

Standards of Public Land Health Evaluation of 64045 BLUEWATER Allotment [04/01/2010]

The Roswell Field Office conducted rangeland health assessments at 3 study sites within 64045 BLUEWATER. The assessments looked at the 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 the field assessment. The 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
64045-ALKALI-E095	X			X			N/A		
64045-EAST CODDLE-E097	X			X			N/A		
64045-WEST CODDLE-E096	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Bluewater, allotment #64045. 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 6 trend plot locations 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.

This allotment contains 3,331 acres of public land. The studies are located on two Loamy SD-3 sites and a Sandy SD-3 ecological site. The majority of the indicators were rated as "None to Slight" or "Slight to Moderate" degree of departure from the ecological site description. There are no riparian areas on the public land in this allotment. At each of the study locations, the indicator for Invasive Plants while rated as "Slight to Moderate" due to the amount or encroaching mesquite, the team noted the level of mesquite. In the East Coddle Pasture or the Sandy SD-3 site, mesquite was more prevalent than in the other pastures.

Recommendations: With the majority of the indicators falling in the "None to Slight" or "Slight to Moderate" category, this allotment is rated as "Meeting" the standard for Rangeland Health. . Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grass cover and good plant composition remains. The team strongly

recommends that the entire allotment be mapped for mesquite and if feasible to implement a land treatment. Due to the intermingled land status, the team also recommends that coordination be done with other entities, such as the Natural Resource Conservation Service and the Soil and Water Conservation District, and the New Mexico State Land Office to complete the treatment across private, state leased lands and public lands.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64045-ALKALI-E095

Legal Land Desc	SENW 10 0060S 0250E Meridian 23	Acreage	922
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060003200 FIVE MILE		
Observers	TRAUTNER & MCGEE	Observation Date	04/01/2010
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	HRB	Soil Taxon Name	HOLLOMEX
Texture Class	NM644 L	Soil Phase	HOLLOMEX- MILNER-REEVES
Texture Modifier	NM644 MOIST LOAMS		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

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:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground					X

Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	bare ground and under canopy good					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	scattered mesquite					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	actual 10-20%, esd 25-30%					
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	Scattered mesquite					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:	Biological & physical crusts present					
B	Wildlife Habitat					X

Comments:						
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					

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	4	7
B	Biotic	0	0	0	3	8

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		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes:

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64045-EAST CODDLE-E097

Legal Land Desc	SENW 17 0060S 0260E Meridian 23	Acreage	1452
Ecosite	042CY004NM SANDY SD-3	Photo Taken	Y
Watershed	13060003200 FIVE MILE		
Observers	TRAUTNER & MCGEE	Observation Date	03/19/2010
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	DsA	Soil Taxon Name	DONA ANA
Texture Class	NM644 SL	Soil Phase	DONA ANA
Texture Modifier	NM644 SANDY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

Attribute	Indicators	Departure from Ecological Site Description/Ecological Reference Areas				
		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						

S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:	mesquite dunes					
H	Litter Movement				X	
Comments:	litter movement around obstructions					
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	lack of diversity of shrubs					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	mesquite					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat				X	
Comments:						

B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat				X	
Comments:						
B	Special Status Species Populations					
Comments: burrowing owls						

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	1	9
H	Hydrologic	0	0	0	2	9
B	Biotic	0	0	0	5	7

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		0	0	10
Hydrologic		0	0	11
Biotic		0	0	12

Site Notes: species noted at this location: tobosa, black grama, blue grama, dropseeds, muhlys, cactus, barrel cactus, cholla, mesquite.

Noted very little utilization by livestock, invasion of mesquite is evident. Very little desirable shrubs.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64045-WEST CODDLE-E096

Legal Land Desc	NESE 14 0060S 0250E Meridian 23	Acreage	957
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060003200 FIVE MILE		
Observers	TRAUTNER & MCGEE	Observation Date	04/01/2010
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	HRB	Soil Taxon Name	HOLLOMEX
Texture Class	NM644 L	Soil Phase	HOLLOMEX- MILNER-REEVES
Texture Modifier	NM644 MOIST LOAMS		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

Attribute	Indicators	Departure from Ecological Site Description/Ecological Reference Areas				
		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground					X

Comments:	Esd 40-50-5, actual - 35%					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	accumulated around obstructions					
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	esd 25-305, actual 15%					
B	Annual Production				X	
Comments:	within 80%					
B	Invasive Plants				X	
Comments:	scattered mesquite					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:	Chemical & biological crusts					
B	Wildlife Habitat					X

Comments:						
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					

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	1	9
H	Hydrologic	0	0	0	3	8
B	Biotic	0	0	0	3	8

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		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: Area is dominated by tobosa and black grama. Other species include dropseeds, three awn, mesquite, yucca, burrograss, hairy grama. Site looks very good, very little use.

Good biological crusts that are stabilizing the soils.

Determination of Public Land (Rangeland) Health for 64045 BLUEWATER

The Record of Decision (ROD) for the New Mexico Standard 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 Bluewater, allotment 64045, 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/ J. Howard Parman
Assistant Field Manager

08/12/2010
Date