

Land Health Evaluation Report

Dry Creek Allotment

Bureau of Land Management

Butte Field Office

Introduction and Assessment Process

This report documents whether land health standards were achieved for the Dry Creek 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 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: Dry Creek #20218
Current Management Category: M (Maintain)
Location: T. 5 N., R. 2 W., Sec. 6
 Jefferson County
Public Acres: 582
Season of Use: 5/16 – 6/15
Public Animal Unit Months: 32
Assessment Date/Period: 07/20/2011

Elevations range from 5,400 to 6,200 feet. Predominant ecological sites (NRCS) are Very Shallow and Silty-Droughty, 15-19” P.Z. northern Rocky Mountains, south. Bluebunch wheatgrass, Idaho fescue, and rocky mountain juniper are the most characteristic upland understory vegetation. There are no established upland trend or utilization studies.

The ID team chose to perform the upland assessment within one of the largest mapping units, Maiden-Lap-Rock outcrop complex, 15 to 35 percent slopes (121E). A verification soil pit was dug on a southeast facing backslope to determine the ecological site. The verification pit matched the major component Lap and similar soils, placing it in the Shallow Limy Droughty (SwLyDr) ecological site. These soils contain 35-60% gravel and high surface fragment cover. They form in gravelly colluvium over residuum weathered from limestone and are relatively shallow with depth to bedrock at 18 inches. They occur on divides, escarpments, hillsides, and ridges.

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
Dry Creek	20218	Yes	Yes	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.

<p>Western Montana Standard #1 <i>“Uplands are in Proper Functioning Condition”</i></p>

Finding Standard is met.

Rationale The rangeland health evaluation found that both soil and site stability and hydrologic function had none to slight departure from expected. Biotic integrity was rated as a slight to moderate departure based on weeds found throughout the allotment and some level of conifer encroachment from lack of disturbance. Limber pine mortality, contributed mainly to mountain pine beetle, was observed throughout the uplands but regeneration was adequate for reestablishment. These factors had not altered the site characteristics enough to not meet this standard.

There was slight concern over the amount of bare soil present. Juniper encroachment may have been responsible for a loss of sage brush and subsequent gain in bare soil. This site occurs on a steep slope (14%) which could provide an opportunity for sediment from these bare patches to move downslope. However, since these soils are skeletal (contain >35% gravel) and well armored by surface fragments, sediment loss is unlikely. Overall, though some attributes were slightly outside the range of natural variability, the degree to which the attributes differed was not large enough to no longer meet the standard.

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

Finding Standard is met.

Rationale The only riparian within the Dry Creek allotment was a lotic system referred to as Dry Creek BDLW-14. Dry Creek is an ephemeral tributary of the Boulder River. No hydric soil indicators were met. The IDT completed a riparian assessment and determined that the reach is in Proper Functioning Condition. The only concern was that the point bars were not revegetating, but they were created as a result of this spring’s high flow event and were not fully expected to be revegetated. Conifer encroachment was present, but is not currently affecting the proper functioning condition.

The reach’s hydrological characteristics are appropriate for the channel type, and the proper riparian plant communities are present and in healthy condition. A wetter-than-average winter resulted in high spring flows. The stability of stream banks, presence of rocks and woody material in the channel, and deposition in the floodplain were evidence of the reach’s ability to dissipate energy and properly function in high flow conditions.

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 establishing Total Maximum Daily Loads (TMDL) of sediment and contaminants affecting water quality for beneficial uses. Dry Creek is not currently listed as an impaired waterbody. However, the Boulder River, which is located below the Dry Creek Allotment, is listed on the State of Montana and EPA 305(b) list of impaired water bodies. TMDLs for the Boulder River watershed are currently being developed by the DEQ.

Dry Creek was determined by the DEQ to be fully supporting aquatic life. Due to the ephemeral nature of the stream, there was insufficient water present for the DEQ to determine if Dry Creek supports agriculture, cold water fisheries, drinking water, industrial uses, or primary contact recreation at this time. The Boulder River was determined to be fully supporting industrial uses and partially supporting agriculture and primary contact recreation. It does not support aquatic life, cold water fisheries, or drinking water.

The ID team did not find that the Dry Creek Allotment is contributing excessive levels of sediment or contaminants or altering flows to the Boulder River. Therefore, the ID team concluded that the Dry Creek Allotment was meeting the water quality standard.

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.

The allotment provides many different types of habitat for a wide variety of both plant and animal species. It provides winter habitat for deer and elk. Bird species typical of the habitat were observed during the evaluation. This allotment is within the Elkhorns Cooperative Management area and is part of a very large, contiguous unit of federally managed land.

Preliminary Identification of Causal Factors and Recommendations

Even though land health standards were met, based on the field review and observations, the following actions may be necessary in order to make significant progress in maintaining the Western Montana Standards for Rangeland Health:

- Integrated Weed Management (IWM) in riparian and upland sites.

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 groups/individuals were notified of the Dry Creek Allotment Assessment:

Permittees authorized to graze on the allotment

Western Watersheds Project

Beaverhead-Deerlodge National Forest
Butte and Whitehall Ranger Districts

Montana Fish, Wildlife, and Parks

BLM Staff Participants

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

Assessment Team Member	Title	Signature	Date
Roger Olsen	Rangeland Management Specialist		
Scot Franklin	Wildlife Biologist		
Charles Tuss	Fire Management Specialist		
Lacy Decker	Range Technician (IWM)		
Corey Meier	Soil, Water, Air Lead (Soils Scientist)		
Michael O'Brien	Forester		
Gwen Davies	Biological Technician (Soils)		

Review	Title	Signature	Date
Tanya Thrift	Assistant Field Manager, Renewable Resources		
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