

2006 Evaluation of Upper Shirttail Creek Allotment (#1024) Relative to Rangeland Health Standards

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I. Area Evaluated

The Upper Shirttail Creek Allotment (#1024) is located west of Rye Valley, Oregon (see Appendix 1: Map), and it is within the Pedro Mountain Geographic Unit as described in the Baker Resource Management Plan/Record of Decision dated July 1989. It is an allotment consisting of one pasture of 485 acres public land plus 220 acres private land. The active allowable use under the ten-year permit is 111 AUMs on public land plus 22 AUMs private land, for a total of 133 AUMs (83% public), to be used within the dates of May 1 to October 13. The actual use has been alternating spring use (June) with fall use (October) every other year.

II. Data and Information Used in the Evaluation

A. Trend Plot

Data from the trend plot is summarized in Appendix 2: Trend Data. Indicators used are ground cover (compared to bare ground), and plant species frequency as measured in frequency transects.

B. Rangeland Health Assessments

Appendix 3 summarizes the results of the rangeland health assessments completed in 2006. Multidisciplinary teams viewed a representative site on the allotment, assessing 17 rangeland health indicators at each site in accordance with Technical Reference 1734-6, Interpreting Indicators of Rangeland Health, 2000 (Version 4).

C. Proper Functioning Condition Assessments

Appendix 3 summarizes the results of the PFC assessments completed in 2006, in which 17 indicators were assessed in accordance with Technical Reference 1737-15, A User Guide to Assessing Proper Functioning Condition, 1998.

D. Native, T & E, and Locally Important Species Habitat Ratings

These are habitat ratings for Standard 5 that were done with each rangeland health assessment. Indicators used were:

1. Presence or absence of T & E species or species of concern
2. Native Plant Communities

- a. Age classes
- b. Diversity
- c. Habitat connectivity
- d. Population recovery

E. Actual Use and Utilization Data

Appendix 4 summarizes the actual use records (reported by the permittee) and range forage utilization data (estimated by BLM range personnel in accordance with Technical Reference 4400-3, Utilization Studies and Residual Measurements).

III. Standards Evaluated

The standards evaluated are those presented in detail on pages 15-18 of the final version of “The Standards for Rangeland Health and Guidelines for Livestock Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington” (August 12, 1997).

A. Standard 1 - Upland Watershed Function

Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

What Was Used to Evaluate the Status of this Standard: Rangeland health assessments, using the attributes of Soil & Site Stability and Hydrologic Function, plus the ground cover data from trend plots.

Determination for Standard 1:

<u>Standard Met</u> <u> X </u>	<u>Standard Not Met</u> _____ <u>Livestock not a significant factor</u> _____ <u>Livestock a significant factor</u> _____	<u>Standard Not Present</u> _____
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The attributes of rangeland health relating to this standard were rated as none-to-slight departure from expected levels, and so the standard is met. The trend plot showed less ground cover from litter in 2004 than in 1987, but this change is at least partly attributable to a fire and reseeding with introduced grasses.

B. Standard 2 - Riparian/Wetland Watershed Function

Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

What Was Used to Evaluate the Status of this Standard: proper functioning condition assessments for Ray Creek and a tributary of Ray Creek.

Determination for Standard 2:

<u>Standard Met</u> _____	<u>Standard Not Met</u> <u> X </u> _____ <u>Livestock not a significant factor</u> _____ <u>Livestock a significant factor</u> <u> X </u> _____	<u>Standard Not Present</u> _____
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All the stream mileage in the allotment was rated as Functional at Risk, trend not apparent. Thus the standard is not met. Heavy utilization by cattle along the riparian zones is likely to be a significant factor in preventing a clear upward trend. But the

professional judgment of the BLM rangeland management specialist is that the trespass use has been more significant than the authorized use in this allotment.

C. Standard 3 - Ecological Processes

Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.

What Was Used to Evaluate the Status of this Standard: Rangeland health assessments, using the attribute of Biotic Integrity, plus plant species changes determined from trend plots.

Determination for Standard 3:

Standard Met X

Standard Not Met _____

Standard Not Present _____

Livestock not a significant factor _____

Livestock a significant factor _____

Biotic Integrity was rated at none-to-slight departure from expected levels, and the trend plot confirmed that key perennial forage grasses were maintaining adequate cover and frequency. However, there were changes in species due to reseeding after a fire: a significant decrease in Idaho fescue (and a small, non-significant decrease in bluebunch wheatgrass) versus an increase in the seeded intermediate wheatgrass. This introduced species is thriving, actually resulting in greater live vegetation cover than before the fire.

D. Standard 4 - Water Quality

Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

What Was Used to Evaluate the Status of this Standard:

Professional judgment based mainly on the observations from the proper functioning condition assessments.

Determination for Standard 4:

Standard Met _____

Standard Not Met X

Standard Not Present _____

Livestock not a significant factor _____

Livestock a significant factor _____

Standard 5 – Native, T & E, and Locally Important Species

Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

What Was Used to Evaluate the Status of this Standard: Native, T &E and locally important species habitat ratings done with each rangeland health assessment, plus sagebrush canopy cover estimates. Although there is an infestation of Scotch thistle on Ray Creek, the thistle primarily is on private land and this standard is met on the public land.

Determination for Standard 5:

Standard Met X

Standard Not Met

Standard Not Present

Livestock not a significant factor

Livestock a significant factor

Conformance with Guidelines for Livestock Grazing Management

Use as authorized is in conformance with the guidelines.

Recommendations

1. Conduct more frequent use supervision to detect use during times not authorized, and conduct fence inspections prior to turnout in adjoining allotments.
2. Require maintenance of spring developments in this allotment so as to provide reliable water sources away from the creeks, and require escape ramps installed in all troughs.

IV. Appendices

Appendix 1: Map

Appendix 2: Trend Data

Appendix 3: Summary of Rangeland Health Evaluations

Appendix 4: Summary of Proper Functioning Condition Assessments

Appendix 5: Actual Use and Utilization Table