

Appendix 11

Rangeland Health Assessment and Evaluation Process, Meeting or Not Meeting Standards

Assessment Process Overview

The Rangeland Health Assessment was conducted in accordance with the protocol for Interpreting Indicators of Rangeland Health, version 3 (Technical Reference 1734-6, 2000). Assessments conducted in 1999 were done under an earlier version and reviewed for conformance with version 3.

The assessments utilized 18 qualitative indicators that evaluate soil and site stability, hydrologic function and biotic integrity. In version 3 of the protocol, 17 indicators are mandatory. The 18th indicator, biological crust, is an optional indicator that was included due to the widespread occurrence of crust in the study area.

Assessments were conducted on soil mapping units or ecological survey areas defined by NRCS Site Write Ups with a target of cumulatively representing 75% of the geographic area of each pasture of each grazing allotment. One to several assessments were conducted within each pasture depending on its degree of homogeneity. Additional areas above the 75% level were included at the discretion of the assessment team (e.g., seedings, loamy bottom sites, reference areas) if they were areas frequently used by livestock.

Assessments were conducted by interdisciplinary teams, representing at least two of three areas of expertise: livestock management (usually the range management specialist responsible for the allotment), soils, and vegetation. Grazing permittees were invited to accompany BLM on assessments and to participate in staff training on the protocols.

Approximately 630 upland assessments have been completed. In addition, riparian assessments have been completed on 500 seeps, springs, and stream reaches. These also employed interdisciplinary teams and standard agency protocols.

Evaluating whether Standards 1 and 3 are being met

Utilizing the Attribute Summaries for “Departure from Ecological Site Description/Ecological Reference Area” for Soil/Site Stability and Biotic Integrity prepared in the Assessment Evaluation process (Technical Reference 1734-6, App. 1), and reviewing existing additional data such as trend and utilization, an evaluation was made as to whether or not areas were meeting Standards based on the following criteria:

Attribute Summary Departure for Soil/Site Stability and/or Biotic Integrity was either “None to Slight” (5) or “Slight to Moderate” (4)

Area was found to be meeting Standard(s).

Attribute Summary Departure for Soil/Site Stability and/or Biotic Integrity was “Extreme” (1)

Area was found to not be meeting Standard(s).

Attribute Summary Departure for Soil/Site Stability and/or Biotic Integrity was “moderate to extreme” departure (2) and other summary indicators rated greater than (2)

Area was found to not be meeting Standard(s) unless there was evidence to the contrary

Attribute Summary Departure for Soil/Site Stability and/or Biotic Integrity was “Moderate” (3).

Summary indicator ratings were 3, 4 or 5, area was found to be meeting Standard(s).

Evaluating whether Standard 2 is being met

Utilizing Utah’s Standards for Rangeland Health, riparian sites were assessed using the Properly Functioning Condition (PFC) assessment process. As part of these assessments photo points and other historic data were used to assess trend.

Site was evaluated as meeting Standard 2 if rated as either:

Proper Functioning Condition, or

Functioning-At-Risk with an upward trend, or

Functioning-At-Risk with no apparent/static trend, or

Site was evaluated as not meeting Standard 2 if rated as either:

Functioning-At-Risk with a downward trend, or

Not Functioning.

Evaluating whether Standard 4 is being met

Utilizing Utah’s Standards for Rangeland Health, water quality was evaluated using standards set forth by the Utah Division of Water Quality. Long term water quality monitoring data as well as single sample data was used in this determination.

Allotments were evaluated as meeting Standard 4 if water sources tested either within the allotment or downstream from the allotment, but still representative of that allotment's water quality, were within Utah water quality standards.

Allotments were evaluated as not meeting Standard 4 if water sources tested either within the allotment or downstream from the allotment, but still representative of that allotment's water quality, did not meet Utah water quality standards.

For each allotment that failed Standard 4, an explanation is given as to the reason that water quality was an issue (see individual allotment write-ups in Appendix 1). In most cases, water quality was highly dependent on area soils and geology and non-attainment of Standard 4 was caused by factors outside the control of management.