

**Red Rock and Lima Watershed Assessment  
Executive Summary and Authorized Officer's  
Determination**



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This document summarizes the findings of the Red Rock Watershed, Lima Watershed and a single allotment located in the Medicine Lodge Watershed that was conducted during the 2007 field season. All of these allotments will be referred to as RRLW in this document. The assessment area covers approximately 55,582 acres of public land administered by the Bureau of Land Management (BLM) in Beaverhead County, Montana. The RRLW includes 55,428 acres within twenty-four grazing allotments and 154 acres that are unleased.

The table below summarizes the determination of Rangeland Health Standards by allotment. It also briefly describes resource concerns identified by the interdisciplinary team (IDT) and preliminary recommendations to mitigate these concerns and revise management where deemed necessary.

The BLM is currently working on National Environmental Policy Act (NEPA) documentation. The NEPA document will include all BLM-administered public lands covered in the RRLW. Alternative management will be analyzed wherever it is determined that allotments are not meeting the Standards, allotments are meeting the Standards but have site specific resource concerns, or unhealthy forest and/or fuels conditions are outside the natural range of variability.

The issue of scale must be kept in mind in evaluating each standard. It is recognized that isolated sites within a landscape may be FAR and not meeting the standards; however, considering broader scope and scale, the area may be in PFC; or isolated sites may be PFC, but overall the resource in the allotment or area is FAR and not meeting the standards. No single indicator provides sufficient information to determine land health. They are used in combination to provide information necessary to make a land health determination. Alternatively, just because a standard is being met, does not mean that the conditions on the ground represent desired resource conditions or objectives.



Roe Allotment, July 2007

Allotment Name, Number, Category & BLM acres	Are Healthy Rangelands Standards Being Met?					Primary Resource Concerns (including discernable cause of resource concern)	ID Team Initial Recommendations
	Upland	Riparian Wetland	Water Quality	Air Quality	Bio-diversity		
Bell Canyon 20193 (I) Acres: 7095	YES	NO	1	YES	NO	<ol style="list-style-type: none"> <li>1. Livestock trailing and use along riparian reaches (900, 931, 985) causing excessive hummocking and streambank impacts.</li> <li>2. Douglas-fir encroaching into mountain big sagebrush habitat.</li> <li>3. Relatively large spotted knapweed infestation.</li> <li>4. Excessive erosion and public safety concerns on specific designated road.</li> </ol>	<ol style="list-style-type: none"> <li>1. Consider periodic year-long rest treatment for “canyons” portion of allotment.</li> <li>2. Consider treating conifer encroachment with prescribed fire inside the WSA; consider fire &amp;/or mechanical treatments outside the WSA.</li> <li>3. Treat spotted knapweed infestation.</li> <li>4. Consider designating alternative route.</li> </ol>
<sup>1</sup> The State of Montana, Department of Environmental Quality (DEQ) has been given the responsibility for making water quality determinations and has completed its evaluation of 303(d)-listed streams. Tributary streams in the RRLW are not on the 303(d) list, are not priority streams and are not scheduled to be evaluated by DEQ.							
Cedar Creek 10124 (I) Acres: 4708	YES	NO	1	YES	YES	<ol style="list-style-type: none"> <li>1. Both riparian reaches (901, 925) have livestock trailing and streambank impacts.</li> <li>2. Browsing was noted on the majority of Bitterroot milkvetch inflorescences observed on the allotment. Repeated spring grazing may lead to population decline of this BLM sensitive plant species.</li> <li>3. Road intersects reach 901 twice.</li> </ol>	<ol style="list-style-type: none"> <li>1 and 2. Consider combining allotment with Williams &amp; Shoshone Cove allotments &amp; treating each allotment as a pasture in a three treatment, rest-rotation grazing system.</li> <li>3. Consider eliminating or re-routing road that intersects reach 901.</li> </ol>

Allotment Name, Number, Category & BLM acres	Are Healthy Rangelands Standards Being Met?					Primary Resource Concerns (including discernable cause of resource concern)	ID Team Initial Recommendations
	Upland	Riparian Wetland	Water Quality	Air Quality	Bio-diversity		
Clark Canyon 30002 (I) Acres: 8526	YES	NO	NO	YES	NO	<ol style="list-style-type: none"> <li>1. Conifer encroachment in uplands and riparian areas and forest health (insects and/or disease).</li> <li>2. Loss of aspen.</li> <li>3. On stream reaches 928, 930 and 986, streambank impacts and vegetative composition in riparian habitat due to livestock grazing.</li> <li>4. Clark Canyon on Montana DEQ 303 (d) list of impaired streams.</li> <li>5. Wildlife barrier fence.</li> <li>6. Trout species of unknown genetic purity.</li> </ol>	<ol style="list-style-type: none"> <li>1 and 2. Prescribed fire, mechanical treatment or other means to mitigate conifer encroachment, improve forest health and promote aspen.</li> <li>3. Adjust livestock grazing management in specific pastures to improve riparian function.</li> <li>4. Continue working with Montana DEQ and local Watershed Committees in the development and implementation of water quality restoration plans.</li> <li>5. Modify to BLM standards.</li> <li>6 Conduct fish surveys to verify fish species.</li> </ol>
Ellis Peak 10126 (I) Acres: 3252	YES	NO	1	YES	NO	<ol style="list-style-type: none"> <li>1. Stream bank impacts and vegetative composition on most reaches due to livestock grazing especially on east side of allotment.</li> <li>2. Wildlife barrier fences.</li> </ol>	<ol style="list-style-type: none"> <li>1 and 2. Consider periodic, year-long rest treatments to reduce grazing pressure on Law Creek for the east half of the allotment.</li> <li>2. Modify or replace barrier fences.</li> </ol>
North McKnight 20746 (I) Acres: 682	YES	NA	NA	YES	YES	Vegetation composition and vigor in lower elevation upland habitat. Overall, BLM land met upland standard.	Continue current management but establish an additional upland monitoring site on allotment.
Snowline AMP 30029 (I) Acres: 9427	YES	YES	1	YES	YES	<ol style="list-style-type: none"> <li>1. In Dutch Hollow area, streambank impacts and vegetative composition in riparian habitat due to livestock grazing.</li> <li>2. Some allotment perimeter and division fences are not meeting BLM fencing specifications.</li> <li>3. Some wet meadows are drying out and are being invaded by Kentucky bluegrass, Canada thistle and native upland plant species.</li> </ol>	<ol style="list-style-type: none"> <li>1 and 3. Adjust length of time and/or season of livestock grazing management in specific pastures to improve riparian function and wetland habitat condition.</li> <li>2. Modify existing fences to meet BLM wildlife specifications where needed.</li> </ol>

Allotment Name, Number, Category & BLM acres	Are Healthy Rangelands Standards Being Met?					Primary Resource Concerns (including discernable cause of resource concern)	ID Team Initial Recommendations
	Upland	Riparian Wetland	Water Quality	Air Quality	Bio-diversity		
Williams 20195 (M) Acres: 1626	YES	NA	NA	YES	YES	Reduction in vigor & production of cool season bunchgrasses.	Consider combining the Cedar Creek, Williams & Shoshone Cove allotments and treating each allotment as a pasture in a three treatment rest-rotation grazing system.
Lima Peaks 30270 (M) Acres: 1543	YES	YES	1	YES	YES	1. Aspen decline. 2. Conifer encroachment into uplands and riparian. 3. Unauthorized OHV traffic. 4. Short segment of road impacting reach 914.	1 and 2. Prescribed fire, mechanical treatment or other means to mitigate conifer encroachment and promote aspen. 3. Emphasize travel restrictions in non-motorized areas on the allotment. 4. Close 0.25 miles of road near reach 914.
Norris Canyon 20109 (M) Acres: 317	YES	NA	YES	YES	YES	No resource concerns identified.	Continue current management
Radio TV 00150 (M) Acres: 1822	YES	NA	NA	YES	YES	Unauthorized OHV traffic.	Emphasize travel restrictions in non-motorized areas on the allotment.
Roe 20727 (M) Acres: 2557	YES	YES	1	YES	YES	No resource concerns identified.	Continue current management.
Roe West 20728 (M) Acres: 5972	YES	NA	NA	YES	YES	Spotted knapweed infestation in sporadic areas along road.	Coordinate weed treatments with private land owners, county and state. The goal is to eradicate these relatively small infestations of spotted knapweed.
Shoshone Cove 20192 (M) Acres: 1655	YES	NA	NA	YES	YES	1. Browsing was noted on the majority of Bitterroot milkvetch inflorescences observed on the allotment. 2. Relatively small leafy spurge infestations.	1. Consider combining the Cedar Creek, Williams & Shoshone Cove allotments and treating each allotment as a pasture in a three treatment rest-rotation grazing system. 2. Eradicate leafy spurge infestations.
Allotment E 10149 (M) Acres: 1537	YES	NA	NA	YES	YES	1. Loss of vigor of cool season bunch grasses in south pasture.  2. Leafy spurge infestation along road.	1. Continue current management but discuss incorporating rest in south pasture. 2. Eradicate leafy spurge infestation.

Allotment Name, Number, Category & BLM acres	Are Healthy Rangelands Standards Being Met?					Primary Resource Concerns (including discernable cause of resource concern)	ID Team Initial Recommendations
	Upland	Riparian Wetland	Water Quality	Air Quality	Bio-diversity		
Clark Canyon Isolated 20206(C) Acres: 140	YES	NO	1	YES	NO	Conifer encroachment along riparian reach.	Reduce conifers if feasible and cost effective using prescribed fire, herbicide, and/or mechanical treatment.
Little Sheep (C) Acres: 121	YES	NO	1	YES	NO	1. Stream bank impacts, decadent woody vegetation and reduced sedge along reach 915 due to livestock grazing. 2. Aspen decline and Douglas-fir encroachment. 3. Mortality of limber pine.	1. Consider fencing reach 915 and the associated spring in a riparian enclosure. 2. Prescribed fire, mechanical treatment or other means to mitigate conifer encroachment and promote aspen.
Phalarope West 30204(C) Acres: 1029	YES	NO	NA	YES	YES	1. Increased runoff and confinement from Interstate 15 impacting stream reach 933. 2. Spotted knapweed and Dyer's woad infestation. 3. Old dump site present.	1. Continue current management. 2. Treat Spotted knapweed infestation and coordinate with Dyer's woad task force. 3. Consider dump clean-up options.
Roe Isolated 20729 (C) Acres: 80	YES	NO	1	YES	NO	Streambank impacts and reduced riparian vegetation along reach 987 due to livestock grazing.	Discuss livestock grazing management and/or design projects with grazing permittee to improve or protect riparian habitat.
Seybold Ind. 20686 (C) Acres: 162	YES	NA	NA	YES	YES	No resource concerns identified.	Maintain current management.
Seybold Non-AMP 20187 (C) Acres: 80	YES	NA	NA	YES	YES	No resource concerns identified.	Continue current management.
Snowline AMP Custodial 20607 (C) Acres: 1440	YES	NO	1	YES	YES	Stream reach 946 entrenched with some bank shearing.	Discuss livestock grazing management and/or design projects with grazing permittee to improve or protect riparian habitat.
Snowline Isolated Tracts 20719 (C) Acres: 350	YES	NA	NA	YES	YES	Some concerns about wet meadow habitats.	Continue current management and consider protective fencing in one wetland high priority area.

Allotment Name, Number, Category & BLM acres	Are Healthy Rangelands Standards Being Met?					Primary Resource Concerns (including discernable cause of resource concern)	ID Team Initial Recommendations
	Upland	Riparian Wetland	Water Quality	Air Quality	Bio-diversity		
Straight Creek (C) Acres: 1084	YES	NA	NA	YES	YES	No resource concerns identified.	Maintain current management.
Truax Creek 20642 (C) Acres: 377	YES	NA	NA	YES	YES	No resource concerns identified.	Maintain current management.
Unleased Acres: 154	YES	NA	NA	YES	YES	No resource concerns identified but grazing occurring.	Consider combining the unleased area with adjacent existing allotments.

<sup>1</sup> The State of Montana, Department of Environmental Quality (DEQ) has been given the responsibility for making water quality determinations and has completed its evaluation of 303(d)-listed streams. Tributary streams in the RRLW are not on the 303(d) list, are not priority streams and are not scheduled to be evaluated by DEQ.

### Standard # 1: Upland Health

All allotments are meeting this standard:

Members of the IDT visited all the grazing allotments, as well as the unleased public land in the RRLW during 2007 and completed 15 *Rangeland Health Indicator Evaluation Matrices* on various ecological sites and plant associations. In addition, 17 Daubenmire trend studies and 25 permanent photo plots established in the 1970s and early 1980s were duplicated in 2007 to help determine vegetative trend. All the study sites visited were rated as PFC by the IDT. Based on the information presented in the study sites, historical photographs, allotment tours by the IDT and actual grazing use reports for each allotment, all 24 allotments within the RRLW were rated as PFC. It appeared that existing management was improving or maintaining upland health conditions on all allotments and quantitative monitoring data on file supported the findings of the IDT. The 154 acres of BLM that are unleased were also found to be functioning properly. However, site specific concerns such as non-native invasive plant species, conifer encroachment, etc., are discussed in the assessment report.

### Standard # 2: Riparian Health

Nine allotments and are **not** meeting this standard:

1. Bell Canyon
2. Cedar Creek
3. Clark Canyon
4. Clark Canyon Isolated
5. Ellis Peak

6. Little Sheep
7. Roe Isolated
8. Snowline AMP Custodial
9. Phalarope West

The riparian areas that did not meet the standards were determined to be FAR with either a static or downward trend or non-functional. Riparian habitat that is FAR with an upward trend is considered to be meeting the riparian health standard because it is making progress toward the goal of PFC.

Generally, the riparian areas that did not meet the standard had altered vegetative composition along the riparian zone and/or reduced bank stability due to impacts from livestock trailing and/or grazing. Encroachment of Rocky Mountain juniper, Douglas-fir, and reduced deciduous woody riparian vegetation (aspen, willow, redosier dogwood, etc.), was also a riparian concern and cause for failure to meet the standard. This was evident in reaches of Clark Canyon and Clark Canyon Isolated. Several of the lower reaches of these major streams were also deeply entrenched due to a combination of factors explained in the assessment report. Livestock impacts have been determined to be one of the contributing factors in not meeting the riparian standard in each of these allotments except Phalarope West. However, livestock grazing impacts associated with Clark Canyon Isolated allotment occurred at least five years ago.

### **Standard # 3: Water Quality**

Two allotments are **not** meeting this standard:

1. Clark Canyon
2. Clark Canyon Isolated

The reason these allotments failed to meet water quality standards is because Clark Canyon Creek is on Montana DEQ's 303d list. The IDT found that most reaches are improving and not contributing excessive sediment to Clark Canyon Creek but livestock grazing along stream reaches 986, 930 and 928 in Clark Canyon allotment are contributing to water quality impairment.

### **Standard # 4: Air Quality**

Air quality standards are being met within the RRLW.

### **Standard # 5: Biodiversity**

Biodiversity is closely related to upland, including forests, and riparian health.

Six allotments are not meeting this standard:

1. Bell Canyon
2. Clark Canyon
3. Ellis Peak

4. Clark Canyon Isolated
5. Little Sheep
6. Roe Isolated

Degraded riparian conditions caused by current and/or historic livestock grazing were the primary cause of not meeting the biodiversity standard within the Bell Canyon, Ellis Peak, Little Sheep and Roe Isolated Allotments. Forest health was the primary cause of the Clark Canyon allotment not meeting the biodiversity standard. The conversion of deciduous woody vegetation to Rocky Mountain juniper was the primary factor in not meeting the biodiversity standard within the Clark Canyon Isolated allotment.

### **NEPA Documentation**

Before any of the above stated recommendations can be implemented, NEPA documentation will be completed to analyze a reasonable range of alternatives to address resource concerns found during the Assessment. The Dillon Field Office will be working on the Red Rock and Lima Environmental Assessment (MT-050-07-10) during the winter and spring of 2008.

Implementation of new plans will begin in 2008, but due to budgetary and human resource constraints, complete implementation of these plans may take several years.

For more information, please review the RRLW Assessment Report or contact the Dillon Field Office (406) 683-8000.

## Authorized Officer's Determination

Based on my review of the Assessment Team's recommendations and other relevant data and information, I have determined that the following 15 allotments and the unleased area within the RRLW Watershed **meet** all five of the Standards for Rangeland (Land) Health and Guidelines for Grazing Management for BLM lands in Montana:

1. North McKnight
2. Snowline AMP
3. Williams
4. Lima Peaks
5. Norris Canyon
6. Radio TV
7. Roe
8. Snowline Isolated Tracts
9. Straight Creek
10. Roe West
11. Shoshone Cove
12. Allotment E
13. Seybold Individual
14. Seybold Non-AMP
15. Truax Creek
16. Unleased BLM Land

I have determined that the following 9 allotments within the RRLW **do not meet** the Standards for Rangeland Health and Guidelines for Grazing Management for BLM lands in Montana. These allotments do not meet the Riparian Health Standard and most do not meet the biodiversity Standard excluding Phalarope West, Snowline AMP Custodial and Cedar Creek).

1. Bell Canyon
2. Cedar Creek
3. Clark Canyon
4. Ellis Peak
5. Clark Canyon Isolated
6. Little Sheep
7. Roe Isolated
8. Snowline AMP Custodial
9. Phalarope West

I have determined that current livestock management is a significant causal factor in the rangeland health standards **not being met** on each of the following 7 allotments:

1. Bell Canyon
2. Cedar Creek
3. Clark Canyon
4. Ellis Peak
5. Little Sheep
6. Roe Isolated
7. Snowline AMP Custodial

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. Appropriate action means implementing actions that will result in significant progress toward fulfillment of the standards. Practices and activities subject to standards and guidelines include the development, modification, or revision of AMPs, establishment of terms and conditions of permits, leases and other grazing authorizations, and range improvement activities such as vegetation manipulation, fence construction and development of water.

BLM Manual Handbook H-4180-1, Rangeland Health Standards Handbook, provides guidance for conducting watershed-based Land Health Assessments. It states “If the Land Health Standards are not being achieved because of a causal factor other than current livestock grazing management, you must consult other program guidance for the appropriate steps to be taken to ensure that progress toward meeting Standards is made.”

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Dillon Field Manager

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Date