

# Standards of Public Land Health

## Evaluation of 64036 SALT CREEK FLAT Allotment

[ 12/06/2006 ]

The Roswell Field Office conducted (RHA) Rangeland Health Assessments at 1 IDUSU study site within Salt Creek Flat, allotment #64036. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of this study site. Existing monitoring data was incorporated into and in support of this field assessment. A summary of this 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
64036-IDUSU-A157	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Salt Creek Flat, allotment #64036. 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 IDUSU 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.

The Salt Creek Flat Allotment is approximately 261 acres in size and is all public (BLM) land. This small allotment consists of fairly rugged hills and drainages and ranges in elevation from approximately 3900 feet to 4100 feet. The worksheet places the site in a Loamy SD-3 ecosite. It is unlikely that there is any Loamy SD-3 on this allotment with the exception of very narrow strips along drainages. GIS data shows the area of the study site to be Limestone Hills SD-3, which a much better fit. For purposes of this evaluation, this site was compared to Limestone Hills SD-3. This site was visited on June 25, 2007. No livestock were observed on the allotment. Grazing use was not apparent.

The ecological site has been changed from a Loamy to a Limestone Hills.

Site 64036-IDUSU-A157 has very stable soil. Most soil stability indicators rated "none to slight". Pedestalling was not apparent. One small gully was forming in the nearby drainage and was associated with the 2-track road leading to the site. The high amount of surface rock lends stability to the site.

Hydrologic function was rated similarly. Shrub cover is about double what is expected for the site, but is not judged to be affecting runoff or infiltration at this time. Herbaceous cover exceeds that expected for the site.

All indicators assessing biotic integrity for the site rated "slight to moderate" or "none to slight". Production was good. Litter amount exceeded the 12% expected for the site. F/S groups rated "slight to moderate" due to the increase in the shrub component. There is good species diversity. Black grama is still the dominant grass. Invasive Plants rated "slight to moderate" due to mesquite and creosote bush being widely scattered. The area provides good habitat for mule deer. Because of the terrain, it is not suitable habitat for pronghorn.

**Recommendations:** Occasional prescribed fire would be useful in controlling the increase in shrubs. Continue the current grazing strategy.

<b>RFOs Upland and Biotic Standard Assessment Summary Worksheet</b>			
<b>SITE 64036-IDSU-A157</b>			
Legal Land Desc	SESE 31 0080S 0230E Meridian 23	Acreage	210
Ecosite	042CY020NM LIMESTONE HILLS SD	Photo Taken	Y
Watershed	13060005070 SALT		
Observers	JACKSON; BRITTON	Observation Date	06/25/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	EbC	Soil Taxon Name	ECTOR
Texture Class	NM644 CBV-L	Soil Phase	ECTOR
Texture Modifier	NM644 VERY COBBLY LOAM,D		
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:	No apparent livestock use. An old road leads to the site.		

**Part 2. Attributes and Indicators**

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to	Moderate	Slight to Moderate	None to

			Extreme			Slight
S H	Rills					X
Comments:	No rills.					
S H	Water Flow Patterns					X
Comments:	Lots of surface rock. Flow patterns are difficult to discern.					
S H	Pedestals and/or Terracettes					X
Comments:	Very few pedestals.					
S H	Bare Ground					X
Comments:	Much less than expected. Lots of surface rock.					
S H	Gullies				X	
Comments:	Generally, there are no gullies. There is on small gully associated with the 2-track road leading to site.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	There is some displacement, but litter is also well distributed.					
S H B	Soil Surface Resistance to Erosion					X
Comments:	Good soil aggregate stability.					
S H B	Soil Surface Loss or Degradation					X
Comments:	Very little evidence of soil loss or degradation. Very few pedestals.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:	Shrub cover is about double what is expected but not likely affecting runoff and infiltration on this site. Herbaceous cover is >28%.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Shrubs are about double what is expected. There is good grass diversity. BOER is still the dominant grass.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Exceeds expected amount of 10%.					

B	Annual Production					X
Comments:	>80% of potential.					
B	Invasive Plants				X	
Comments:	Mesquite and creosote bush are widely scattered throughout but more common closer to the drainage.					
B	Reproductive Capability of Perennial Plants					X
Comments:	Desirable grasses produced seed in 2006.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	Evident throughout, but continuity is broken.					
B	Wildlife Habitat					X
Comments:	Good habitat for mule deer. 1 doe observed on site.					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	N/A					
B	Special Status Species Populations					X
Comments:	N/A					

### 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	2	9
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 very stable. Site is very rocky. Very little evidence of soil movement or loss.	0	0	10
Hydrologic		0	0	11
Biotic	Good plant diversity. Good production. Black grama is the dominant grass. Shrub cover is about double what is expected.	0	0	13

Site Notes: This site is not a Loamy SD-3. There is likely no place on this allotment that is a Loamy SD-3 except for very narrow areas along drainage bottoms. This site was evaluated using Limestone Hills SD-3. Soils are very stable with very little evidence of soil movement or loss. Ground cover is good, but shrub cover is higher than expected and may be increasing. The area is very rocky. There is good species diversity.

The photo point is located at: 13S 532537 3714661

Photo #1 is the frame at the above location. Photo #2 is taken at 0 degrees. Photo #3 is taken at 120 degrees. Photo #4 is taken at 240 degrees. All are corrected for declination.

Plants encountered included:

shrubs: ACGR, PAIN2 (mariola), NOLINA, PRGL, LADI, OPUNT (prickly pear), GUSA2, RHMI, pencil cholla forbs: croton, PLPA, ERIOG grasses: BOER, ARIST, STNE, PAHA, ERIN, SCBR, TRPI, TRMU, MUAR, ERPU8

## **Determination of Public Land (Rangeland) Health for 64036 SALT CREEK FLAT**

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 Flat, allotment #64036, 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