

Standards of Public Land Health

Evaluation of 64024 SALT CREEK FARM & RANCH

Allotment

[12/06/2006]

The Roswell Field Office conducted Rangeland Health Assessments at 1 study site within Salt Creek Farm & Ranch, allotment #64024. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of these field assessments. A summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64024-IDSU-A153	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Salt Creek Farm & Ranch, allotment #64024. Ten of these assessed soil site stability; 11 hydrologic function; and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 1 trend plot location within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections, which were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 years.

There is one study site on this small, 169 acre allotment. The entire allotment is within a Loamy SD-3 ecosite.

Soil stability is very good on the site. Most indicators rate "none to slight". The entire allotment is relatively flat with very little evidence of soil movement or loss.

Hydrologic function is very good on the site. All but one of the indicators was rated "none to slight". Soil Surface Resistance to Erosion was only slightly below expected for the ecosite, but infiltration and runoff appear to be in balance with natural potentials, as evidenced by a low occurrence of active water erosion feature such as terracettes and pedestals.

Biotic integrity is good for the site. There is a shift in grass composition from what is expected for the ecosite. The site has shifted to a burrograss / tobosa grass grassland community from a tobosa grass / black grama community. Other more desirable grasses, like black grama, are still present but in reduced amounts. Forb production was high.

It is the professional opinion of the Assessment Team, public land within allotment #64024, Salt Creek Farm & Ranch meets Upland and Biotic Standards. There are no Riparian issues present therefore this standard was not addressed. See site notes, comments and recommendations for further information regarding this assessment.

Recommendations: This loamy SD-3 site has transitioned to or is transitioning to a burrograss / tobosa grass grassland. Prescribed burning or other disturbance (i.e. herd effect) followed by appropriate rest may help improve vegetative diversity. Consider rest and alternating or changing the timing and duration of grazing to allow desirable forage plants to thrive and reproduce. All roads on the allotment should be inventoried for failures related to runoff and erosion. Road related erosion in the form of gullies and other similar features should be prioritized for restoration and rehabilitated.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64024-IDSU-A153			
Legal Land Desc	NESE 30 0080S 0240E Meridian 23	Acreage	177
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060005070 SALT		
Observers	JACKSON; DILLEY	Observation Date	04/18/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	AbB	Soil Taxon Name	ALAMA
Texture Class	NM644 SIL	Soil Phase	ALAMA
Texture Modifier	NM644 SILT LOAM,DRY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	A two track road and powerline pass through the site. Red ants are creating clearings. Antelope are in the area. Cattle are present NW of site. Cattle trails are evident. No to slight grazing use observed at the site.		
Part 2. Attributes and Indicators			
		Departure from Ecological Site Description/Ecological Reference Areas	

Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:	Flat ground; none observed.					
S H	Water Flow Patterns					X
Comments:	Slight evidence of past erosion. Site is almost level. Good grass cover breaks flows.					
S H	Pedestals and/or Terracettes					X
Comments:	Pedestals are minimal.					
S H	Bare Ground					X
Comments:	Less than expected for the ecosite.					
S H	Gullies					X
Comments:	none					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:	Uniform distribution. Little to no evidence of water or wind movement.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Some reduction in aggregate stability in the interspaces.					
S H B	Soil Surface Loss or Degradation					X
Comments:	Little evidence of erosion.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:	No shrubs. Dominant grasses are holding soil well.					
S H B	Compaction Layer					X
Comments:	Few instances of platy structure, but not restrictive to root penetration or water infiltration.					
B	Functional/Structural Groups				X	
Comments:	According to production data, burrograss is the dominant grass. Tobosa and black grama should be dominant.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						

B	Annual Production					X
Comments:	Exceeds 80% of potential production.					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:	There does not appear to be any current impediment to reproduction, but reduction in desirable grasses could indicate past restrictions such as timing and duration of grazing.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	Evident throughout the site but continuity is broken.					
B	Wildlife Habitat					X
Comments:	Antelope were observed in the vicinity. Forbs were abundant.					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						
B	Special Status Species Populations					X
Comments:						

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	2	8
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	3	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	Soils are stable with good herbaceous cover.	0	0	10
Hydrologic		0	0	11
Biotic	Good production. Little evidence of soil loss. Good production. No invasive plants. Species composition has degraded somewhat.	0	0	13
<p>Site Notes: The site has a good crop of Indian wheat as well as other forbs. Black grama is less than expected. Tobosa appears to be about as expected, although that is not borne out by the production data. Burrograss has increased across the site. Production data indicates that it is by far the dominant grass. Sand dropseed is present in patches across the site.</p> <p>Plant species encountered included: shrubs - cholla, prickly pear, PRGL (mesquite) forbs - Verbena, Erodium spp., Cryptantha spp., PIPA (Indian wheat), desert holly, Carmissonia spp.</p> <p>grasses - PLMU, BOER, SCBR, SPCR, PAOB</p>				

Determination of Public Land (Rangeland) Health for 64024 SALT CREEK FARM & RANCH

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Salt Creek Farm & Ranch, allotment #64024, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ EDDIE BATESON
Assistant Field Manager

08/24/2007
Date

