**U.S. Department of the Interior**
**Bureau of Land Management**
**White River Field Office**
**220 E Market St**
**Meeker, CO 81641**

# ENVIRONMENTAL ASSESSMENT

**NUMBER**: DOI-BLM-CO-110-2009-0059-EA

**CASEFILE/PROJECT NUMBER**: Grazing Permit # 0502959

**PROJECT NAME**: McCarthy Gulch Allotment Grazing Permit Renewal - 06022

**LEGAL DESCRIPTION**: T 3S, R 95W.
Section 35;
T 4S, R 95W
Sections 1, 2, 11-13

**APPLICANT**: Lonnie Shults/XTO

**ISSUES AND CONCERNS**: None

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**:

***Background/Introduction***: XTO Energy, a Texas based energy company purchased the base property for the McCarthy Gulch allotment in 2006 and has leased the base property to Lonnie Shults for livestock grazing through 2012.

Allotment Categorization- all White River Field Office (WRFO) grazing allotments have been placed in one of three management categories that define the intensity of management: (1) improve, (2) custodial and (3) maintain. These categories broadly define rangeland management objectives in response to an analysis of an allotment's resource characteristics, potential, opportunities, and needs. Public Scoping and Bureau of Land Management (BLM) resource team review as part of the permit renewal process provide the opportunity to update, change, or maintain allotments' categorization. The McCarthy Gulch allotment has been classified as an M (Maintain) category allotment due to an absence of resource conflicts and its relatively small acreage of Public Lands.

**Proposed Action**: The proposed grazing schedule is as follows:

| Proposed Grazing Schedule for McCarthy Gulch Allotment - 06022 | | | | | | |
|---|---|---|---|---|---|---|
| **Pasture Name** | **Livestock Number** | **Kind+** | **Date On** | **Date Off** | **% BLM** | **BLM AUMs** |
| Lower McCarthy Pasture | 50 | Cattle | 7/1 | 9/30 | 21 | 32 |
| Upper McCarthy Pasture | 50 | Cattle | 7/1 | 9/30 | | 32 |

The McCarthy Gulch allotment will remain divided into two pastures and the grazing permittee will have the flexibility/discretion as to when to move off the Lower McCarthy pasture depending on forage conditions and availability of stock water. The lower pasture will be the first pasture to be used in sequence. This grazing permit renewal also changes grazing use from a spring/fall regime to a summer/early fall grazing regime. Livestock grazing use is deferred every year until after the critical growing period.

Based upon the analysis of forage production on BLM lands, the McCarthy Gulch grazing preference will be adjusted. The Federal Range percentage will also be adjusted downward to more accurately reflect the forage contribution of both the BLM and private lands within the allotment.

**Terms and conditions:** The following Terms and Conditions as provided for by 43 CFR 4130.3-2 will be incorporated in this grazing permit renewal:

1. Any changes in grazing use must be applied for prior to the grazing period.

2. Each year billing notices are 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 a part of this grazing permit/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 permit/lease, unless otherwise provided for in the terms and conditions of this grazing permit/lease.

4. This grazing permit/lease is subject to the terms and conditions of an allotment management plan if such plan has been prepared. If an allotment management plan has not been prepared, it must be incorporated in this permit/lease when completed.

5. No grazing use can be authorized under this grazing permit/lease during any period of delinquency in the payment of amounts due in settlement for unauthorized grazing use.

6. Grazing use authorized under this grazing permit/lessee 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.

7. This grazing permit/lease is subject to cancellation, in whole or in part, at any time because of:

    a. Noncompliance by the permittee/lessee with rules and regulations now or hereafter approved by the Secretary of the Interior.

    b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.

    c. A transfer of grazing preference by the permittee/lessee to another party.

    d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described herein.

    e. Repeated willful unauthorized grazing use.

8. This grazing permit/lease is subject to the provisions of executive Order NO. 11246 of September 24, 1965, as amended, which sets forth nondiscrimination clauses. A copy of this order may be obtained from the authorized officer.

9. The permittee/lessee must own or control and be responsible for the management of the livestock authorized to graze under this grazing permit/lease.

10. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze under this grazing permit/lease.

11. The permittee/lessee grazing case file is available for public inspection as required by the Freedom of Information Act.

12. Actual Use information, for each use area, will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing lease and/or grazing billings in accordance with 43 CFR 4130.3-2(d).

13. In order to improve livestock distribution on the public lands, all salt blocks and/or mineral supplements will not be placed within a 1/4 mile of any riparian area, wet meadow, or any other live water source unless stipulated though a written agreement or decision in accordance with 43 CFR 4130.3-2(c).

14. 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 Sec. 4140.1(b) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

**No Action Alternative (***No Livestock Grazing)***:** The no-grazing alternative consists of not issuing a grazing permit for livestock use. There would be no livestock grazing on public lands within the McCarthy Gulch allotment on which it is currently permitted.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD**: The Alternative of continuation of current management was considered but has not been carried forward because the permittee's application was for a change in the season(s) of use from spring/fall to summer/fall.

The current grazing permit is as follows:

| Current Grazing Permit Schedule | | | | | | |
|---|---|---|---|---|---|---|
| **Pasture Name** | **Livestock Number** | **Kind+** | **Date On** | **Date Off** | **% BLM** | **BLM AUMs** |
| McCarthy Gulch | 133 | Cattle | 5/15 | 6/30 | 31 | 64 |
| McCarthy Gulch | 133 | Cattle | 9/15 | 10/30 | | 62 |

**NEED FOR THE ACTION**: Lonnie Shults' BLM grazing permit # 0502959 which authorizes grazing on the McCarthy Gulch allotment (06022) expired on February 28, 2008. A new grazing permit was issued under Appropriations Rider, Sec 114, P.L. 107-67. In order for this grazing permit to be "fully processed" it is necessary to complete a NEPA analysis, including an assessment of compliance with the Standards for Rangeland Health. This permit is subject to renewal or transfer at the discretion of the Secretary of the Interior for a period of up to ten years. The Bureau of Land Management has the authority to renew the livestock grazing permit/lease consistent with the provisions of the *Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, and White River Resource Area Resource Management Plan/Environmental Impact Statement(RMP/EIS)*. This RMP/EIS has been amended by the *Standards for Public Land Health in Colorado.*

**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: pages 2-22 through 2-26

Decision Language: With minor exceptions, livestock grazing will be managed as described in the 1981 Rangeland Program Summary (RPS). That document is the Record of Decision for the 1981 White River Grazing Management Final Environmental Impact Statement (Grazing EIS)

The proposed action implements the Resource Management Plan Livestock Grazing Management objective on page 2-22 to 2-26:

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

"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 implementing a grazing system."

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).]

## 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 specific elements listed below:

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

| STANDARDS FOR PUBLIC LAND HEALTH | | | | | | | |
|---|---|---|---|---|---|---|---|
| [Standard] | Current Situation | | | With Proposed Action | | With No Grazing | |
| | Achieving or Moving Towards Achieving | Not Achieving | Causative Factors | Achieving or Moving Towards Achieving | Not Achieving | Achieving or Moving Towards Achieving | Not Achieving |
| **#1-Upland Soils** | | | | | | | |
| 06022 McCarthy Gulch | 1,295 acres | 0 | | 1,295 acres | 0 | 1,295 acres | 0 |
| **#2-Riparian Systems** | | | | | | | |

| STANDARDS FOR PUBLIC LAND HEALTH | | | | | | | |
|---|---|---|---|---|---|---|---|
| [Standard] | Current Situation | | | With Proposed Action | | With No Grazing | |
| | Achieving or Moving Towards Achieving | Not Achieving | Causative Factors | Achieving or Moving Towards Achieving | Not Achieving | Achieving or Moving Towards Achieving | Not Achieving |
| 06022 McCarthy Gulch | 0.4 miles | 0 | W Branch Cow Creek | 0.4 miles | 0 | 0.4 miles | 0 |
| **#3-Plant Communities** | | | | | | | |
| 06022 McCarthy Gulch | 1,295 acres | 0 | | 1,295 acres | 0 | 1,295 acres | 0 |
| **#3-Animal Communities** | | | | | | | |
| 06022 McCarthy Gulch | 1,295 acres | 0 | | 1,295 acres | 0 | 1,295 acres | 0 |
| **#4-Special Status, T&E Species** | | | | | | | |
| 06022 McCarthy Gulch | 1,295 acres | 0 | | 1,295 acres | 0 | 1,295 acres | 0 |
| **#5-Water Quality** | | | | | | | |
| 06022 McCarthy Gulch | 1,295 acres | 0 | | 1,295 acres | 0 | 1,295 acres | 0 |

## NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

### AIR QUALITY

*Affected Environment*: This proposed action is located in rural northwest Colorado in the White River Basin, more than ten miles from special designation air sheds or non-attainment areas. Industrial facilities in White River Basin include coal mines, soda ash mines, natural gas processing plants and power plants. Due to these industrial uses, increased population and oil and gas development in this region, emissions of air pollutants in the White River Basin due to exhaust emissions and dust (particulate matter) are likely to occur and increase into the future. Despite increases in emissions, overall air quality conditions in the White River Basin are likely to continue to be good for some time to come due to effective atmospheric dispersion conditions and limited transport of air pollutants from outside the area. The White River Field Office (WRFO) resource area has been classified as either attainment or unclassified for all air pollutants, and most of the area has been designated for the prevention of significant deterioration (PSD) class II.

*Environmental Consequences of the Proposed Action:* The environmental consequences to air quality from Alternative A would include the periodic and local production of dust due to cattle trailing to and from forage, water and nutrient sources. The most likely time for increased dust production due to approved activities will be during periods of the day (typically morning and evening) that cattle move to water, forage and/or nutrients, between pastures and onto and off of the allotment. Dust levels may be noticeable locally and especially during drier times.

The Colorado Air Pollution Control Division (APCD) estimates the maximum $PM_{10}$ levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms per cubic meter ($\mu g/m^3$). This alternative is not likely to exceed this western Colorado dust standard.

*Environmental Consequences of the No Grazing Alternative:* Impacts from the no-action alternative would result in no dust production due to grazing activities.

*Mitigation*: None Identified.

**SOILS** (includes a finding on Standard 1)

*Affected Environment*: The McCarthy Gulch allotment has had soils inventoried and compiled in the Rio Blanco County Soil Survey (1982). The soil map unit and its associated ecological site are listed by pasture below:

| **Lower McCarthy Pasture BLM Soils/Ecological Sites** | | |
|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** |
| Barcus channery loamy sand,2-8%slopes | Foothills Swale | 0 |
| Castner channery loam, 5-50%slopes | Pinyon-Juniper woodlands | 112 |
| Glendive fine sandy loam | Foothills Swale | 51 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 156 |
| Northwater loam,5-50%slopes | Aspen Woodlands | 76 |
| Parachute Loam,25-75%slopes | Brushy Loam | 147 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 41 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stoney Foothills | 124 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 43 |
| | **Total** | **750** |

| **Upper McCarthy Pasture BLM Soils/Ecological Sites** | | |
|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** |
| Barcus channery loamy sand,2-8%slopes | Foothills Swale | 21 |
| Glendive fine sandy loam | Foothills Swale | 21 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 24 |
| Northwater loam,5-50%slopes | Aspen Woodlands | 130 |
| Parachute Loam,25-75%slopes | Brushy Loam | 62 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 32 |
| Silas loam,0-8%slopes | Mountain Swale | 25 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stony Foothills | 87 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 89 |
| | **Total** | **490** |

*Environmental Consequences of the Proposed Action:* Because virtually all BLM soils are occupied by mid and late seral plant communities, these sites would be expected to change little over the short term. Over the long term there would be an increase in surface litter, ground cover and canopy cover.

*Environmental Consequences of the No Grazing Alternative:* Under a no grazing scenario there will be a short term increase in surface litter and plant cover. This increase would be most noticeable on the Foothill Swale ecological site in the bottom of Spring Gulch. Little change would be expected to take place on the uplands because they are present used very lightly by livestock or not at all.

*Mitigation*: McCarthy Gulch rangeland and riparian monitoring studies.

*Finding on the Public Land Health Standard for upland soils*: Soils in the McCarthy Gulch allotment currently meet the Standard on a site and watershed basis and will meet or exceed the Standard in the future under the proposed action.

**WASTES, HAZARDOUS OR SOLID**

*Affected Environment*: There are no known hazardous wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites in the allotments. There are no known solid waste dump sites within the allotments.

*Environmental Consequences of the Proposed Action:* No listed or extremely hazardous materials are proposed for use in this project. All applications of pesticides would be in compliance with BLM requirements.

*Environmental Consequences of the No Grazing Alternative:* No hazardous or other solid wastes would be generated under the no-action alternative.

*Mitigation*: Please contact the BLM – WRFO Hazardous Materials Coordinator at (970) 878-3800 and/or the Colorado Department of Public Health and Environment (CDPHE) through the 24-hour spill reporting line at 1 (877) 518-5608, if the permittee suspects the release of any chemical, oil, solid waste, petroleum product, or sewage in the allotment.

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

*Affected Environment*: This allotment is in entirely within Piceance Creek. The allotment is within segment 16 and is classified for Aquatic Life Warm 2, Primary Recreation, and Agriculture.

*Environmental Consequences of the Proposed Action:* The permit reauthorization will reduce the AUMs for the allotment in half and reduce the grazing period to summer after about half of the primary growing season and will reduce the late season use in October.

Only a small portion of the allotment, 31%, is BLM administered land. Grazing removes vegetation that may help reduce rain splash erosion, lessen surface runoff and livestock often preferentially remove grass and forb species that form root masses that hold together soil matrices better than non-desirable species. This may lead to a vegetation shift to grasses and forbs that are not as beneficial to water quality. Hoof action from trailing to and from water, nutrient and forage sources as well as travel through pastures create preferential flow paths that can concentrate overland flow and intercept subsurface flows. These impacts will be assessed and if impacts are observed and changes may occur during yearly range management modifications to address specific situations. With good grazing management impacts are not expected beyond those typically experience on public lands.

Water Quality may improve indirectly from the improved condition of the riparian areas under the proposed actions management but should be evaluated for standards to maintain the beneficial functions of health riparian areas for water quality.

*Environmental Consequences of the No Grazing Alternative:* The no-grazing alternative would not be in conformance with the 1997 White River ROD/RMP. However, nonuse of this area for grazing would generally improve water quality as compared to the proposed action or the No Action alternative.

*Mitigation*: No additional mitigation.

*Finding on the Public Land Health Standard for water quality*: This permit change is unlikely to lead to an exceedance of Colorado water quality standards.

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

*Affected Environment*: The lower reach of the West Branch of Cow Creek is located in the Southeast part of the Upper McCarthy pasture. This reach of 0.6 miles was assessed in August 2005 by an interdisciplinary team and was determined to be functioning at risk with an upward trend.

*Environmental Consequences of the Proposed Action:* The grazing strategy for the W. Branch of Cow Creek is to avoid livestock use because grazing use in the summer in combination with the topography is essentially incompatible with riparian maintenance and enhancement.

*Environmental Consequences of the No Grazing Alternative:* The impacts of adopting this alternative will be very similar to those of the proposed action because the proposed action grazing strategy is to avoid livestock grazing use of the riparian area. In general there will be a positive impact on riparian expression and development in the W. Branch of Cow Creek.

*Mitigation*: When cattle are in the Upper McCarthy pasture, the permittee will periodically check the West Branch of Cow Creek to insure that cattle are not using that area to water. Any cattle found there will be immediately moved and located on another water source.

*Finding on the Public Land Health Standard for riparian systems*: The West Branch Cow Creek currently meets the Standard and would continue to improve under the proposed grazing management.

**VEGETATION** (includes a finding on Standard 3)

*Affected Environment*: The following table lists the plant community appearance for each of the ecological sites or woodland types on the McCarthy Gulch allotment along with the predominant plant species comprising the composition of each community.

Forb species, though important to the diversity of a community and comprising up to 25 to 30% of the composition of several of the plant communities listed, are not presented in the following table because they generally are not significant contributors to the general appearance of the community.

| Ecological Site/ Woodland Type | Plant Community Appear | Predominant Plant Species in Plant Community |
|---|---|---|
| Loamy Slopes | Mix Shrub/grass Shrubland | Mountain mahogany, bitterbrush, Utah serviceberry, mountain big sagebrush, Letterman needlegrass, beardless bluebunch wheatgrass, sedge, western wheatgrass, junegrass, indian rice grass |
| Mountain Loam | Grass/Open Shrub Shrubland | Polyanthus brome, nodding brome, slender wheatgrass, bearded wheatgrass, Letterman and Columbia needle grasses, mountain big sagebrush, low rabbitbrush, snowberry, serviceberry |
| Mountain Swale | Grass/Open Shrub Shrubland | Basin wildrye, polyanthus brome, nodding brome, slender wheatgrass, bearded wheatgrass, Letterman and Columbia needle grasses, sedges, rushes, mountain big sagebrush, rubber rabbitbrush, snowberry, |
| Brushy Loam | Deciduous Shrub/grass Shrubland | Utah serviceberry, oakbrush, snowberry, nodding brome, sedge, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses |
| Aspen Woodlands | Deciduous Woodland | Quaking aspen, Utah serviceberry, snowberry, nodding brome, sedge, slender wheatgrass, bearded wheatgrass, Letterman and Columbia needle grasses |
| Dry Exposure | Grassland | Beardless bluebunch wheatgrass, needle and thread, june grass, indian rice grass, fringed sage, buckwheat |
| Stony Foothills | Grass/Open Shrub Shrubland | Beardless bluebunch wheatgrass, western wheatgrass, needle-and-thread, junegrass, indian ricegrass, fringed sage, Wyoming big sagebrush, black sagebrush, serviceberry, pinyon and juniper |
| Foothill Swale | Grass/Open Shrub Shrubland | Basin wildrye, western wheatgrass, slender wheatgrass, streambank wheatgrass, indian rice grass, Nevada bluegrass, basin big sagebrush, fourwing saltbush, rubber rabbitbrush |
| Pinyon-Juniper Woodland | Woodland | Pinyon pine, Utah juniper, mountain mahogany, bitterbrush, Utah serviceberry, Wyoming big sagebrush, beardless bluebunch wheatgrass, western wheatgrass, junegrass, indian |

| Ecological Site/ Woodland Type | Plant Community Appear | Predominant Plant Species in Plant Community |
|---|---|---|
| | | rice grass, mutton grass |

| McCarthy Gulch ALLOTMENT, Lower McCarthy Pasture Ecological Site Similarity Ratings | | | | | | |
|---|---|---|---|---|---|---|
| **ECOLOGICAL SITE** | **Total BLM Site Ac. In Pasture** | **PNC** | **Late-Seral** | **Mid-Seral** | **Early-Seral** | **BLM Ac. Classified** |
| Brushy Loam | 147 | 0 | 0 | 147 | 0 | 147 |
| Loamy Slopes/Mountain Loam | 156 | 0 | 156 | 0 | 0 | 156 |
| Loamy Slopes | 43 | 0 | 0 | 43 | 0 | 43 |
| Aspen woodlands | 76 | 0 | 76 | 0 | 0 | 76 |
| Foothill Swale | 51 | 0 | 0 | 51 | 0 | 51 |
| Pinyon-juniper woodland | 153 | 0 | 0 | 0 | 0 | 0 |
| Stony Foothills | 124 | 0 | 0 | 124 | 0 | 124 |
| **Total** | **750** | **0** | **232** | **365** | **0** | **597** |
| | | | | | | |
| **% BLM Ac Classified** | **80** | **0** | **39** | **61** | **0** | |

| McCarthy Gulch ALLOTMENT, Upper McCarthy Pasture Ecological Site Similarity Ratings | | | | | | |
|---|---|---|---|---|---|---|
| **ECOLOGICAL SITE** | **Total BLM Site Ac. In Pasture** | **PNC** | **Late-Seral** | **Mid-Seral** | **Early-Seral** | **BLM Ac. Classified** |
| Brushy Loam | 62 | 0 | 62 | 0 | 0 | 62 |
| Loamy Slopes/Mountain | 24 | 0 | 0 | 24 | 0 | 24 |
| Mountain Swale | 25 | 0 | 0 | 25 | 0 | 25 |
| Quaking Aspen | 130 | 0 | 87 | 43 | 0 | 130 |
| Loamy Slopes | 89 | 0 | 36 | 53 | 0 | 89 |
| Foothill Swale | 42 | 0 | 0 | 42 | 0 | 42 |
| Stony Foothills | 87 | 0 | 87 | 0 | 0 | 87 |
| Pinyon-juniper woodland | 32 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **491** | **0** | **272** | **187** | **0** | **459** |
| | | | | | | |
| **% BLM Ac Classified** | **93** | **0** | **59** | **41** | **0** | |

| Lower McCarthy Pasture BLM Soils/Ecological Sites | | |
|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** |
| Barcus channery loamy sand,2-8%slopes | Foothills Swale | 0 |
| Castner channery loam, 5-50%slopes | Pinyon-Juniper woodlands | 112 |
| Glendive fine sandy loam | Foothills Swale | 51 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 156 |
| Northwater loam,5-50%slopes | Aspen Woodlands | 76 |
| Parachute Loam,25-75%slopes | Brushy Loam | 147 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 41 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stoney Foothills | 124 |

| Lower McCarthy Pasture BLM Soils/Ecological Sites | | |
|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 43 |
| | **Total** | **750** |

| Upper McCarthy Pasture BLM Soils/Ecological Sites | | |
|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** |
| Barcus channery loamy sand,2-8%slopes | Foothills Swale | 21 |
| Glendive fine sandy loam | Foothills Swale | 21 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 24 |
| Northwater loam,5-50%slopes | Aspen Woodlands | 130 |
| Parachute Loam,25-75%slopes | Brushy Loam | 62 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 32 |
| Silas loam,0-8%slopes | Mountain Swale | 25 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stony Foothills | 87 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 89 |
| | **Total** | **491** |

*Environmental Consequences of the Proposed Action:* Under the proposed action virtually all ecological sites would be able to produce at or near their potential. Plant cover, productivity and composition would be maximized due to light grazing or an absence of livestock grazing. The Foothill Swale ecological site in the bottom of Spring Gulch would be deferred from grazing until after peak productivity under a high intensity short duration regime enabling it to maintain a relatively high level of plant vigor.

*Environmental Consequences of the No Grazing Alternative:* Because most parcels of BLM rangelands are either very lightly grazed or not grazed at all by livestock it is likely that there would be little difference between the impacts under this alternative and those described for the proposed action. The exception to this would be the Foothill Swale ecological site on the 160 acre tract of BLM which lies in the bottom of Spring Gulch which would likely develop a heavy herbaceous component over a short time frame in the absence of grazing. Other BLM ecological sites would progress towards a late seral condition at a pace comparable to that for the proposed action.

*Mitigation*: McCarthy Gulch rangeland and riparian monitoring studies

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Upland plant communities currently meet the Standard and are expected to meet or exceed the Standard in the future under the proposed action.

**INVASIVE, NON-NATIVE SPECIES**

*Affected Environment*: There are few noxious weeds known to occur on BLM lands on the allotment. Musk thistle (*Carduus nutans*) and mullein (*Verbascum thapsus*) occur on private lands in McCarthy Gulch. The invasive alien cheatgrass (*Bromus tectorum*) occurs on areas of unrevegetated earthen disturbance primarily on deeded land in McCarthy Gulch proper.

*Environmental Consequences of the Proposed Action:* Under the proposed action there is likely to be little change from the present situation which is a relatively noxious weed and cheatgrass free environment.

*Environmental Consequences of the No Grazing Alternative:* Under a no grazing scenario there would probably be little change on upland sites. In McCarthy Gulch it is likely that there would be an increase in herbaceous fuels, increasing the potential for wildfire and thus predisposing those lower elevation sites to cheatgrass invasion.

*Mitigation*: None

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

*Affected Environment*: There are no plant species listed, proposed, or candidate to the Endangered Species Act, or plants considered sensitive by the BLM, that are known to inhabit areas potentially influenced by the proposed action.

*Environmental Consequences of the Proposed Action:* The proposed action would have no influence on special status species or associated habitats.

*Environmental Consequences of the No Action Alternative:* There would be no action authorized that would have the potential to influence special status species or associated habitats.

*Mitigation*: None

*Finding on the Public Land Health Standard for Threatened & Endangered species*: The proposed and no-action alternatives would have no influence on populations or habitats of plants associated with the Endangered Species Act or BLM sensitive species, and would have no influence on the status of applicable land health standards.

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

*Affected Environment*: There are no animals listed, or proposed or candidate for listing under the Endangered Species Act that inhabit or derive important benefit from the project area.

BLM sensitive animals that have potential to inhabit the project area are the greater sage-grouse and three species of bat (i.e., Townsend's big-eared bat, fringed and Yuma myotis).

The upper pasture of the allotment lies on the northwest corner of overall sage-grouse range as delineated by the Colorado Division of Wildlife. Based on an evaluation of 2005 aerial photographs, BLM-administered lands lie on the periphery of habitat potentially suited for occupation by sage-grouse and constitute a maximum of 21 acres in 4 parcels (6-acre weighted average) on 3 separate spur ridges.

Townsend's big-eared bat, and fringed and Yuma myotis occupy a broad array of habitats in the West, including western Colorado's semidesert shrublands and woodlands. The Yuma myotis and Townsend's big-eared bat are often closely associated with riparian communities and permanent sources of water. The fringed myotis is more common in upland sage-steppe and xeric woodlands, including pinyon-juniper. Foraging habitat for the Yuma myotis includes edge habitats along streams and adjacent to and within a variety of wooded habitats where they forage primarily on flying aquatic insects. The fringed myotis and Townsend's big-eared bat more consistently use forested habitats for roosting and foraging. All these bats are capable of traveling long distances between roosts and foraging areas (up to 10 miles).

The core distribution of bats tends to be strongly correlated with the availability of cave-like roosting habitat (e.g., mines) and buildings for night, maternity, and hibernation roosts, but these species have been found using rock crevices and trees. Bats roosting in woodland habitats use live and dead trees, roosting under loose exfoliating bark, in cavities, or vertical cracks—attributes best served by mature large-diameter pinyon, aspen, and juniper or douglas-fir trees.

Bat abundance in this Resource Area is likely constrained by the paucity of maternity and hibernation roost habitat that could be expected to harbor large numbers of bats (e.g., caves, mines, buildings). Rock outcrops and mature pinyon-juniper woodlands, representing potential roost substrate for small numbers of bats, particularly solitary males during the summer, are widely available in the Resource Area and this allotment.

*Environmental Consequences of the Proposed Action:* Although there is little, if any, sage-grouse use of this allotment, any livestock-related influence on understory vegetation as brood cover or a forage base would not begin until after early August. By this time, most broods would be 4-5 weeks old and flighted. It is expected that livestock use of upper ridgeline positions through the remainder of the brood period (into September), when herbaceous cover is most important for chick concealment, would remain light. Although there would be no opportunity for herbaceous regrowth after cattle were removed, under light grazing use, residual ground cover should remain sufficient to serve effectively as supplemental nest cover early in the following nesting season.

Livestock grazing use would have no influence on the availability of bat roosting habitat. Well-developed herbaceous understories (i.e., high foliage volume and species-rich composition) generally translate to an abundant and diverse source of invertebrate prey for insectivorous species, including bats. Proposed grazing use is not expected to have any substantive influence on the abundance and diversity of the bats' invertebrate prey base in upland situations. Deferred

grazing use and reductions in the duration and intensity of livestock use in the valleys of Spring Creek and Cow Creek should promote long-term incremental improvement in understory composition and ground cover density that should benefit these prey bases.

*Environmental Consequences of the No Grazing Alternative:* In the absence of livestock grazing, ground cover expression and the accumulation of residual growth would be expected to increase substantially in the bottomlands and more quickly elevate the abundance and diversity of invertebrate prey available for bats. Due to the limited acreage associated with these bottomlands, it is suspected that the overall nutritional effect on bat abundance and/or distribution would be minor in contrast to the proposed action. The effects of livestock removal in upland situations would be more subtle since grazing use is constrained by slope and water availability.

*Finding on the Public Land Health Standard for Threatened & Endangered species*: Although the extent and continuity of habitat available for sage-grouse and bat use may be somewhat limited in this allotment, on a landscape scale the mixed shrub complex across allotment presently meets the land health standards? The proposed action and no action alternatives would, in varying degrees, allow for improvements in understory expression in bottomland habitats, which is consistent with elevated habitat function and more optimal achievement of the health standard.

## MIGRATORY BIRDS

*Affected Environment*: BLM lands within this allotment are characterized by rugged, topographically diverse terrain dominated by mountain shrub and mixed shrubs communities that vary from barren south-facing slopes to heavy oakbrush/serviceberry and douglas-fir stands on north-facing slopes. Both pastures are comprised predominantly (73-75%, 553-377 acres) of steep slopes that are not amenable to livestock grazing use. Basin big sagebrush bottoms comprise 6 to 14% of each pasture (42-71 acres); 11-22% (57-167 acres) of each pasture is represented by mildly-sloped shrubland basins and ridgelines that are distant from water. Although highly varied in abundance, the shrubland habitats supports a rich breeding assemblage of migratory birds, including dusky flycatcher and Virginia's warbler in the deciduous shrub communities, and green-tailed towhee and Brewer's sparrow (USFWS Bird of Conservation Concern, BOCC) in the basin big sagebrush and mixed shrub communities, and Cassin's finch (BOCC) in the douglas-fir type. Most of these birds return to nest by mid-May and complete nesting functions by mid-July. In terms of a source of forage, forage substrate for invertebrate prey and concealment, well-developed herbaceous understories generally contribute toward optimizing nest habitat conditions, particularly for those species associated with shrublands. Intervening herbaceous cover enhances nest concealment and improves microclimatic conditions at the nest (improving nest success) and, once hatched, well developed ground cover density and height, and species-rich understory composition offers resources and substrate for an abundant source of invertebrate prey that is of paramount nutritional value for developing young.

*Environmental Consequences of the Proposed Action:* Overall grazing use across the allotment would decline by 25%, but effective use across the majority of the BLM uplands would remain light to incidental and have little influence on nest habitat components.

Grazing-related effects would continue to be most pronounced in basin big sagebrush bottomlands. Compared to current authorized use, the proposed grazing regimen would defer grazing use from 15 May (early stages of nesting) to 1 July (late in the nesting season). Delaying livestock entry into the allotment by 1.5 months would shift any grazing-related effects on understory expression (i.e., progressive reduction in the height and density of herbaceous ground cover) until late in the nesting season. Many initial nesting attempts would be near completion by early July when cattle enter the lower pasture and maximum reduction in ground cover would occur beyond the principal nesting season (late July). Use of bottomland vegetation in the upper pasture would not commence until early August when virtually all nesting activity would be complete. Efforts to reduce the duration and intensity of livestock use in the valleys of Spring Creek (an ephemeral McCarthy tributary) and Cow Creek should promote long-term incremental improvement in understory composition and ground cover density beneficial as nesting cover and as a source of invertebrate and seed/fruit forage.

Overall, nesting and brood-rearing conditions for migratory birds would be expected to remain near optimal across a majority (75-90%) of the allotment's upland shrub and wooded vegetation communities. Further, deferred livestock use is expected to have relatively minor influence on breeding bird activity or nest outcome in bottomland habitats.

*Environmental Consequences of the No Grazing Alternative:* Because there is little grazing-related influence across the majority of BLM uplands, livestock removal would not lead to appreciable change in herbaceous expression. Conversely, ground cover in bottomland habitats would be expected to increase dramatically in terms of height and density. In the lower McCarthy pasture (only use coincident with the nesting season), ground cover expression attending livestock removal would likely prompt an increase in breeding bird density (e.g., up to 50%) and may be expected to enhance survival and recruitment of fledglings. This effect, however, would generally be confined to about 50 acres of BLM-administered bottomlands and, in contrast to the proposed action, would not be expected to involve an increase of more than a dozen breeding pair.

*Mitigation*: None.

**WILDLIFE, AQUATIC** (includes a finding on Standard 3)

*Affected Environment*: There are no lentic or lotic systems capable of supporting higher order aquatic communities on Public Lands within these pastures. The West Branch of Cow Creek is a diminutive stream whose capability is currently limited to the support of a relatively rudimentary invertebrate community. The allotment drains to higher potential aquatic habitat associated with the upper reaches of Piceance Creek, a relatively large and predominantly privately-owned perennial stream. The condition and function of this stream is heavily influenced by agricultural use, but these reaches persist in supporting at least nominal

populations of speckled dace, a common and widespread native fish. The nearest BLM-administered section of Piceance Creek is over 30 valley-miles downstream.

*Environmental Consequences of the Proposed Action:* The proposed action would reduce livestock use across the allotment by about 25%, eliminate early growing season use during May and June, and would strive to abbreviate the duration and intensity of use in valley communities that are most susceptible to grazing effects. These efforts would be expected to improve the composition and density of ground cover in the valleys of Cow Creek and McCarthy Gulch and, over time, reduce sediment contribution to downstream aquatic habitats in Piceance Creek. These effects would likely remain incremental since BLM lands comprise a small fraction of the allotment's bottomland communities. Because the upland land base would continue to receive limited overall use, authorized livestock grazing use would not be influential in modifying ground cover functions across 75% or more of the allotment.

*Environmental Consequences of the No Grazing Alternative:* Although strong herbaceous accumulations (especially in the bottomlands) that would attend livestock removal would be expected to reduce and retain sediment originating from BLM-administered parcels, removal of cattle from 33% of the allotment (and much less of the watershed) would probably have little measurable influence on overall sediment loads reaching aquatic habitats associated with Piceance Creek.

*Mitigation*: None.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Terrestrial): Alternative management strategies addressed in this EA would have little effective influence on any downstream system that supports an aquatic community and would, therefore, have no influence on the status of these streams' functional condition.

**WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment*: BLM lands within this allotment are characterized by rugged, topographically diverse terrain dominated by mountain shrub and mixed shrubs communities that vary from barren south-facing slopes to heavy oakbrush/serviceberry and douglas-fir stands on north-facing slopes. Both pastures are comprised predominantly (73-75%, 553-377 acres) of steep slopes that are not amenable to livestock grazing use. Basin big sagebrush bottoms comprise 6 to 14% of each pasture (42-71 acres); 11-22% (57-167 acres) of each pasture is represented by mildly-sloped shrubland basins and ridgelines that are distant from water. The BLM parcels in the allotment are similar in elevation range at 7000-7800 feet in the lower pasture and 7200-8000 feet in the upper pasture. In general, the upland communities host well-developed bunchgrass-forb understories.

These ranges are used predominantly by elk and deer during the fall through mid-winter months (September through January) and during return movement in spring (May). Smaller numbers of both species persist through the summer. The allotment's complex shrubland communities

provide a varied source of herbaceous and woody forages that are nutritionally important for big game as they enter the winter season, as well as for winter season recovery and preparation for partuition.

The allotment's higher elevation mixed sagebrush and mountain shrub communities are well suited to dusky grouse nesting and brood-rearing functions. The height and density of the herbaceous understory is an important factor in the suitability of dusky grouse nest and brood-rearing habitats. Well developed herbaceous understories are thought to provide scent, visual and physical barriers to potential predators and provide microclimatic conditions conducive to improved hatching success. Diets of grouse chicks are comprised almost exclusively of forbs and invertebrates. By the end of October, most, if not all dusky grouse leave these shrubland habitats to winter in coniferous forest types.

As discussed in the Migratory Bird section above, this allotment hosts an abundant and rich migratory bird community and these traits likely extend to its small mammal component, including those species that rely on well developed shrubland understories, such as Merriam's shrew and long-tailed vole.

*Environmental Consequences of the Proposed Action:* Livestock use is expected to remain light on up to 75% of the BLM acreage that involves steep slopes and/or heavy deciduous shrub canopies. Relative to currently authorized use, the onset of grazing would be deferred by about 6 weeks (beginning 1 July rather than mid-May) and overall use intensity would be reduced by about 25%. Because the use period would be shifted to the latter portion of the growing season and efforts would be made to limit the duration of livestock use of the bottoms, the proposed action would be expected to prompt incremental improvements in the density, vigor, and variety of native herbaceous plants in the allotment's valley and toeslope habitats (about 100 acres).

The proposed action would be expected to prompt improving trends in the availability and quality of herbaceous forage in bottomland habitats. More generally, big game, and especially deer, would continue to benefit from upland use late in the growing season and into the dormant season months. Removal of heavy bunchgrass residuals increases deer access to emerging spring growth or fall regrowth and, consequently, increases the availability of succulent and more digestible forage.

Because of strong similarities in reproductive biology and ridgeline habitat selection, the influence of the proposed action on dusky grouse would be virtually identical to that discussed in the Threatened, Endangered, and Sensitive Animal section for greater sage-grouse.

Most of the small mammal contingent, particularly those associated with bottomland habitats, would respond positively to herbaceous understory development during the reproductive season (i.e., through June). Further, reductions in the duration and intensity of use would aid in reserving more herbaceous residuals that serve as a source or forage and cover, both in preparation for winter hibernation and as subnivian habitat for non-hibernating species (e.g., voles). This effect is not expected to be dramatic, but would represent a localized and incremental benefit at the local population level.

*Environmental Consequences of the No Grazing Alternative:* In the absence of livestock grazing, ground cover expression and the accumulation of residual growth would be expected to increase substantially in valley and toeslope positions. It is probable that most nongame birds and those small mammals that prefer highly developed ground cover would gain elevated levels of abundance, although in contrast to the proposed action, it is probable that such effect would be small scale and localized. Certain benefits derived under a balanced livestock grazing strategy may be foregone across these bottomland situations, such as the preconditioning of fall grass growth for deer. The effects of livestock removal across the majority of upland acreage would be more subtle, since livestock distribution and use is constrained due to steep slopes and lack of available water.

*Mitigation*: None.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): In its present state, this allotment meets the land health standard for terrestrial wildlife. The proposed action would defer livestock entry onto the allotment until later in the growing season and reduce the overall intensity and duration of use in each pasture. Although much of the BLM-administered portions of the allotment are situated on steep slopes that will continue to limit livestock use and effects on herbaceous ground cover, the proposed action and the no grazing alternative would allow for improvements in understory expression on BLM bottomlands and toe-slopes that are consistent with elevated function and more optimal achievement of the health standard.

## CULTURAL RESOURCES

*Affected Environment*: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (#09-059) was completed for each allotment on 4/3/2009 following the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the WRFO cultural files.

| Allotment Number | Acres Inventoried at a Class III level | Acres NOT Inventoried at a Class III Level* | Percent -%- of Allotment Inventoried at a Class III level | Number of Cultural Resources known in allotment | High Potential of Historic Properties (yes/no) | Management Recommendations (Additional inventory required and historic properties to be visited) |
|---|---|---|---|---|---|---|
| 06022 | 268 | 3,627 | 7% | 1 | no | No further work |

Four cultural resource inventories have been previously conducted within the Allotments resulting in the complete coverage inventory of 268 acres and the recording of 1 cultural resource (5RB3752), a historic road/trail. There are few sites in the vicinity of the Allotment. Those present include a prehistoric open camp of indeterminate age and culture, two historic engravings, and one historic Isolated Find (all Field or Officially Not Eligible). The one identified resource within the Allotment is Officially Not Eligible for listing on the National Register of Historic Places (NRHP).

Based on available data, a low potential exists for NRHP-Eligible historic properties in Allotment 06022. On 4/2/2009, Rangeland Management Specialist Mark Hafkenschiel indicated that no known areas of livestock concentration exist on BLM portions of the Allotment. In addition, the only permanent water on BLM surface, a tributary to McCarthy Gulch in T4S R95W Section 11, is in an area highly unlikely to contain cultural resources. The present channel lies adjacent to the north-facing slope of a valley, the south-facing slope of which has failed to produce identifiable cultural resources (Hays and Baer 2006). Generally, north facing slopes are less likely to contain archaeological sites, especially camps or habitations. Due to the low potential of historic properties and the lack of livestock concentration areas on BLM surface, no further inventory will be required for this allotment.

If historic properties are located during any subsequent field inventories for other projects in this area, and BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Office (SHPO).

*Environmental Consequences of the Proposed Action:* The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties, should any exist on un-inventoried portions of the Allotment.

No known historic properties are located in areas where livestock concentrate. Additionally, because of the highly disturbed state of 5RB3752 due to road improvements and continuous usage, grazing activities are not expected to produce significant impacts to the historic road.

*Environmental Consequences of the No Action Alternative:* Under the No Action Alternative, impacts to cultural resources would cease, should such resources (excepting 5RB3752) exist on the Allotment.

*Mitigation*: The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing archaeological sites, or for collecting artifacts on public lands. If artifacts 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 archaeological site damage.

## PALEONTOLOGY

*Affected Environment*: Allotment 06022 encompasses areas generally mapped as the following fossil-bearing formations (Tweto 1979, Armstrong and Wolny 1989):

Uinta Formation—potential fossil yield classification (PFYC) 4—Eocene mammals (titanotheres, uintatheres, myacid carnivores, possibly others), reptiles (turtles and crocodilians), fish (vertebrae, spines, and scales, likely including Lepisosteidae), gastropods (high-spired and turitellid snails), insect larvae, and plants (leaves, wood, algae, etc.).

Green River Formation, Parachute Creek Member—PFYC5—fossil reptiles (lizards, crocodilians, turtles), bats, insects (including eggs & larvae, scorpion ants, beetles, gnats, and mosquitoes), and plants (including algae reefs, ferns, horse-tails (Equisteum), seeds, flowers, fruit, oaks, maples, sassafras, figs, magnolias, etc.).

*Environmental Consequences of the Proposed Action:* In general, paleontological materials (fossils) are not considered to be endangered by normal grazing activities. Some damage to fossil materials may occur in areas of livestock concentration (identified during cultural resource investigation—see above). 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.

Direct impacts that may occur where livestock concentrate include trampling, chiseling and churning of site soils. There may be impacts from standing, leaning and rubbing against above ground features. Indirect impacts may include soil erosion, gullying and increased potential for unlawful collection and vandalism. In areas where fossil bed presence coincides with areas of livestock concentration, continued grazing may contribute to substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to paleontological resources.

*Environmental Consequences of the No Action Alternative:* Direct and indirect impacts to paleontological resources from grazing activities would cease.

*Mitigation*: The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing paleontological localities or for collecting vertebrate fossils on public lands. 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 locality damage.

**ELEMENTS NOT PRESENT OR NOT AFFECTED**:

No flood plains, prime and unique farmlands, exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

**OTHER ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

| Non-Critical Element | NA or Not Present | Applicable or Present, No Impact | Applicable & Present and Brought Forward for Analysis |
|---|---|---|---|
| | | | |
| Visual Resources | | X | |
| Fire Management | | X | |
| Forest Management | | X | |
| Hydrology/Water Rights | | X | |
| Rangeland Management | | | X |
| Realty Authorizations | | X | |
| Recreation | | X | |
| Access and Transportation | | X | |
| Geology and Minerals | X | | |
| Wild Horses | X | | |
| | | | |
| Areas of Environmental Concern | X | | |
| Wilderness | X | | |
| Wild and Scenic Rivers | X | | |
| | | | |
| Cadastral | X | | |
| Socio-Economics | | X | |
| Law Enforcement | X | | |

**RANGELAND MANAGEMENT**

*Affected Environment*: The following tables are analysis of forage production on ecological sites, by pasture on both BLM and private lands in the McCarthy Gulch allotment. This forage analysis more accurately reflects the forage contribution/suitability of the allotment's various ecological sites by surface ownership. Previous preference and percentage Federal Range had been based on range survey information from the late 1940's.

| Lower McCarthy Pasture BLM Ecological Sites | | | | |
|---|---|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** | **Acres/AUM** | **AUMs** |
| Castner channery loam, 5-50%slopes | Pinyon-Juniper woodlands | 112 | UNS | 0 |

| Lower McCarthy Pasture BLM Ecological Sites | | | | |
|---|---|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** | **Acres/AUM** | **AUMs** |
| Glendive fine sandy loam | Foothills Swale | 51 | 5 | 10 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 156 | 60%S/4 | 23 |
| Northwater loam,5-50%slopes | Aspen Woodlands | 76 | 20%S/4 | 3 |
| Parachute Loam,25-75%sloeps | Brushy Loam | 147 | 40%S/7 | 8 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 41 | UNS | 0 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stoney Foothills | 124 | 30%S/12 | 3 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 43 | 40%S/7 | 2 |
| | **Total** | **750** | | **49** |

| Lower McCarthy Pasture Private Ecological Sites | | | | |
|---|---|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** | **Acres/AUM** | **AUMs** |
| Northwater loam,5-50%slopes | Aspen Woodlands | 35 | 5 | 7 |
| Parachute Loam,25-75%sloeps | Brushy Loam | 298 | 40% S/7 | 17 |
| Glendive fine sandy loam | Foothills Swale | 57 | 3 | 19 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 13 | 6 | 2 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 130 | 70%S/4 | 23 |
| Silas loam,0-8%slopes | Mountain Swale | 1 | 1 | 1 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 8 | 14 | 0 |
| Patent loam,0-3%slopes | Rolling Loam | 10 | | |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stoney Foothills | 165 | 40% S/12 | 6 |
| | **Total** | **717** | | **75** |

| Upper McCarthy Pasture BLM Ecological Sites | | | | |
|---|---|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** | **Acres/AUM** | **AUMs** |
| Barcus channery loamy sand,2-8%slopes | Foothills Swale | 21 | 5 | 4 |
| Glendive fine sandy loam | Foothills Swale | 21 | 4 | 5 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 24 | 5 | 4 |
| Northwater loam,5-50%slopes | Aspen Woodlands | 130 | 50% S/5 | 13 |
| Parachute Loam,25-75%sloeps | Brushy Loam | 62 | 40%S/6 | 4 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 32 | 22 | 1 |
| Silas loam,0-8%slopes | Mountain Swale | 25 | 4 | 6 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stoney Foothills | 87 | 40%/12 | 2 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 89 | 60%S/7 | 7 |
| | **Total** | **490** | | **46** |

| Upper McCarthy Pasture Private Ecological Sites | | | | |
|---|---|---|---|---|
| **Soil mapping unit name** | **Ecological Site** | **Acres** | **Acres/AUM** | **AUMs** |
| Northwater loam,5-50%slopes | Aspen Woodlands | 149 | 4 | 37 |
| Parachute Loam,25-75%sloeps | Brushy Loam | 744 | 9 | 83 |
| Starman-Vandamore complex,5-40%slopes | Dry Exposure/Dry Exposure | 40 | 12 | 3 |
| Barcus channery loamy sand,2-8%slopes | Foothills Swale | 15 | 4 | 3 |
| Veatch channery loam,12-50%slopes | Loamy Slopes | 23 | 7 | 3 |
| Irigul-Parachute complex,5-30%slopes | Loamy Slopes/Mountain Loam | 432 | 5 | 86 |
| Silas loam,0-8%slopes | Mountain Swale | 80 | 3 | 27 |
| Rentsac channery loam,5-50%slopes | Pinyon Juniper woodlands | 86 | 20 | 4 |
| Torriorthents-Rock Outcrop, complex,15-90%slopes | Stoney Foothills | 269 | 16 | 17 |
| | **Total** | **1,838** | | **263** |

| Total Forage Production for Private/BLM Lands | |
|---|---|
| **Private** | **338** |
| **BLM** | **95** |

*Environmental Consequences of the Proposed Action:* With the exception of the 160 acre tract of BLM in NW1/4 of Sec 11, at the fork of McCarthy Gulch and the West Branch of cow Creek, BLM lands in the allotment are on the uplands and are either ungrazed or very lightly grazed. In essence, due to topography and the location of water sources, the vast majority of grazing use is made on private lands in the allotment. Grazing use of the 160 acre tract of BLM is controlled by a drift fence across the drainage at the lower end of that tract. The grazing strategy for the West Branch of Cow Creek will be avoidance of grazing due to the potentially negative impact of livestock use and concentration on the riparian area there. Based upon the analysis of forage production on BLM lands, the McCarthy Gulch grazing preference will be adjusted. The Federal Range percentage will be adjusted downward to more accurately reflect the forage contribution of both the BLM and private lands within the allotment.

*Environmental Consequences of the No Grazing Alternative:* Under a no grazing scenario, 95 AUMs of forage allocated for livestock would not be utilized.

*Mitigation*: Grazing use of BLM lands in the bottom of Spring Gulch will be limited to 60% measured in the bottom of the drainage. Grazing use will be made at one time during the summer grazing season.

## REALTY AUTHORIZATIONS

*Affected Environment*: The proposed action is located in a low development area. Primary linear uses are the access road up McCarthy Gulch and the XTO pipeline corridor. There are no known utility lines in the area.

*Environmental Consequences of the Proposed Action:* none

*Environmental Consequences of the No Action Alternative:* none

*Mitigation*: none

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts from the proposed action would not exceed those discussed and analyzed in the White River ROD/RMP and/or the White River Resource Area Grazing Management EIS.

**REFERENCES CITED:**


Armstrong, Harley J. and David G. Wolny
1989 *Paleontological Resources of Northwest Colorado: A Regional Analysis*. Museum of Western Colorado, Grand Junction, Colorado.

Hays, Heidi and Sarah Baer
2006 Class III Cultural Resource Inventory of the XTO Energy Federal Well 3S-95-34-44, Rio Blanco County, Colorado. SWCA Environmental Consultants, Broomfield, Colorado.

Tweto, Ogden
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.


**PERSONS / AGENCIES CONSULTED:** Lonnie Shults, Ray Trujillo- XTO Energy

**INTERDISCIPLINARY REVIEW:**

| Name | Title | Area of Responsibility |
|---|---|---|
| Bob Lange | Hydrologist | Air Quality, Wastes (Hazardous or Solids), Water Quality (Surface and Ground), Hydrology and Water Rights. |
| Maggie Marston | Botanist | Areas of Critical Environmental Concern, Threatened and Endangered Plant Species |
| Michael Selle | Archeologist | Cultural Resources, Paleontological Resources |
| Mark Hafkenschiel | Rangeland Management Specialist | Invasive, Non-Native Species, Vegetation , Rangeland Management, Soils, and Wetlands and Riparian Zones |
| Ed Hollowed | Wildlife Biologist | Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife |
| Jim Michels | Fire / Fuels Technician | Wilderness, Access and Transportation, Recreation, Fire Management, Forest Management |
| Paul Daggett | Mining Engineer | Geology and Minerals |
| Linda Jones | Realty Specialist | Realty Authorizations |
| Jim Michels | Fire / Fuels Technician | Visual Resources |

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

# DIO-BLM-CO-110-2009-0059-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 offer a proposed decision to implement the grazing schedule outlined in the proposed action with the addition of the mitigation listed below.

**MITIGATION MEASURES**:

1) Grazing use of BLM lands in the bottom of Spring Gulch will be limited to 60% measured in the bottom of the drainage. Grazing use will be made at one time during the summer grazing season.

2) When cattle are in the Upper McCarthy pasture, the permittee will periodically check the West Branch of Cow Creek to insure that cattle are not using that area to water. Any cattle found there will be immediately moved and located on another water source.

3) Please contact the BLM – WRFO Hazardous Materials Coordinator at (970) 878-3800 and/or the Colorado Department of Public Health and Environment (CDPHE) through the 24-hour spill reporting line at 1 (877) 518-5608, if the permittee suspects the release of any chemical, oil, solid waste, petroleum product, or sewage in the allotment.

4) The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing archaeological sites, or for collecting artifacts on public lands. If artifacts 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 archaeological site damage.

5) The operator is responsible for informing all persons who are associated with the allotment activities that they will be subject to prosecution for knowingly disturbing paleontological localities or for collecting vertebrate fossils on public lands. 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 locality damage.

6) Continue McCarthy Gulch rangeland and riparian monitoring studies.

**COMPLIANCE/MONITORING**: As per McCarthy Gulch rangeland and riparian monitoring studies.

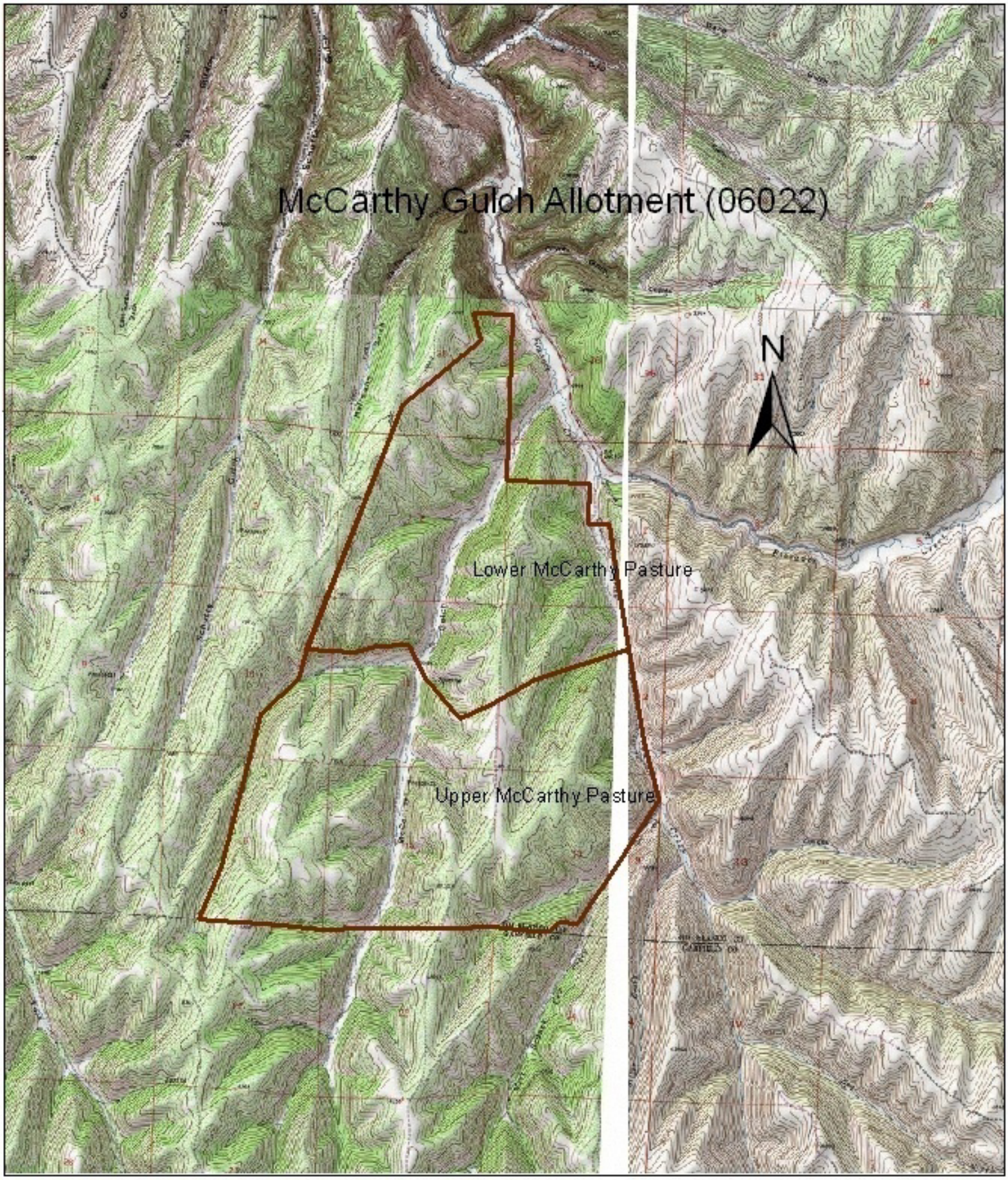
**NAME OF PREPARER**: Mark Hafkenschiel (7/13/09)

**NAME OF ENVIRONMENTAL COORDINATOR**: Caroline Hollowed (7/17/09)

**SIGNATURE OF AUTHORIZED OFFICIAL**: James R Roberts
Acting Field Manager

**DATE SIGNED**: 7-17-09

**ATTACHMENTS**: Map of Allotment Boundaries


McCarthy Gulch Allotment (06022)
N
Lower McCarthy Pasture
Upper McCarthy Pasture