2006 Evaluation of Hollowfield Canyon Allotment (#1022) Relative to Rangeland Health Standards

_____Jackie Dougan Fisheries Biologist

_____Melissa Yzquierdo Wildlife Biologist/Botanist

_____Craig Martell Range Management Specialist

_____Susan Badgley Range Technician

_____Todd Kuck Supervisory NRS/Hydrologist

I. Area Evaluated

The Hollowfield Canyon Allotment (#1030) 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. It is a small allotment consisting of one pasture of 250 acres public land and 351 acres private land. The amount of allowable active use under the ten-year permit is 42 AUMs on public land plus 50 AUMs on private land for a total of 92 AUMs (46% public land), within the dates of 6/22 to 8/21.

II. Data and Information Used in the Evaluation

A. Trend Plots

Data from the trend plots 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

In 2006, 17 riparian zone indicators were examined 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

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:

Standard Met__X__ Standard Not Met____ Standard Not Present____

Livestock not a significant factor____

Livestock a significant factor____

These attributes showed none-to-slight departure from expected levels, so the standard is being met. The trend plot, however indicated a need to continue to monitor ground cover, with less ground cover from plant litter measured in 2003 than in 1987.

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__

:

Table 1 summarizes the results of the PFC assessments completed in 2006.

Table 1 Proper Functioning Condition Assessments in 2006 for Hollowfield Allotment #1030

Creek	FARU	FARN
Hollowfield R1	.33 mi.	
Hollowfield T1R1		.55 mi.
TOTAL	**.33 Mi.**	**0.55 mi.**

The majority of the 0.88 mile of stream is at Functioning at Risk with trend not apparent.

With livestock use being naturally concentrated at creeks, and with trespass livestock apparently using the area at inappropriate periods, the livestock grazing may 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 is more significant than the authorized use.

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 ___

The biotic integrity was rated at none-to-slight departure from expected conditions, and the trend plot showed a very significant increase in Idaho fescue and an apparent increase in bluebunch wheatgrass.

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 _X_ Standard Not Met ___ Standard Not Present ___
Livestock not a significant factor ___
Livestock a significant factor ___

With a lack of water quality data and no obvious water quality issues observed during the PFC assessments, the conclusion is that this standard is met.

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__X__ Standard Not Met____ Standard Not Present___

Livestock not a significant factor___

Livestock a significant factor___

No species of T&E importance were identified, and native species habitat appeared adequate.

Conformance with Guidelines for Livestock Grazing Management

The dates of the grazing period printed on the current grazing permit are June 22 to August 21. This period includes part of the critical growing period. Guideline 6 under Livestock Grazing Management Guidelines says, "Provide periodic rest from grazing for rangeland vegetation during critical growth periods to promote plant vigor, reproduction and productivity. Therefore, the current grazing permit is not in conformance. However, the permittee requested and was granted October 1 to November 15 use in recent years instead of during the growing season, and this change in use would normally benefit rangeland health.

Recommendations

1. Change the period of use on the ten-year permit to allow latitude for periodic fall use so grazing will not always take place during the growing season.
2. Conduct regular use supervision visits to detect any unauthorized use by permittees not holding grazing permits in this allotment.
3. Monitoring should be focused on riparian vegetation. Utilization triggers should be established to determine when livestock should be moved off the allotment in the fall. These could be in the form of stubble heights.

IV. Appendices

Appendix 1: Map

Appendix 2: Trend Data

Appendix 3: Summary of Rangeland Health Evaluations

Appendix 4: Actual Use and Utilization Table