Land Health Evaluation Report

Rocky Canyon SGC Allotment

Bureau of Land Management

Butte Field Office

Introduction and Assessment Process

This report documents whether land health standards were achieved for the Rocky Canyon SGC Grazing Allotment administered by the Bureau of Land Management's Butte Field Office. Standards for Rangeland Health were evaluated utilizing an interdisciplinary team (ID team) of resource specialists.

Rangeland Health Standards for Western Montana are described in detail in the Record of Decision (ROD) issued for Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota and South Dakota (August 1997). The preamble of the Western Montana Standards states: "The purpose of the S&Gs (Standards and Guidelines) are to facilitate the achievement and maintenance of healthy, properly functioning ecosystems within the historic and natural range of variability for long-term sustainable use." Standards are statements of physical and biological condition or degree of function required for healthy sustainable lands. Achieving or making significant progress towards these functions and conditions is required of all uses of public land as stated in 43 CFR 4180.1.

This report contains an evaluation of each of the five standards:

- Standard #1 Upland Health
- Standard #2 Riparian/Wetland Health
- Standard #3 Water Quality
- Standard #4 Air Quality
- Standard #5 Biodiversity

Available monitoring data from both upland and riparian sites, existing inventories, historical photographs and standardized methodology are used by an ID team to assess condition and function. Condition/function declarations regarding this allotment are expressed as:

- Proper Functioning Condition (PFC)
- Functioning at Risk (FAR), which is assigned a trend of up, down, static or not apparent
- Nonfunctioning (NF)

Standards are met when conditions are at PFC or FAR with an upward trend. This is dependent on scope and scale. The BLM will consider the information contained in this report, along with public scoping and other sources of information, to make a determination regarding causal factors and courses of action to be analyzed in a National Environmental Policy Act (NEPA) document.

General Allotment Summary

Allotment Name/Number: Rocky Canyon SGC # 10240
Current Management Category: M (Maintain)
Location: T4N, R4W, Sections 4, Jefferson County
Public Acres: 243 acres.
Season of Use: 06/16 to 10/15
Public Animal Unit Months: 50
Assessment Date: May 6, 2009

The Rocky Canyon SGC Allotment lies about 7 miles south of Boulder, MT and about 17 miles north of White Hall, MT. The allotment is grazed in conjunction with adjacent private property and United States Forest Service (USFS) lands. This allotment is managed as a pasture within the USFS's Big Foot Allotment. The USFS Big Foot Allotment including these and other BLM managed lands, is managed as a 9 pasture deferred grazing system with approximately 550 c/c pairs. This allotment was changed from a rest rotation grazing system to a deferred system, in order to shorten the grazing period on the allotment's riparian areas. The USFS has the lead for grazing management on this allotment. The Big Foot Allotment contains about 4000 acres of private property, 1800 acres of BLM managed lands and approximately 20,000 acres of USFS managed lands.

The Boulder weather station reports 11.48 inches of precipitation on average, and an average daily temperature of 42.6 degrees Fahrenheit. The Rocky Canyon Allotment sits at higher elevations than the Boulder weather station, and receives more precipitation and cooler weather than is recorded at the weather station.

The major soil map units are:

Soils

1591E – Catgulch, boulderly-Crackerville-Rock outcrop complex, 15 to 45 percent slopes.

1372D – Burtoner-Connieo, bouldery-Rock outcrop complex, 4 to 15 percent slopes.

1540F – Shaboom, extremely bouldery-Rock outcrop Elmark, very boulderly, association, 35 to 60 percent slopes.

1910F – Elmark, very boulder- Rock outcrop-Shaboom, extremely bouldery, complex, 25 to 60 percent slopes.

Summary of Standards Achieved --Yes, No, N/A (Not Applicable)--						
Allotment Name	Allot #	1. Upland	2. Riparian	3. Water Quality	4. Air Quality	5. Biodiversity
Rocky Canyon	10240	Yes	No	Yes	Yes	Yes

Rangeland Health Standards Evaluation and Rationale

The issue of scope and scale must be kept in mind when evaluating each standard. It is recognized that isolated sites within a landscape may be Functioning at Risk (FAR) and not meeting the standards; however, considering broader scope and scale, the area may be deemed in Proper Functioning Condition (PFC). Likewise, isolated sites may be in PFC, but, overall, the resource within the allotment or area could be FAR and not meeting standards. Therefore, no single indicator provides sufficient information to determine rangeland health. Indicators are used in combination to provide information necessary to make rangeland health determinations.

Western Montana Standard #1
"Uplands are in Proper Functioning Condition"

Finding Standard is met.

Rationale

The rangeland health evaluation conducted on this allotment was compared to the Natural Resource Conservation Service's ecological site guides. The site evaluated on this allotment showed little departure from the soil stability, hydrologic and biotic function indicators. There is some scattered Douglas fir encroachment. Utilization is within acceptable levels on this allotment and on adjacent private property and USFS managed land that is included in the Rocky Canyon Pasture.

Site 1: a Rangeland Health Evaluation Worksheet was completed at T4N, R4W, Sec. 4: NE1/4NE1/4. The soil type for this site is Caseypeak-Branham-Rock outcrop complex, 15 to 35 percent slopes (1842E). This site was determined to be a silty 15-19" precipitation zone ecological site. The assessment showed 16 of 17 indicators to be none to slight from departure. The Functional/structural groups indicator was rated as slight to moderate. The site had a good representation of native vegetation and the introduced species Kentucky bluegrass was also present. The ecological site description for a silty site does not include Kentucky bluegrass.

Overall, the uplands are in Proper Functioning Condition.

Western Montana Standard #2
"Riparian and Wetland Areas are in Proper Functioning Condition"

Finding Standard is not met.

Rationale

Riparian reach No. J-10, Rocky Canyon Creek, to was split into J-10-1 and J-10-2, because of the topography and channel differences of the stream in these locations. Reach J-10-1 is approximately 500 feet long, a B type channel (2 to 4 % gradient), and is located on fairly level land. This reach was rated as F@R with trend Not Apparent in 2009. The stream in this area has been widened out in places. The Interdisciplinary Team (ID) noted that sinuosity and width/depth ratio of reach J-10-1 were not in balance with the landscape setting. It is not apparent if the present grazing system is improving conditions or if they are remaining static. The stream is well vegetated, however the more level topography of this site and the location of the nearby BLM/USFS boundary fence concentrates animal use along this 500 feet of the reach. The remainder of the reach, an A type channel (4 to 10% gradient), about 3200 feet long was designated as J-10-2. This reach is steeper than the previous reach and is contained by rocks along the creek, which maintain the stability and integrity of the stream bank. This reach was rated as PFC in 2009.

Reach J-104, the northern tributary to Rocky Canyon Creek, was reclassified as a woody draw, because of its lack of surface water and riparian vegetation. This draw supplies little water to Rocky Canyon Creek, only seasonal runoff.

The other riparian reaches in this allotment: J-105, the southern tributary to Rocky Canyon Creek, and J-9-02, the South Fork of Little Whitetail Creek are rated as PFC. These reaches all contain a high quality and quantity of riparian vegetation that is in good to excellent condition.

There is approximately 9300 feet of total riparian reach in the Rocky Canyon Allotment. Eighty seven hundred feet of these reaches rated PFC and 500 feet rated F@R with trend Not Apparent. Since, 500 feet of riparian reach does not have an apparent upward trend the riparian standard is not met on this allotment.

Western Montana Standard #3:
"Water Quality Meets State Standards."

Finding Standard is met.

Rationale

The State of Montana, Department of Environmental Quality (DEQ) has responsibility for implementing the Clean Water Act. This responsibility includes making beneficial use determinations. The State of Montana 303(d) list of impaired water bodies was checked for Jefferson County and none of the riparian reaches, in the Rocky Canyon Allotment, were included on this list.

Western Montana Standard #4
"Air Quality Meets State Air Quality Standards."

Finding Standard is met.

Rationale

Although the actual air quality in the allotment is unknown, there is no evidence to suggest that the current allotment conditions would be contributing to any air quality problems in terms of a source of smoke or dust particulates. No visual impairment was observed.

Western Montana Standard #5
"Provide habitat as necessary, to maintain a viable and diverse population of native plant and animal species, including special status species."

Finding Standard is met.

Rationale

The following indicators were used to assess whether existing habitat conditions are at a condition to support viable and diverse populations of native plant and animal species, including special status species.

- Plants and animals are diverse, vigorous, and reproducing satisfactorily.
- Noxious weeds are absent or insignificant in the overall plant community.
- Spatial distribution of species is suitable to ensure reproductive capability and recovery.
- A variety of age classes is present.
- Connectivity of habitat or presence of corridors prevents habitat fragmentation.
- Diversity of species (including plants, animals, insects, and microbes) are represented.
- Plant communities in a variety of successional stages are represented across the landscape.

A variety of native wildlife species are distributed across the allotment. Big game including moose, elk and deer are present; small mammal burrows were noted; ruffed grouse and numerous passerine species were seen during the allotment evaluation;

numerous insect and arachnid species were observed. Wildlife and plants appear to be healthy, diverse, and reproducing satisfactorily. Although the BLM portion of the allotment is too small to sustain healthy and diverse wildlife communities on its own, it is connected on all sides to USFS, other BLM and undeveloped private land. There are no significant barriers to wildlife movement in and out of the allotment.

Noxious weeds and invasive plant species are rare. The vegetative composition and reproductive capability are healthy throughout the allotment. A variety of successional stages and age classes of plant communities are represented across the allotment.

Preliminary Identification of Causal Factors and Recommendations

Based on the field review and observations, it appears the following factors may be contributing to land health standards not being achieved:

- There is no apparent factor. It appears that wildlife and livestock use may be concentrated on reach J-10-1 by a nearby fence line.

Final determinations will be made upon assessment of further information. It should be noted that if changing a current management or use will not result in progress toward meeting the standards, then the current management or use should not be considered a significant causal factor.

The following actions may be necessary in order to make significant progress in achieving the Western Montana Standards for Rangeland Health:

- Riparian monitoring to determine trend.
- Construction of an alternative watering source for both wildlife and livestock.

How This Information Will Be Used

If the information in this Evaluation Report indicates that the allotment meets the Western Montana Standards for Rangeland Health, BLM will issue grazing decision(s) (subject to protest and appeal) to renew or issue associated grazing authorizations as necessary, with the appropriate level of NEPA documentation and public involvement in accordance with CEQ guidance and BLM direction. No additional final determinations are necessary.

For allotments not meeting the Western Montana Standards for Rangeland Health, BLM will use the information in this Evaluation Report along with any other relevant data or information, including input from interested parties, to make a final determination whether or not current grazing management or levels of use are a significant causal factor in not meeting rangeland health standards on the allotment. If current grazing management and/or levels of use appear to be a significant causal factor, BLM will use the NEPA process to document the affected environment and develop alternatives to propose changes to grazing management to facilitate achieving rangeland health standards. These changes or actions will be addressed with an appropriate level of NEPA

documentation and public involvement in accordance with CEQ guidance and BLM direction. A Final Determination Document will be prepared in concert with the NEPA analysis and associated decision(s). Pursuant to 43 CFR 4180.2(c), the Authorized Officer shall take appropriate action as soon as practicable, but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards. Any grazing decisions, however, are subject to protest and appeal.

If current grazing management or levels of use do not appear to be a significant causal factor, changes or activities in other program areas or activities that appear to be significant causal factors may or may not be undertaken through a NEPA process, dependent on program and office priorities. However, a Final Determination Document will be prepared to document and outline the significant causal factors.

Involvement of Permittees, State Agencies and Interested Publics

The following parties were solicited by mail to see if they had interest in the 2009 Rangeland Health Assessments for the BLM – Butte Field Office: MT Fish, Wildlife, and Parks, Western Watersheds Project, Beaverhead-Deerlodge National Forest, Helena National Forest, Gallatin National Forest, MT Department of Natural Resources and Conservation and the allotment grazing permittee.

The permittee accompanied the interdisciplinary team on a portion of this assessment and contributed to the upland assessment and riparian discussion of this allotment.

The Beaverhead/Deerlodge National Forest has supplied streamreach measurement information for the Rocky Canyon Stream on adjacent USFS managed lands.

BLM Staff Participants

The following BLM staff participated in the preparation of this report:

Assessment Team Member	Title	Signature	Date
John Sandford	Natural Resource Specialist		
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