition with ground cover appropriate for the community to provide soil protection. Upland soils are in healthy condition.</p> <p>The proposed action will result in increased utilization of forage with soils on gentle slopes and in drainage bottoms, probably more than has historically taken place on the allotment. It is anticipated that the proposed level of cattle use will result in proper utilization levels and not decrease soil protection.</p>			
2: Riparian Systems	1,775	4	Noxious Weeds (Canada Thistle)
<p>The riparian habitat along Flag Creek is in good condition and the system is functioning properly. With mitigation requirements to limit forage utilization to a moderate level and under the proposed season of use, the proposed change would not degrade the condition or function of the riparian system along Flag Creek. As such, all the alternatives would meet the objectives of this standard.</p>			
3: Plant/ Animal	1,779	0	N/A
<p>As noted in the range management and vegetation sections, the plant communities on the allotment found on both private and public</p>			

	Current Situation		
Standard	Acres Achieving or Moving Towards Achieving Standards	Acres Not Achieving standards	Causative Factors
lands are in good condition with healthy and productive rangelands. These plant communities are resilient enough to accommodate the change in livestock kind and remain in their current state.			
4: Special Status Species	1,779	0	N/A
No T&E or special status species are known to exist on or derive significant benefit from the area. All of the alternatives would meet the objectives of this standard.			
5: Water Quality	1,779	0	N/A
The water quality of all water bodies including groundwater where applicable, located or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated requirements set forth under state law as required by section 303(c) of the Clean Water Act.			
Total Acres	1,775	4	Noxious Weeds

CRITICAL ELEMENTS

CULTURAL RESOURCES:

Affected Environment: The 1998 BLM/Colorado SHPO Protocol agreement requires the BLM to identify all historic properties and sacred sites on all lands within Colorado that are within the APE of a BLM undertaking (1998 Protocol VII (A) p. 4), which is defined as the geographic area(s) within which an undertaking may cause changes in the character or use of historic properties (36 CFR 800.2). During Section 106 review, a cultural resource assessment was completed for this allotment on 05/21/02, following the procedures outlined in IM-WO-99-039, IM-CO-99-007 and IM-CO-99-019. Copies of the cultural resource assessment are available in the White River Field Office archaeology files and the summary report is attached to the range allotment permit file.

Three cultural resource inventories have been conducted within the allotment, resulting in a Class III coverage inventory of 50 acres and the recording of one historic property, which has been evaluated as not eligible for nomination to the National Register of Historical Places. There are no historic properties considered to be potentially “at risk” from damage due to grazing allotment operations. Based on available data, a low potential exists for historic properties in Allotment 06831. Subsequent cultural resource inventories may be conducted in areas where livestock concentrations coincide with high potential for discovering vulnerable historic

properties. Within Allotment 06831, no Class II inventory has been identified as necessary. If future work in the allotment reveals a necessity, subsequent mitigation will be identified and implemented in consultation with Colorado SHPO.

Environmental Consequences: Direct impacts that may occur where livestock concentrate include trampling, chiseling and churning of site soils, cultural features and artifacts, artifact breakage and impacts from standing, leaning and rubbing against above ground features and rock art. Indirect impacts may include soil erosion, gullying and increased potential for unlawful collection and vandalism. In areas where cultural site presence coincides with areas of livestock concentration, continued grazing may contribute to substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties.

There are no potentially at risk historic properties located in areas of potential livestock concentrations. The proposed action substantially lowers the potential for grazing impacts to cultural resources.

Environmental Consequences of No Action Alternative: The no action alternative would leave livestock kind and amount as they are at present, resulting in no changes for impacts to cultural resources.

Environmental Consequences of No Grazing Alternative: The No Grazing alternative would result in no impacts to historic properties.

Mitigative Measures: Should a ten-year permit be issued, appropriate mitigation measures may be identified in consultation with Colorado SHPO within the period of the permit. It is recommended that any renewal issued for this lease be subject to the allotment specific stipulations contained in the information forms.

1. The operator is responsible for informing all persons who are associated with the project 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 project or construction 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 site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise,

the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The Jolley H grazing allotment contains a number of vegetation types ranging from juniper woodland to aspen forests. The precipitation range on the allotment is 15-25 inches per year, with half falling as winter snows. Useful precipitation is based more on elevation, slope and aspect than the yearly precipitation. Native and non-native seeded species are adapted to use within this area.

Environmental Consequences of the Proposed Action: The proposed action alternative does not detail any use of seeded species and no analysis of this subject is required.

Environmental Consequences of the No Action Alternative: The no action alternative does not detail any use of seeded species and no analysis of this subject is required.

Impact of No Grazing Alternative: The no grazing alternative does not detail any use of seeded species and no analysis of this subject is required.

Mitigation: None

NOXIOUS WEEDS: (This includes vegetative information related to Public Land Health Standard 3.)

Affected Environment: The Jolley lease is relatively free of noxious weeds. The only known problem weed is Canada thistle, which is found along Flag Creek. However, lower down Flag Creek musk and bull thistle and houndstongue are becoming problems on the private properties there and could work upstream. With livestock grazing the potential exists for movement of houndstongue seeds due to their ability to attach to the animal's hides. This area can be rated high for invasion of yellow toadflax based on proximity to infestations found on the White River National Forest.

Environmental Consequences of Proposed Action: Given the steep terrain of the allotment, the BLM in the bottoms of Flag Creek (sections 35 and 36) are expected to be cattle concentration points, The draw to the east is expected to be a major trailing route for cattle using

this area. There are also a number of springs and wallows east of Flag creek on which cattle are expected to concentrate. On all of these sites Canada thistle is expected to be introduced and to become established if mitigation measures are not followed.

Environmental Consequences of No Action Alternative: Generally sheep are better able to use steep terrain than cattle. With proper herding, use of the forage resources can be better managed which is an advantage in maintaining the desired vegetation and prevention of noxious weed establishment. Sheep generally concentrate on water sources less than cattle, although trailing back and forth to can reduce vegetation cover providing habitat for noxious weed establishment.

Environmental Consequences of No Grazing Alternative: Under this alternative grazing would not be permitted. Overall cover and density of native species would increase. The competitive advantage of the native communities would decrease the opportunity for noxious weed establishment. This would be particularly important in control of bull and musk thistles. Houndstongue would persist even under improved vegetation conditions although the density and rate of spread would be significantly decreased. Removing the presence of a grazing permittee on the land can be a disadvantage as they are critical to the reporting of outbreaks of noxious weeds, and for control of these outbreaks.

Mitigative Measures: The grazing permittee is to control noxious weeds by an integrated management strategy. All herbicide application is to be conducted by an EPA certified applicator. Application proposals must be approved by the BLM. Post spraying reports are to be provided to the BLM.

MIGRATORY BIRDS

Affected Environment: Non-game populations associated with these ranges are widespread and common throughout sagebrush and juniper, and aspen habitats in this Resource Area (e.g., spotted towhee, song sparrow, Steller's jay). Other bird species observed during on-site visits included fox sparrows, blue grouse, Clark's nutcrackers. There are no specialized or narrowly endemic species known to occupy the project area.

Environmental Consequences of the Proposed Action: Implementation of this project would have no measurable influence on the abundance or distribution of breeding migratory birds even at the smallest landscape scale.

Environmental Consequences of the No Action Alternative: There would be no expected consequences to migratory birds resulting from adopting the no action alternative.

Impact of No Grazing Alternative: None.

Mitigation: None.

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

Affected Environment: A portion of this allotment in Pasture 3 (parts of Sections 35 and 36, T2S, R94W) consisting of approximately 250 acres is designated as potential Canada lynx habitat as delineated by CDOW and the Colorado Interagency Lynx Recovery Team. Section 7 Consultation was initiated between the BLM and U.S. Fish and Wildlife Service (FWS) and completed in 2003. The U.S. Fish and Wildlife Service concluded in a letter, dated 26 September 2003, that “the habitat that may occur within the allotment is insufficient in size to support the individual lynx by itself. Therefore, it is the determination of the Service that actions occurring within the allotment will have no effect on the lynx.”

Environmental Consequences of the Proposed Action: The Biological Assessment (attached) details the consequences of the proposed action on all threatened and endangered species that could possibly be influenced or affected by this action. In short, there is no indication that the described species inhabit or make important use of the project vicinity. This action was determined to have no effect on any T&E animal species.

Environmental Consequences of the No Action Alternative: No anticipated negative impact is expected if this grazing regime were to remain unchanged.

Impact of No Grazing Alternative: The absence of any grazing would be expected to have no impacts to threatened and endangered wildlife.

Mitigation: None currently. However, should the grazing regime change substantially in the future, the FWS may require mitigation and/or conservation measures.

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive animal species. Thus there would be no effect on achieving the land health standard.

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

Affected Environment: No threatened or endangered plants are present in, or in the vicinity of, the proposed project area.

Environmental Consequences of the Proposed Action: None

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus there would be no effect on achieving the land health standard.

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

Affected Environment: The portions of the allotments that are on public lands are in both the White River and Colorado River drainages. See the table below.

Drainage Name	Sub-Watershed	Watershed	Acres of BLM
West Rifle	Rifle Creek	Colorado River	211
Harris Gulch	Rifle Creek	Colorado River	3.1
Mullen Gulch	Rifle Creek	Colorado River	214
Flag Creek	Flag Creek	White River	566
Fourteenmile Creek	Piceance Creek	White River	5.2
Thirteenmile Creek	Fourteenmile Creek	Piceance Creek	321
Twelvemile Creek	Fourteenmile Creek	Piceance Creek	515
Sheep Creek	Sheep Creek	White River	372

For Fourteenmile Creek, which is a tributary to Piceance Creek and the White River, the State has classified this reach as a "Use Protected" reach; its designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. Flag Creek and Sheep Creek which are tributary to the White River are also classified as "Use Protected", their beneficial uses are: Aquatic Life 1, Recreation 1b, Water supply and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use protected. For those waters, only the protection specified in each reach will apply. The state has further defined water quality parameters with table values. These standards reflect the ambient water quality and define maximum allowable concentrations for the various water quality parameters, and are published by the Colorado Department of Public Health and Environment, Water Quality Control Commission, Regulation No. 37, The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31). For all of the reaches involved, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 6.0 mg/l, pH = 6.5 - 9.0 and Fecal Coliform = 2000/100ml and E. Coli = 630/100. In addition to these physical and biological standards, Flag and Sheep Creeks have standards for inorganic and metals.

Environmental Consequences of the Proposed Action: Under this alternative BLM would expect minor impacts to water quality since cattle tend to use areas with water more heavily than sheep. It is not anticipated that this change in grazing type will have a measurable long-term affect on the overall water quality.

Environmental Consequences of the No Action Alternative: This alternative would have minimal impacts to water quality since cattle tend to use areas with water more heavily than sheep.

Impact of No Grazing Alternative: With no grazing occurring on the allotment, a slight improvement to water quality would occur within the Flag Creek stream channel because of reduced fecal matter contamination and greater filtering by vegetation that receives no livestock grazing pressure. However, this benefit would not be significant to the overall creek because grazing by livestock would continue on other segments of Flag Creek, and the BLM segment of the creek is a minority portion.

Mitigation: The BLM will monitor the drainage bottoms and riparian areas of BLM administered lands for overuse of woody and herbaceous species and adjust the grazing program if necessary.

Finding on the Public Land Health Standard for water quality: Water quality data is not available for the drainages within the allotments. However, the United State Geological Survey (USGS) monitors the White River above and below the confluence with Flag Creek. Data indicates livestock grazing has not caused the White River to not meet state water quality standards; therefore there is no reason not to expect water quality to continue to meet the state and Public Land Health standards with the proposed action.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: There is a ¼ mile of riparian habitat along a federally owned portion of Flag Creek that is in properly functioning condition.

Environmental Consequences of the Proposed Action: This proposal may result in concentration of cattle in the riparian area and could result in heavy utilization of herbaceous forage in the riparian zone. The riparian habitat on public land is along 1/4 mile of Flag Creek within pasture 3. It is not anticipated that this area will receive over utilization by cattle, because of its position on Flag Creek and the amount of more suitable and accessible watering areas on private land upstream. The proposed action's grazing period (05/15 – 06/25) is during the spring for pasture 3. Grazing during the early season for a short duration on Flag Creek will create ample opportunity for plant regrowth after being grazed by livestock, particularly on the sedge community within and abutting the stream channel, which provides an essential role in the functionality of the riparian area. Grazing during the spring period will also provide for sediment trapment, stream flow dissipation, availability of succulent upland vegetation for increased distribution, and reduced utilization on woody plant species. In addition, more suitable and accessible watering areas are found on private lands upstream. Protection of riparian areas is also important to the Canada lynx (see endangered animal section above). Therefore, use levels will need to be closely monitored to measure utilization rates, soil compaction, and trampling. If these conditions arise and hamper the allotment in meeting rangeland health standards, additional actions may be necessary.

Environmental Consequences of the No Action Alternative: Under this alternative, the riparian habitat on public land is not anticipated to receive over utilization by sheep as shown by historic low use levels and the current functional status of the riparian habitat. Certain

characteristics of sheep use are more conducive to high-quality riparian habitat since they tend to utilize the uplands and steep slopes more efficiently, along with greater distribution through herding.

Environmental Consequences of No Grazing Alternative: The riparian habitat along Flag Creek would remain in good and properly functioning condition. Reduced pressure on the riparian vegetation would lead to greater ground cover by vegetation and soil protection. Thus, increasing the scope of the riparian zone would increase sediment trapment, reduce the intensity of spring runoffs, and provide for a greater diversity and density of vegetation. No livestock grazing would also increase woody debris accumulation and provide for ample opportunity for seed production and establishment of native vegetation.

Mitigation: To insure the proper level of use, a mitigation measure would be stipulated on the authorization to limit herbaceous forage utilization levels in the riparian zone to 40 percent of the current year's growth and maintain a sedge height of six (6) inches. The sedge height limit is so that the riparian zone allows Flag Creek to resist runoff conditions, which are usually experienced in the spring during snow melt or a high summer rain event(s). Additionally, the BLM range conservationist assigned this allotment shall establish photo points at several locations on Flag Creek to closely monitor the utilization of vegetation by livestock.

Finding on the Public Land Health Standard for riparian systems: Riparian systems are expected to continue to meet the Public Land Health Standard under all alternatives.

Mitigation: None.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No Area of Critical Environmental Concern, flood plains, prime and unique farmlands, Wilderness Area, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Air Quality, Hazardous Waste, Native American religious, or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

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

SOILS: (This includes all information related to Public Land Health Standard 1.)

Affected Environment: The pastures of the allotment have only a partially completed soil survey at this time, as the Garfield County portion of this allotment is unsurveyed. Because the North Pasture (Pasture 1) is not situated within Garfield County, it does have a complete soil survey. Therefore, between the Twelvemile Creek Pasture (Pasture 2) and Flag Creek Pasture (Pasture 3) there are 548 BLM acres and 2017 private acres within the Jolley H Allotment that

are not included within the survey. The following soil types/groups comprise the major association types on the completed portions of the soil survey

Pasture	PAST #	Soil Type	Range Site	Unit	Land Status	ACRES
North	1	Absarokee-Delson channery loams,8-65%slopes	Brushy Loam	2	BLM	13.4
North	1	Castner channery loam, 5-50%slopes	Pinyon-Juniper woodlands	15	BLM	58.5
North	1	Irigul channery loam,5-50%slopes	Loamy Slopes	42	BLM	70.5
North	1	Irigul-Parachute complex,5-30%slopes	Loamy Slopes/Mountain Loam	43	BLM	113.8
North	1	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	BLM	31.8
North	1	Parachute Loam,25-75%loeps	Brushy Loam	58	BLM	32.5
North	1	Parachute-Rhone loams,5-30%slopes	Mountain Loam	59	BLM	42.3
North	1	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	BLM	38.9
North	1	Rhone loam,30-75%slopes	Brushy Loam	76	BLM	89.8
North	1	Shawa loam,3-8%slopes	Deep Loam	80	BLM	6.0
North	1	Torriorhents-RockOutcrop, complex,15-90%slopes	Stoney Foothills	91	BLM	38.1
North	1	Veatch channery loam,12-50%slopes	Loamy Slopes	96	BLM	8.2
North	1	Winnemucca-Clayburn loams,8-25%slopes	Brushy Loam/Mountain Loam	99	BLM	38.8
Total:						582.6

Pasture	PAST #	Soil Type	Range Site	Unit	Land Status	ACRES
North	1	Shawa loam,3-8%slopes	Deep Loam	80	PRI	135.1
North	1	Absarokee-Delson channery loams,8-65%slopes	Brushy Loam	2	PRI	0.0
North	1	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	13.1
North	1	Irigul-Parachute complex,5-30%slopes	Loamy Slopes/Mountain Loam	43	PRI	18.3
North	1	Torriorhents-RockOutcrop, complex,15-90%slopes	Stoney Foothills	91	PRI	13.7
North	1	Parachute Loam,25-75%loeps	Brushy Loam	58	PRI	0.0
North	1	Veatch channery loam,12-50%slopes	Loamy Slopes	96	PRI	0.0
North	1	Rhone loam,30-75%slopes	Brushy Loam	76	PRI	0.0
North	1	Irigul channery loam,5-50%slopes	Loamy Slopes	42	PRI	0.0
North	1	Parachute Loam,25-75%loeps	Brushy Loam	58	PRI	41.6
North	1	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	63.9
North	1	Parachute-Rhone loams,5-30%slopes	Mountain Loam	59	PRI	7.7
North	1	Rhone loam,30-75%slopes	Brushy Loam	76	PRI	0.0
North	1	Irigul-Parachute complex,5-30%slopes	Loamy Slopes/Mountain Loam	43	PRI	15.0
North	1	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	0.0
North	1	Torriorhents-RockOutcrop, complex,15-90%slopes	Stoney Foothills	91	PRI	13.2
North	1	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	31.7
North	1	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	162.4
North	1	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	0.0
North	1	Castner channery loam, 5-50%slopes	Pinyon-Juniper woodlands	15	PRI	63.2
North	1	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	15.6
North	1	Work Loam, 8-15%slope	Deep Loam	102	PRI	23.8
North	1	Work Loam, 8-15%slope	Deep Loam	102	PRI	72.6
North	1	Absarokee-Delson channery loams,8-65%slopes	Brushy Loam	2	PRI	5.1
North	1	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	16.7

North	1	Castner channery loam, 5-50%slopes	Pinyon-Juniper woodlands	15	PRI	47.3
North	1	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	11.0
North	1	Winnemucca-Clayburn loams,8-25%slopes	Brushy Loam/Mountain Loam	99	PRI	1.5
North	1	Winnemucca-Clayburn loams,8-25%slopes	Brushy Loam/Mountain Loam	99	PRI	1.8
North	1	Winnemucca-Clayburn loams,8-25%slopes	Brushy Loam/Mountain Loam	99	PRI	3.9
North	1	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	13.0
North	1	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	2.5
North	1	Torriorthents-RockOutcrop, complex,15-90%slopes	Stoney Foothills	91	PRI	0.8
					Total:	794.4

Pasture	PAST #	Soil Type	Range Site	Unit	Land Status	ACRES
Twelvemile Creek	2	Cochetopa loam,9-50%slopes	Brushy Loam	23	BLM	82.8
Twelvemile Creek	2	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	BLM	60.5
Twelvemile Creek	2	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	BLM	157.7
Twelvemile Creek	2	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	BLM	48.8
Twelvemile Creek	2	Silas loam,0-8%slopes	Mountain Swale	82	BLM	0.8
Twelvemile Creek	2	Work Loam, 8-15%slope	Deep Loam	102	BLM	0.1
Twelvemile Creek	2	N/A	N/A	Unsurveyed	BLM	493.8
					Total:	844.5

Pasture	PAST #	Soil Type	Range Site	Unit	Land Status	ACRES
Twelvemile Creek	2	N/A	N/A	Unsurveyed	PRI	656.7
Twelvemile Creek	2	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	51.6
Twelvemile Creek	2	Work Loam, 8-15%slope	Deep Loam	102	PRI	0.2
Twelvemile Creek	2	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	0.3
Twelvemile Creek	2	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	342.6
Twelvemile Creek	2	Work Loam, 3-8%slope	Deep Loam	101	PRI	25.3
Twelvemile Creek	2	Castner channery loam, 5-50%slopes	Pinyon-Juniper woodlands	15	PRI	1.0
Twelvemile Creek	2	Silas loam,0-8%slopes	Mountain Swale	82	PRI	153.2
Twelvemile Creek	2	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	0.2
Twelvemile Creek	2	Irigul-Parachute complex,5-30%slopes	Loamy Slopes/Mountain Loam	43	PRI	13.5
Twelvemile Creek	2	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	185.5
Twelvemile Creek	2	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	0.1
Twelvemile Creek	2	Shawa loam,3-8%slopes	Deep Loam	80	PRI	48.6
Twelvemile Creek	2	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	18.8
Twelvemile Creek	2	Absher loam,0-3%slopes	Alkaline Slopes	3	PRI	8.3
Twelvemile Creek	2	Jerry loam,12-45%slopes	Brushy Loam	44	PRI	18.7
Twelvemile Creek	2	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	44.5
Twelvemile Creek	2	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	59.3
Twelvemile Creek	2	Absarokee-Delson channery loams,8-65%slopes	Brushy Loam	2	PRI	118.3
Twelvemile Creek	2	Absarokee-Delson channery loams,8-65%slopes	Brushy Loam	2	PRI	2.0
Twelvemile Creek	2	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	0.1
Twelvemile Creek	2	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	66.5

Twelvemile Creek	2	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	60.3
Twelvemile Creek	2	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	0.2
Twelvemile Creek	2	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	PRI	147.9
Twelvemile Creek	2	Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	74	PRI	213.9
Twelvemile Creek	2	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	6.3
Twelvemile Creek	2	Work Loam, 8-15%slope	Deep Loam	102	PRI	0.1
Total:						2243.7

Pasture	PAST #	Soil Type	Range Site	Unit	Land Status	ACRES
Flag Creek	3	Cochetopa loam,9-50%slopes	Brushy Loam	23	BLM	65.9
Flag Creek	3	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	BLM	117.0
Flag Creek	3	Miracle fine sandy loam,3-25%slopes	Mountain Loam	52	BLM	0.6
Flag Creek	3	Nagitsy-Irigul channery loams,5-50%slopes	Brushy Loam/Loamy Slopes	54	BLM	3.0
Flag Creek	3	Winnemucca-Clayburn loams,8-25%slopes	Brushy Loam/Mountain Loam	99	BLM	110.6
Flag Creek	3	N/A	N/A	Unsurveyed	BLM	54.3
Total:						351.3

Pasture	PAST #	Soil Type	Range Site	Unit	Land Status	ACRES
Flag Creek	3	N/A	N/A	Unsurveyed	PRI	1359.8
Flag Creek	3	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	430.3
Flag Creek	3	Winnemucca-Clayburn loams,8-25%slopes	Brushy Loam/Mountain Loam	99	PRI	52.5
Flag Creek	3	Tampico-Miracle complex,8-50%slopes	Brushy Loam/Mountain Loam	88	PRI	19.4
Flag Creek	3	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	0.1
Flag Creek	3	Nagitsy-Irigul channery loams,5-50%slopes	Brushy Loam/Loamy Slopes	54	PRI	62.7
Flag Creek	3	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	5.2
Flag Creek	3	Cochetopa loam,9-50%slopes	Brushy Loam	23	PRI	119.9
Flag Creek	3	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	7.6
Flag Creek	3	Torriorhents-RockOutcrop, complex,15-90%slopes	Stoney Foothills	91	PRI	12.4
Flag Creek	3	Lamphier-Tampico-Kamack loams,5-60%slopes	Aspen woodlands/Brushy Loam	50	PRI	25.8
Total:						2095.7

Environmental Consequences of Proposed Action: Cattle have a greater tendency than sheep to congregate within the stream channels, draws, and the more level terrain localities of the allotment. Therefore, within the limited stream channel (1/4 mile) along Flag Creek, cattle use, in comparison to sheep use, would be more inclined to trample stream banks and cause higher soil compaction rates. This could lead to increased soil erosion and possible pedalesting of vegetation within the wet soil areas. Under the proposed action's season of use and AUM totals, overall impacts to the soils should be negligible in respect to changes in erosion rates, pedalesting, and undesired alterations in vegetation types and cover. The early season use for the Flag Creek Pasture under the proposed action would have uplands with succulent, herbaceous forage that would attract cattle away from the stream channel, thus increasing distribution and reducing the amount of soil compaction and bank trampling by cattle. Under the proposal, there would be ample opportunity for regrowth of native vegetation after livestock grazing, thus

maintaining the current state of the plant communities that provides adequate soil protection. Also, cattle use of woody species (willows, etc.) during this early timeframe would be minimal as to maintain the role of woody species within the functionality of the riparian system.

Environmental Consequences of No Action Alternative: Under this alternative, sheep use would continue to be the authorized livestock type. Sheep are more inclined than cattle to form multiple trail patterns leading between water sources, feeding localities, and bed grounds. At this time, multiple trail patterns have not been formed and are not an issue on the allotment. However, if they did occur in the future because of poor herding practices, it would cause a reduction in plant cover and lead to excessive water movement within the bareground trail system, thus causing gullying and general erosion.

Environmental Consequences of No Grazing Alternative: Ground cover and density of the existing plant communities would increase when receiving no grazing pressure from livestock. Soil stability would increase with the additional vegetative matter. However, current conditions of the soil are in a satisfactory state and meeting the standards for rangeland health. Therefore, the perceived impact of increased soil stability may be minor within the functionality of the rangelands.

Also, as the BLM portions of the allotment are in a minority position (26%), an elimination of livestock grazing on BLM may lead to an increase use of the neighboring private lands. Thus, this situation may cause greater use levels that would degrade upstream (Flag Creek) private land health conditions due to a possible loss of ground cover. This situation may then transcend upon the downstream soil conditions on BLM, due to the loss of ground cover upstream which would cause greater stream flow events.

Mitigative Measures: None

Finding on the Public Land Health Standard for upland soils: Vegetation production and species composition on these sites provide adequate cover for soil protection and forage production to meet a multitude of demands, thus they meet or exceed the Colorado Public Land Health Standards. Overall, as indicated by historic sheep and cattle use within the allotment, soil protection provided by existing ground cover would continue to meet required Public Land Health Standards. Thus, soils would continue to provide for a functioning landscape.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The allotment is situated in a mixture of range sites that are predominantly Loamy Slopes, Mountain Loam, Pinyon-Juniper Woodland, Aspen Woodland, and Brushy Loams. These range sites primarily have an overstory that consist of gambel oak, serviceberry, snowberry, pinyon, juniper, big sagebrush, and aspen. Mixed within the understory of these range sites are mountain brome, western wheatgrass, elk sedge, beardless wheatgrass, Indian ricegrass, Kentucky bluegrass, nodding brome, and basin wildrye. Canadian Thistle, an invasive species, is found along the bottoms of Flag Creek. Overall, these range sites are currently within a productive state as a high seral stage class of vegetative condition.

The Wyoming sagebrush and mountain shrub communities are predominant on the west side of the Hogback and make up the majority of the communities on public land. The mountain sagebrush, aspen and spruce/fir occur on the east side of the Hogback. A majority of these communities are found on private land.

Environmental Consequences of the Proposed Action: Under the proposed action's season of use and AUM totals, overall impacts to the vegetation community should be negligible in respects to plant diversity, cover amounts, and litter accumulation. The early season use for the Flag Creek Pasture under the proposed action would have uplands with succulent, herbaceous forage that would attract cattle away from the stream channel, thus increasing distribution and reducing the amount of use along this riparian channel. Under the proposal, there would be ample opportunity for regrowth of native vegetation after livestock grazing, thus maintaining the current state of the plant communities. Also, cattle use of woody species (willows, etc.) during this early timeframe would be minimal as to maintain the role of woody species within the functionality of the riparian system.

As outlined under the proposed action, the grazing system will provide the plant communities in the Jolley H. Allotment adequate opportunity for regrowth and seed production following grazing. The critical growing season for this locality is generally from May 1 to June 30, with some variations dependent upon the year. The grazing time frames above include only part of the critical growing season on each pasture. Therefore, each plant will have a higher probability for growth and/or regrowth to reach maturity for an increased level of plant vigor.

Environmental Consequences of the No Action Alternative: Rangeland conditions of the allotment would remain in a high seral state with continued sheep use, as indicated from historic use and current vegetation communities which are meeting rangeland health standards. Thus, it would be anticipated that rangeland health standards would continue to be met in the perceivable future.

Environmental Consequences of No Grazing Alternative: Ground cover and density of the existing plant communities would increase when receiving no grazing pressure from livestock. Soil stability would increase with the additional vegetative matter. However, current conditions of the existing plant communities and soil are in a satisfactory state and meeting the standards for rangeland health. Therefore, the perceived impact of increased ground cover and density of the existing vegetation, along with increased soil stability, may be minor within the functionality of the rangelands.

Also, as the BLM portions of the allotment are in a minority position (26%), an elimination of livestock grazing on BLM may lead to an increase use of the neighboring private lands. Thus, this situation may cause greater use levels that would degrade upstream (Flag Creek) private land health conditions due to a possible loss of ground cover. This situation may then transcend upon the downstream riparian vegetation community on BLM, due to the loss of ground cover upstream which would cause greater stream flow events.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Vegetation production and species composition on these sites provide adequate opportunity for regrowth and maintenance of existing plant community conditions to meet a multitude of demands.

The range sites within the allotment represent plant communities within acceptable thresholds for a healthy community and are within acceptable levels of desirable plant species as defined in the White River ROD/RMP. Thus, these plant communities meet or exceed the Colorado Public Land Health Standards and are anticipated to continue to meet these standards under the proposed action.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: No aquatic wildlife occurs within the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Environmental Consequences of No Grazing Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): No aquatic wildlife exists within this project area thus the proposed action would not affect meeting of this standard.

WILDLIFE, TERRESTRIAL: (This includes wildlife information related to Public Land Health Standard 3.)

Affected Environment: This allotment consists of two disjunct parcels south of Meeker approximately 12 and 15 miles respectively. Vegetative cover includes choke cherry, serviceberry, snowberry, gooseberry, rabbit brush, sagebrush, bitter brush, and mountain mahogany with scattered pockets of Gambel oak and aspen. Much of the terrain is steep and difficult for livestock to access. Extensive elk sign was observed during field visits on 30 and 31 August, 2001. BLM portions of this allotment are used by deer and elk from mid spring through the early winter months, but its principal value lies in its summer use functions. The aspen types provide favored nest substrate for a number of tree-nesting raptors and brood habitat for blue grouse. Well-developed herbaceous and woody ground cover complements raptor, grouse, and big game habitat utility by providing forage and cover both with respect to prey availability and the hiding of young offspring. Cattle are not expected to make pronounced use of upland habitats, and would probably have negligible influence on wildlife habitat utility. Observed avian

species included blue grouse, turkey vulture, Townsend’s warbler, red-tailed hawk, western scrub jay, Steller’s jay, black-capped chickadee, mountain chickadee and yellow warbler.

Environmental Consequences of the Proposed Action: Substantial use of BLM lands by big game is most likely to occur during the latter half of the growing season along the Flag Creek channel, and its aspen bottoms and benches. Similarly, use of confined valley bottoms by cattle west of the Hogback during the first half of the growing season would probably have little influence on big game, raptor or grouse use. The proposed grazing regime, utilizing the May 15 to June 25 timeline, is expected to allow for sufficient regrowth of herbaceous vegetation used by wildlife during the latter half of the growing season. Again, because the BLM land base is so limited in this allotment, monitoring will help determine what levels of cattle use could be expected. No lasting influence on wildlife habitats is expected in the short term, but could be observed over a long-term situation.

Environmental Consequences of the No Action Alternative: Maintaining the current grazing regime involving sheep would result in no substantial adverse impacts to wildlife.

Environmental Consequences of No Grazing Alternative: No grazing in this allotment would result in increased levels of herbaceous and possibly woody vegetation on BLM land.

Mitigation: BLM range conservationists will establish photo points on BLM land to monitor utilization of vegetation by cattle both on upland and riparian sites.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The Public Land Health Standard will continue to be met under the proposed action.

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
Access and Transportation		X	
Cadastral Survey	X		
Fire Management		X	
Forest Management			X
Geology and Minerals	X		
Hydrology/Water Rights		X	
Law Enforcement		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations	X		
Recreation		X	
Socio-Economics		X	

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Visual Resources		X	
Wild Horses	X		

FOREST MANAGEMENT:

Affected Environment: This allotment contains aspen forests on steep north and east facing slopes. These stands are middle aged and healthy.

Environmental Consequences of Proposed Action: Cattle are expected to make full use of these aspen stands given their proximity to water and desirable forage. There may be suppression of seedlings as a result. Overall these stands are expected to be maintained and if a problem surfaces, grazing management could be modified.

Environmental Consequences of No Action Alternative: Past sheep grazing has been at times heavy in the aspen stands, but these impacts have been short-lived.

Environmental Consequences of No Grazing Alternative: Cattle would make no use of the aspen stands adjacent to water and desirable forage. Therefore, no impacts to seedling establishment from cattle/sheep would occur without authorized livestock.

Mitigative Measures: None

PALEONTOLOGY:

Affected Environment: The area of the Jolley H is located in areas mapped as Williams Fork and Mancos Shale (Tweto 1979). The Williams Fork is categorized as a Class II formation indicating that its fossil bearing potential is not well understood in this area. The Mancos Shale is known to produce fossils but not scientifically important vertebrate fossils as a general rule. In the drainage bottoms such as along Flag Creek alluvial deposition probably covers the fossil bearing formations

Environmental Consequences of Proposed Action: Some damage to fossil materials may occur in areas of livestock concentration (identified during cultural resource investigation). Since in situ fossils are seldom encountered in alluvial areas, where cattle tend to concentrate, the potential for damage to undisturbed fossil remains is low if cattle remain the permitted livestock on the range.

Environmental Consequences of No Action Alternative: Some damage to fossil materials may occur in areas of livestock concentration (identified during cultural resource investigation). Since in situ fossils are seldom encountered in alluvial areas, the potential for damage to

undisturbed fossil there remain is low. However, since sheep tend to disperse out of the alluvial areas more than cattle, the potential for damage is slightly higher that it is for other alternatives.

Environmental Consequences of No Grazing Alternative: No potential damage to fossil materials would occur from livestock use.

Mitigative Measures: If paleontological materials (fossils) are discovered during Allotment activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

RANGELAND MANAGEMENT:

Affected Environment: The Jolley H allotment is made up of three pastures (North-1, Twelvemile Creek-2, & Flag Creek-3). Within the table below, acreage is broken down by land status, and AUMs as outlined under the proposed action are shown:

Pasture	Ownership	Acres	Livestock AUMs	Acres/AUM (Livestock)
North-1	BLM	583	67	8.7
	Private	795	84	9.5
	Pasture Total	1378	151	9.1
Twelvemile Creek-2	BLM	845	57	14.8
	Private	2,244	163	13.8
	Pasture Total	3089	220	14.1
Flag Creek-3	BLM	351	23	15.3
	Private	2,096	128	16.4
	Pasture Total	2447	151	16.2
Total BLM		1779	147	12.1
Total Private		5135	375	13.7
Total BLM & Private		6914	522	13.3
No Action Alternative (Sheep use)		1779 (BLM)	407 (BLM)	4.4

The allotment is situated in a mixture of Range Sites that are predominantly Loamy Slopes, Mountain Loam, Pinyon-Juniper Woodland, Aspen Woodland, and Brushy Loams. These range sites primarily have an overstory that consist of gambel oak, serviceberry, snowberry, pinyon,

juniper, big sagebrush, and aspen. Mixed within the understory of these range sites are mountain brome, western wheatgrass, elk sedge, beardless wheatgrass, Indian ricegrass, Kentucky bluegrass, nodding brome, and basin wildrye. These range sites are currently within a productive state as a high seral stage class of vegetative condition.

The Wyoming sagebrush and mountain shrub communities are predominant on the west side of the Hogback and make up the majority of the communities on public land. The mountain sagebrush, aspen and spruce/fir occur on the east side of the Hogback. A majority of these communities are found on private land.

In 2003, an EA (CO-WRFO-01-168-EA) was completed for a temporary, non-renewable grazing lease issued to John and Gus Halandras for a conversion from sheep to cattle for the 2003 grazing season only. Also, in 1999 an EA (CO-017-WR-99-47) was completed for a temporary, partial change in kind of livestock for the 1999 grazing season only, as requested by the applicant. In 2003, the applicant ran approximately 104 head of cows / calves from mid may to the end of August, for a total of 118 AUMs.

The proposed grazing system is to turn 100 cows into pasture 1 on May 1st, which is located immediately east of highway 13 and contains a total private pasture on the west side of the highway. The cattle could remain in this pasture up until May 20th, however cattle would start leaving the pasture on May 11th. Next, the applicant would start moving the cattle into pasture 3 on May 11th. Pasture 3's western boundary is the Hogback and the White River National Forest forms the eastern boundary, with Flag Creek's stream channel running in a north-south direction approximately in the middle of the pasture. The BLM portion of Flag Creek is located in the northern portion of the pasture where the creek exits the allotment. Cattle would remain in pasture 3 until June 25th, thus providing the vegetation in this pasture, including riparian plants, ample opportunity for regrowth after the cattle leave. Next, the cattle would be herded across the Hogback into pasture 2 on approximately June 26th. Pasture 2's eastern boundary is the Hogback and highway 13 forms the western boundary. Cattle would remain in pasture 2 until August 31st. Pasture 1 would still have remaining AUMs for 100 cows from August 26th through September 20th, however the applicant did not apply for this use during the 2003 grazing year. Livestock use would focus on these watering locations due in part to the availability of water, canopy cover, and succulent forage. See table below for the proposed action's grazing use patterns.

Allotment # & Allotment Name	Livestock # & Kind	Grazing Begin Date	Grazing End Date	% P.L.	Type Use	AUMs
<u>06831, Jolley H. Allotment</u>						
North (Pasture 1)	100/Cattle	05/01	05/20	44%	Active	29
North (Pasture 1)	100/Cattle	08/26	09/20	44%	Active	38
Twelve Mile Creek (Pasture 2)	100/Cattle	06/26	08/31	26%	Active	57
Flag Creek (Pasture 3)	100/Cattle	05/11	06/25	15%	Active	23
Permitted Use AUMs:						147

Within the Jolley H Allotment, the majority of the forage component for livestock use is located on private land (72%), versus BLM administered lands (28%), as indicated by the % Public Lands (P.L.) within the proposed action. Also, the majority of watering localities for livestock are located on private land, thus livestock use is concentrated within these areas. Livestock use would focus on these watering locations due in part to the availability of water, canopy cover, and succulent forage.

Also, the most productive and accessible rangelands on the allotment are located on private land. Public lands are found along the Hogback, which has steep slopes on either side. Public lands are mostly mountain shrub communities with heavy, mature canopies of Gamble oak and serviceberry. Aspen types east of the Hogback are the next most predominant community on public land. Wyoming sagebrush communities intermixed in the mountain shrub and at the upper reaches of drainages provides the third largest category. Smaller amounts of grasslands occur on wind swept ridges. Riparian habitats on public land occur on a 1/4 mile stretch of Flag Creek.

Environmental Consequences of Proposed Action: A straight conversion factor of five sheep to one cow will not be used to establish the animal unit equivalent. The amount of cattle use will be reduced proportionate to the amount of lands suitable for cattle distribution, plant communities, and use levels by cattle during recent grazing years. A significant portion of the allotment contains steep slopes (greater than 35%) along the Hogback and Flag Creek, which are more suited for sheep use than cattle. Cattle have a greater tendency to congregate along the stream channels and more level localities, thus lessening their utilization of steep slopes. The AUM proposal, in part, reflects these tendencies of cattle. Also, the applicant's proposal of running 100 head of cattle, and grazing / browsing variations in relation to vegetation types located on the allotment are factored into the AUM totals.

The public lands are topographically positioned along the Hogback above the private lands. Because of steepness and the mature mountain shrub communities, they are generally more accessible to sheep than cattle. Therefore, cattle use will be concentrated in the drainage bottoms and the gentler slopes, mostly private land, which were historically utilized less by sheep.

Under the proposed season of use and reduced AUM totals, possible impacts such as a reduction in ground cover resulting from excess cattle use along the drainages, which may result in greater intensity of overland water flow and greater erosion rates, have been moderated for. Therefore, the proposed action has accounted for possible impacts, which should be negligible in respect to changes in erosion rates and undesired alterations in vegetation types.

As outlined under the proposed action, the grazing system will provide the plant communities in the Jolley H. Allotment adequate opportunity for regrowth and seed production following grazing. The critical growing season for this locality is generally from May 1 to June 30, with some variations dependent upon the year. The grazing time frames above include only part of the critical growing season on each pasture. Therefore, each plant will have a higher probability for growth and/or regrowth to reach maturity for an increased level of plant vigor.

In 2003 (prolong drought), the applicant ran approximately 104 head of cows / calves from mid May to the end of August, for a total of 118 AUMs. Under close monitoring during this timeframe, utilization levels were within an acceptable range throughout the BLM portions of the allotment. In particular, the riparian portion of Flag Creek within the Flag Creek Pasture (3) received moderate use levels as no grazing was authorized after June 25th within the BLM portion of this pasture. Photographs were taken before and after livestock use along the Flag Creek stream channel, which demonstrated that an acceptable use pattern occurred along this zone. Overall, during the 2003 grazing season, browsing of shrubs (i.e. willows) was minimal, soil/bank trampling was nominal, and residual plant cover of riparian species after grazing was sufficient to dissipate stream flow, trap sediment, and provide for bank stability.

A favorable economic impact would occur to the applicant as the market for sheep products has experienced a dramatic downfall with no perceived relief in the future. Therefore, for the operator to be authorized cattle use would be beneficial to take advantage of a more robust livestock industry and market for cattle.

Overall, current rangeland conditions are in a favorable / high seral state, which includes recent use by cattle. As indicated by the 2003 and past grazing seasons, the proposed action would lead to a continuation of meeting public land health standards such as to provide for a functioning riparian habitat, meet a healthy plant community that is diverse and viable, and provide for a stable soil regime.

Environmental Consequences of No Action Alternative: Under this alternative, the grazing lease would remain as is, with continued sheep grazing. Both public and private rangelands in the allotment are in good condition and produce a variety of forage types. In the past 10 years, the allotment has been lightly used by sheep with considerable non-use taken each year. As a result of non-use and sheep grazing preferences, the areas that would be most utilized by cattle have a high production level of grasses, some to the point of becoming stagnant from large accumulations of litter. Therefore, rangeland conditions of the allotment would remain in a high seral state with continued sheep use, as indicated from historic use and current vegetation communities which are meeting rangeland health standards.

A negative economic impact would occur to the applicant as the market for sheep products has experienced a dramatic downfall with no perceived relief in the future. Therefore, for the operator to be authorized sheep use would be harmful as he would not be able to take advantage of a more robust livestock industry and market for cattle.

Environmental Consequences of No Grazing Alternative: Under this alternative, livestock grazing use would not be permitted on public lands. Plant communities would experience an increase in percent ground cover and an increase in density of native species. However, the forage components on public lands within the allotment are in a minority positions (28%) in relation to private lands (72%). Therefore, grazing would likely continue on private lands within the boundaries of the allotment, which would require fencing off of BLM lands. The additional amount of fencing would be cumbersome in respects to costs and resource impacts such as wildlife movement and open landscape aesthetics.

The applicant would experience a negative economic impact as they are dependent upon public land grazing in their livestock operation. When permitted livestock are on public lands, the permittee/lessee can conserve forage on other lands to meet future livestock requirements. Livestock producers are dependent on this permitted grazing use on public lands to ensure the economic viability of his/her ranching operation. Without this grazing lease, the ranch would not have the forage available to meet the requirements of their herds, thus they would have to sell off a portion of, or the entire herd, which would cause a severe economic hardship upon the applicant.

Mitigative Measures: The BLM will continue to take photographs, as deemed necessary to ensure proper documentation, along established photo points down the BLM portion of Flag Creek to provide a monitoring tool for increased evaluation of possible resource impacts by cattle. The photos will be taken before livestock enter this portion of the creek and after they are removed, and at other times deemed appropriate.

The BLM will closely monitor cattle use to determine potential adverse impacts to other resource values. If any concerns arise from cattle use, BLM and the permittee will implement appropriate mitigation measures to ensure future rangeland health standards and guidelines are continued to be met.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts associated with livestock grazing were analyzed in the EIS for the Whiter River RMP. Also, the terrestrial wildlife section in this EA addresses cumulative impacts of grazing by livestock and wildlife.

PERSONS / AGENCIES CONSULTED:

During a previous renewal of this grazing lease (CO-017-WR-99-47), a scoping process was begun in July of 1999 to request information concerning the renewal of grazing permit/leases to prioritize areas or allotments with issues and concerns. The Field Office sent scoping letters to the following groups and agencies: Colorado Division of Wildlife (Meeker), Craig District Board of Grazing Advisors and the Northwest Resource Advisory Council. A Public Notice of the scoping process was posted on the public notice bulletin board in the White River Field Office. In addition, individual letters were sent to the affected permittee/lessee, including a Grazing Lease Renewal Form for signature, informing them that their permit/lease was up for renewal and requested any information they wanted included in, or taken into consideration, during the renewal process. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals and the assessment of public land health standards within the Resource Area. This notice was followed up with an Internet posting of the Resource Area's prioritization of allotments and a determination as to which allotments would be assessed according to the land health standards.

On the public accessible White River Field Office's home internet page located at (<http://www.co.blm.gov/nepa/wrfonepa.htm>) is the White River NEPA register. This site has

listed this EA on the register, along with special designation areas found within the boundaries of the proposed action.

Also, the U.S. Fish and Wildlife Service was consulted and in March of 2004 the Craig District Board of Grazing Advisors was updated with the White River Field Office's grazing permit/lease renewal schedule for the upcoming grazing year, which included the Jolley H Allotment.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Caroline Hollowed	Hydrologist	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Robert J. Fowler	Range Specialist/Forester	Invasive, Non-Native Species
Glenn Klingler	Wildlife Biologist	Migratory Birds
Glenn Klingler	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Marty O'Mara	Hazmat Collateral	Wastes, Hazardous or Solid
Caroline Hollowed	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Glenn Klingler	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Jed Carling	Rangeland Management Specialist	Soils
Jed Carling	Rangeland Management Specialist	Vegetation
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Jed Carling	Rangeland Management Specialist	Fire Management
Robert J. Fowler	Range Specialist/Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Jed Carling	Rangeland Management Specialist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Chris Ham	Outdoor Recreation Planner	Visual Resources
Jed Carling	Rangeland Management Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2004-48-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) 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/RATIONALE: It is my decision to renew Grazing Lease #0501531 as described by the proposed action, with the mitigation measures listed below. This action is in compliance with decisions in the White River ROD/RMP and environmental impacts are expected to be minimal.

MITIGATION MEASURES:

CULTURAL RESOURCES: Should a ten-year permit be issued, appropriate mitigation measures may be identified in consultation with Colorado SHPO within period of the permit. It is recommended that any renewal issued for this lease be subject to the allotment specific stipulations contained in the information forms.

1. The operator is responsible for informing all persons who are associated with the project 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 project or construction 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 site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise,

the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

NOXIOUS WEEDS: The grazing permittee is to control noxious weeds by an integrated management strategy. All herbicide application is to be conducted by an EPA certified applicator. Application proposals must be approved by the BLM. Post spraying reports are to be provided to the BLM.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES: None currently. However, should the grazing regime change substantially in the future, the FWS may require mitigation and/or conservation measures.

WATER QUALITY, SURFACE AND GROUND: The BLM will monitor the drainage bottoms and riparian areas for overuse of woody and herbaceous species and adjust the grazing program if necessary.

WETLANDS AND RIPARIAN ZONES: To insure the proper level of use, a mitigation measure would be stipulated on the authorization to limit herbaceous forage utilization levels in the riparian zone to 40 percent of the current year's growth and maintain a sedge height of six (6) inches. The sedge height limit is so that the riparian zone allows Flag Creek to resist runoff conditions, which are usually experienced in the spring during snow melt or a high summer rain event(s). Additionally, the range conservationist assigned this allotment shall establish photo points at several locations on Flag Creek to closely monitor the utilization of vegetation by livestock.

WILDLIFE, TERRESTRIAL: BLM range conservationists will establishment photo points on BLM land to monitor utilization of vegetation by cattle both on upland and riparian sites.

PALEONTOLOGY: If paleontological materials (fossils) are discovered during Allotment activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

RANGE MANAGEMENT: The BLM will continue to take photographs, as deemed necessary to ensure proper documentation, along established photo points down the BLM portion of Flag Creek to provide a monitoring tool for increased evaluation of possible resource impacts by cattle. The photos will be taken before livestock enter this portion of the creek and after they

are removed, and at other times deemed appropriate. Also, the BLM will closely monitor cattle use to determine potential adverse impacts to other resource values. If any concerns arise from cattle use, BLM and the permittee will implement appropriate mitigation measures to ensure future rangeland health standards and guidelines are continued to be met.

COMPLIANCE/MONITORING: See criteria under the Mitigation Measures above.

NAME OF PREPARER: Jed Carling

NAME OF ENVIRONMENTAL COORDINATOR:

SIGNATURE OF AUTHORIZED OFFICIAL:

Hunt C. Walter
Field Manager

DATE SIGNED:

ATTACHMENTS: 1) Figure 1: Map of the Jolley H Allotment (06831).
2) Biological Assessment

Figure 1: Map of the Jolley H Allotment (06831)

