

Standards of Public Land Health Evaluation of 65090 SOUTH CAPROCK Allotment [01/12/2010]

The Roswell Field Office interdisciplinary team conducted a Rangeland Health Assessment on the South Caprock Allotment, 65090. This assessment evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of the range study locations. Existing monitoring data were incorporated into and in support of the field assessments. A summary of the assessments 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
65090-CAP-D176	X			X			N/A		
65090-NORTH BREAKS-D177	X			X			N/A		
65090-SO BREAKS #2-N019	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluation for public land on the South Caprock Allotment #65090. Ten of these assessed soil site stability, 11 hydrologic function and 13 assessed biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected at the trend study plot locations within the allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office interdisciplinary teams, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological conditions. The collections which were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 years. This allotment is in the "I" (Improve) category.

This allotment contains 3,137 acres of public land. The studies are located on two ecological sites, a Deep Sand CP-2 and Loamy HP-3. The Cap Pasture assessment in the Loamy HP-3 site resulted in determinations that fell either into the "None to Slight" category or the "Slight to Moderate" category with the exception of three ratings; the Invasive plant category, Functional Structural groups, and Plant Community Composition and Distribution Relative to Infiltration and Runoff. Each of these categories were rated at "Moderate" due to the presence and influence of cholla.

The North Breaks and South Breaks assessments were both located in the Deep Sand CP-2 ecological site. The North Breaks assessment resulted in determinations of "Moderate" in four categories: Wind-scoured, Blowouts and/or Depositions Areas, Functional/Structural Groups,

Invasive Plants and Special Status Species Populations. The first three were due to the presence of mesquite while the last was for the presence lesser prairie chicken and sand dune lizards. The team recommended that a land treatment be considered for the mesquite which could also positively influence the presence of both special status species.

The assessment for the South Breaks Pasture also noted the presence of mesquite, but not the extent as in the North Breaks Pasture. The majority of the determinations over all for this area fell in the “None to Slight” category, with the exception of Wind- scoured, Blowouts, and/or Deposition areas and Special Status Species populations. The team determined that more studies should be conducted for the presence of the lesser prairie chicken and the sand dune lizard in this allotment.

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 rate are maintained and that perennial grass cover and good plant composition remains. Map and evaluate for brush control and complete land treatments is warranted. Implement studies to determine the population levels or presence of the lesser prairie chicken and sand dune lizard.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65090-CAP-D176

Legal Land Desc	SESW 18 0150S 0310E Meridian 23	Acreage	281
Ecosite	077CY053NM LOAMY HP-3	Photo Taken	Y
Watershed	13060007090 SHINNERY SANDS		
Observers	ARNOLD & HOWARD	Observation Date	01/14/2010
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Kt	Soil Taxon Name	KIMBROUGH
Texture Class	NM666 L	Soil Phase	KIMBROUGH- STEGALL-SLAUGHT
Texture Modifier	NM666 GRAVELLY FINE SAND		
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:						
H	Litter Movement				X	
Comments:						
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:	Cholla encroachment/cholla common in pockets.					
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups			X		
Comments:	Cholla encroachment.					
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants			X		
Comments:	Cholla encroachment.					
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					
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	8	2
H	Hydrologic	0	0	1	9	1
B	Biotic	0	0	2	8	1

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	1	10
Biotic		0	2	9

Site Notes: Pasture looks good overall.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65090-NORTH BREAKS-D177

Legal Land Desc	NWNW 10 0150S 0300E Meridian 23	Acreage	1020
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007090 SHINNERY SANDS		
Observers	ARNOLD & HOWARD	Observation Date	01/14/2010
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Rn	Soil Taxon Name	ROSWELL
Texture Class	NM666 FS	Soil Phase	ROSWELL- JALMAR
Texture Modifier	NM666 FINE SAND		
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:	Light use by livestock		

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:						
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:	Mesquite encroachment to the north of the range study.					
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:	Litter is within the Ecosite description.					
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:	Possible mesquite treatment would make the habitat better for wildlife. Blow outs suitable for sand dune lizard					

B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat				X	
Comments:	Mesquite treatment would benefit lesser prairie chickens.					
B	Special Status Species Populations			X		
Comments:	Sand dune lizard population unknown at this time, and lesser prairie chicken populations have not moved this far south yet. Habitat is here tho.					

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	1	6	3
H	Hydrologic	0	0	0	8	3
B	Biotic	0	0	3	7	3

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	1	9
Hydrologic		0	0	11
Biotic		0	3	10

Site Notes:

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65090-SO BREAKS #2-N019

Legal Land Desc	SWSW 10 0150S 0300E Meridian 23	Acreage	1836
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007090 SHINNERY SANDS		
Observers	ARNOLD & HOWARD	Observation Date	01/14/2010
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Rn	Soil Taxon Name	ROSWELL
Texture Class	NM666 FS	Soil Phase	ROSWELL- JALMAR
Texture Modifier	NM666 FINE SAND		
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:	Light livestock 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:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments: Mesquite pockets.						
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:						
B	Annual Production				X	
Comments:						
B	Invasive Plants				X	
Comments:						
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:	Pronghorn antelope observed.					
B	Special Status Species Habitat				X	
Comments:	Mesquite treatment may increase the special status species habitat quality.					
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	1	6	3
H	Hydrologic	0	0	0	7	4
B	Biotic	0	0	1	9	3

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	1	9
Hydrologic		0	0	11
Biotic		0	1	12

Site Notes:

Determination of Public Land (Rangeland) Health for 65090 SOUTH CAPROCK

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 South Caprock allotment #65090, 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 02/22/2010

Acting Assistant Field Manager

Date