

2006 Evaluation of French Creek Allotment (#1032) Relative to Rangeland Health Standards

Assessment Participants (Name & Discipline or Interest):

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I. Area Evaluated

The French Creek Allotment (#1032) is located southwest of Durkee, 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. The allotment consists of 947 acres of public land and 1128 acres of private land, and the allotment grazing capacity was calculated in 1971 as 155 AUMs public land and 170 AUMs private land, or 48% federal range. It has been categorized as a “C” allotment and annually licensed with seasons and numbers not restricted as long as abuse to the public land does not occur.

II. Data and Information Used in the Evaluation

A. Trend Plots

There are two photoplots in the allotment where photos and observed apparent trend readings were taken in 1976, 1990, and 2000.

B. Rangeland Health Assessments

Appendix 2 summarizes the results of the rangeland health assessments completed in 2006. Multidisciplinary teams viewed one representative site on the allotment, assessing 17 rangeland health indicators 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 the rangeland health assessment. Indicators used were:

- a. Presence or absence of T & E species or species of concern
- b. Native Plant Communities
 - a. Age classes
 - b. Diversity
 - c. Habitat connectivity

d. Population recovery

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 assessment, using the attributes of Soil & Site Stability and Hydrologic Function, plus observed apparent trend data with photos.

Determination for Standard 1:

Standard Met _____ Standard Not Met X Standard Not Present _____
Livestock not a significant factor _____
Livestock a significant factor X

In terms of departure from expected levels, Soil/Site Stability was rated as Slight-to-Moderate, and Hydrologic Function was rated as Moderate. Observed apparent trend in 2000 indicated all soils indicators were upward or stable at one plot, while the other had downward trend indicators on soils.

The preponderance of evidence is that this standard is not being met, although more intensive monitoring to measure indicators of this standard should be conducted.

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 streams in each pasture.

Determination for Standard 2:

Standard Met _____ Standard Not Met X Standard Not Present _____
Livestock not a significant factor _____
Livestock a significant factor X

Only 33% of the streams had acceptable PFC ratings, and 67% (over 2 miles of streams) were not meeting the standards. Livestock utilization along riparian zones was a significant factor, indicated by utilization data showing 63% utilization in 2005 and heavy utilization observed on other occasions.

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 assessment, using the attribute of Biotic Integrity, plus observed apparent trend data with photos.

Determination for Standard 3:

Standard Met _____ Standard Not Met X Standard Not Present _____
Livestock not a significant factor _____
Livestock a significant factor X

In 2006, Biotic Integrity was rated as moderate departure from expected conditions. Juniper, noxious weeds, and annuals were each in excess of 2% composition of the plant community, and hoof action and heavy grazing was evident. The observed apparent trend in vegetation indicators had been judged upward or stable in 2000. The preponderance of evidence, looking at the most recent data as most significant, is that the standard is probably not met, and at least the apparent trend between 2000 and 2006 is downward.

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 X

Stream temperatures would likely exceed standards, based on the riparian conditions noted in Standard 2 above. Large sections of stream were downcut and lacking shade-producing shrubs or trees, and there was evidence of trampling along streambanks, with high soil moisture in the streambanks during spring use.

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.

Determination for Standard 5:

Standard Met _____

Standard Not Met X

Standard Not Present _____

Livestock not a significant factor _____

Livestock a significant factor X

Whitetop invasion, signs of heavy grazing that is suppressing willow and other native plant communities, and extensive mining impacts were reasons to suggest this standard is not being met. The only possible species of T&E importance suggested as a possible resident is bighorn sheep.

Conformance with Guidelines for Livestock Grazing Management

Management does not conform to the guideline to provide adequate cover and plant community structure to promote streambank stability, debris and sediment capture, and floodwater energy dissipation in riparian areas.

Recommendations

1. Change terms and conditions of the permit to regulate the numbers of livestock and periods of use (no longer operate under the custodial management of seasons and numbers not restricted).
2. Propose that rest or deferred rotation is incorporated into the grazing system.
3. Monitoring should be focused on riparian vegetation. Utilization triggers should be established to determine when livestock should be moved off the allotment. These could be in the form of stubble heights.

IV. Appendices

Appendix 1: Map

Appendix 2: Summary of Rangeland Health Evaluations

Appendix 3: Summary of Proper Functioning Condition Assessments