

**Land Health Evaluation Report**  
**Shoddy Springs Allotment**  
Bureau of Land Management  
Butte Field Office

## **Introduction and Assessment Process**

This report documents whether land health standards were achieved for the Shoddy Springs 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:** Shoddy Springs 11024  
**Current Management Category:** M (Maintain)  
**Location:** Broadwater County, T2N, R1W, Section 2  
**Public Acres:** 160  
**Season of Use:** 7/1-9/30  
**Public Animal Unit Months:** 36  
**Assessment Date/Period:** 5/21/09

The Shoddy Springs allotment is located approximately 8 miles northwest of Threeforks, MT. Elevation on BLM land ranges from approximately 4,600 to 4,700 feet. Landforms in the allotment include ridges, hillsides, alluvial fans, escarpments, strath terraces, and knolls. Slopes generally range from 2-60%. The predominant plant communities are big sagebrush-steppe and shrublands.

Historically, the public land within Shoddy Springs allotment was part of the former Silver Sage allotment (20213) until it was divided in 1995 into two allotments (i.e. Shoddy Springs and Cottonwood Springs). The permitted use for Silver Sage allotment was for 51 cattle from 6/1 to 8/31 (154 AUMs) since at least 1976.

Current and past BLM involvement with this allotment has been largely limited to administrative functions. A term and condition in the grazing permit states that it can be grazed in conjunction with the permittee's livestock operation so long as use is not detrimental to the public land and use is within the permitted grazing dates. Ten horses may also be substituted for 12 cattle during the permitted dates. The Public land within the allotment is listed as a potential disposal parcel.

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
Shoddy Springs	11024	Yes	N/A	N/A	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**

Uplands were assessed in the field at Shoddy Springs allotment on 5/21/2009. The assessment included an evaluation of one representative eco-site for land health indicators and observations through a general allotment walk-through. NRCS/SCS ecological/range site reference guides were used to identify departures from the expected conditions at the eco-site and the other observed areas. These departures were then used to determine whether Montana land health upland standard is being met.

The soils at Shoddy Springs allotment were stable with no appreciable wind or water erosion occurring. Observed gully erosion appeared to be a natural part of the landscape’s physical process. The hydrologic function appeared to be maintained by adequate water capture and infiltration over the majority of the allotment as evidenced by minimal erosion and observed vegetation productivity. Litter cover appeared sufficient for site protection. Noxious weeds were not identified; however, non-native invasive plants such as cheatgrass were present in small areas in or adjacent to drainages.

There was some departure from the expected plant community structure that decreases its productivity. Bluebunch wheatgrass was less than anticipated and in many areas co-dominant with needle-and-thread, short cool-season bunchgrasses (e.g. threadleaf sedge), and/or a short warm season sodgrass (i.e. blue grama). Additionally, approximately two acres of crested wheatgrass was seeded at some point in the past at the south end of the public land parcel in Section 2 (T2N, R1W). Despite these changes from the expected condition, the biotic integrity still appeared intact. The plant community diversity was comparable to the reference guides. The vegetation was also vigorous with signs of past and present reproduction. Overall, the gathered information indicates that the uplands meet Montana land health standards.

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

**Finding**        Not Applicable

**Rationale**

Riparian or wetland areas were not identified on BLM administered land within Shoddy Springs allotment.

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

**Finding**      Not Applicable

**Rationale**

Surface and groundwater water were not identified on BLM administered land within Shoddy Springs allotment.

**Western Montana Standard #4**  
***“Air Quality Meets State Air Quality Standards.”***

**Finding**      Standard is met

**Rationale**

Air quality data was not collected within Shoddy Springs allotment; however, observed vegetation was not dust covered and there was no impairment of visibility.

**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.

There were small mammals, birds, insects, spiders, grasses, forbs, shrubs, and trees observed at Shoddy Springs allotment. Overall, they appeared vigorous and healthy.

Current and remnant inflorescences/flowers on plants indicated that reproduction was taking place. Noxious weeds were not identified; however, invasive non-native species such as cheatgrass were present. Despite the unexpected reduction of bluebunch wheatgrass in certain areas, spatial distribution of species appeared acceptable overall. Perennial shrubs and grasses were present in age classes ranging from young to old. There was connectivity of habitat to prevent fragmentation. Multiple plant, animal, and insect species were found. Plant communities appeared to be in mid- to late-successional stages.

## **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 people/organizations were solicited by mail to see if they had interest in the 2009 Rangeland Health Assessment for Shoddy Springs allotment: MT Fish, Wildlife, and Parks, Western Watersheds Project, Beaverhead-Deerlodge National Forest,

Helena National Forest, MT Department of Natural Resources and Conservation and the allotment grazing permittee. No interest was expressed by those parties.

### **BLM Staff Participants**

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

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