

Land Health Evaluation Report
Garden Gulch Allotment
Bureau of Land Management
Butte Field Office

Introduction and Assessment Process

This report documents whether land health standards were achieved for the Garden Gulch 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: Garden Gulch 20392

Current Management Category: M (Maintain)

Location: T4N, R4E, Section 30; T4N, R3E, Section 26; Gallatin County

Public Acres: 510.36 acres.

Season of Use: 06/15 to 11/14

Public Animal Unit Months: 59

Assessment Date: June 30, 2009

The Garden Gulch Allotment is located about 15 miles north of Manhattan, MT. The allotment is grazed in conjunction with adjacent private property and state land (approximately 2600 acres). This grazing area is split into 3 pastures, (Low, Mid, and Upper). The Low pasture is completely private property, the mid pasture contains 40 acres of public land and approximately 900 acres of private property. The upper pasture contains the majority of the BLM managed land, in this allotment. This pasture contains approximately 800 acres of private property, approximately 480 acres of public lands, and 320 acres of state property. Each pasture is grazed approximately 5 to 6 weeks per year.

The Trident weather station reports 12.85 inches of precipitation on average, and an average daily temperature of 45.5 degrees Fahrenheit. The Belgrade Airport weather station reports 14.92 inches of precipitation on average, and an average daily temperature of 42.1 degrees Fahrenheit. The Menard weather station reports 14.30 inches of precipitation on average. No temperature information is available for this weather station. These are the closest weather stations to this allotment.

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
Garden Gulch	20392	Yes	N/A	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.

Utilization is within acceptable levels on this allotment and on adjacent private property managed with the public land.

Site 1: a Rangeland Health Evaluation Worksheet was completed on T4N, R4E, Sec. 30: SW1/4NW1/4. The soil type for this site is Tolbert-Blaincreek-Adel complex, 15 to 45 percent slopes (439E). This site was determined to be a silty droughty steep 15-19” precipitation zone ecological site. The assessment showed 15 of 17 indicators rated none to slight from departure. The Functional/structural groups indicator was rated as slight to moderate. Blue bunch wheatgrass was identified as being slightly decreased on this site. The Invasive/noxious plants indicator was rated as slight to moderate. There were little if any of these species on the evaluation site. There is cheatgrass present on the south slopes (too high and steep to be from livestock impact). There is houndstongue present in the Garden Gulch Canyon near this evaluation site. It is planned to treat these noxious weeds that are located in the canyon.

Site 2: a Rangeland Health Evaluation Worksheet was completed on T4N, R3E, Sec. 26: SW1/4SE1/4. The soil type for this site is Straw loam, 0 to 4 percent slopes (64B). This site was determined to be a silty 15-19” precipitation zone ecological site. The assessment showed 15 of 17 indicators rated none to slight from departure. The Plant community composition and distribution relative to infiltration and runoff indicator was rated as slight to moderate. Club moss and conifer encroachment have a slight to moderate effect on infiltration at this site. The Functional/structural groups indicator was rated as slight to moderate. A slight to moderate increase in club moss, conifer expansion and Idaho fescue was identified.

Overall, the uplands are in Proper Functioning Condition.

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

Finding Standard is met.

Rationale

The riparian reach, G-17 that is on this allotment was reclassified as an epheral draw with an upward trend, in 2009. It is less than 1/4 mile long and has little riparian vegetation growing along it. In 2004 this reach was rated as Nonfunctional. It was severely trampled by livestock. An exclosure was built around this wet area to prevent this trampling in 2005. The trampling has been eliminated with construction of this exclosure fence around this wet draw.

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

Finding Standard is met.

Rationale

The State of Montana 303(d) list of impaired waterbodies was checked for Gallatin County and this riparian reach is not included on this list. No excess sediment is produced from water running off this allotment.

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 represented on the allotment. Big game including elk and deer are present (the allotment provides winter range for these species); small mammal burrows were noted; 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 state and undeveloped private land. There are no significant barriers to wildlife movement in and out of the allotment.

Noxious weeds and invasive plant species do not comprise a significant portion of the allotment, however houndstongue is becoming common in the Garden Gulch Canyon.

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.

This Evaluation Report indicates that this allotment meets or is making significant progress toward the functions and conditions of the Western Montana Standards for Rangeland Health. No additional final determination is necessary.

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 lessee.

The Garden Gulch Allotment grazing lessee accompanied the Interdisciplinary Team on the 2009 assessment and participated in the assessment.

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		
Scot Franklin	Wildlife Biologist		
Tanya Thrift	Riparian Coordinator		
Corey Meier	Soil, Water, Air Lead (Soils Scientist)		

Review	Title	Signature	Date
Renee Johnson	Assistant Field Manager, Renewable Resources		
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