

Standards of Public Land Health Evaluation of 64041 HOBBS CANYON Allotment [06/11/2010]

The ROSWELL Field Office conducted rangeland health assessments at 5 study sites within 64041 HOBBS CANYON. 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
64041-BLUEWATER-E176	X			X			N/A		
64041-FOREMAN-E175 (*)	X			X			N/A		
64041-HUGGINS-E172	X			X			N/A		
64041-JESS-E173	X			X			N/A		
64041-WEST-E174 (*)	X			X			N/A		

The (*) indicates that the assessment had one or more indicator(s) rated moderate/extreme or extreme. These indicators are:

- Invasive Plants

These indicators by themselves are not enough to rate the site as not meeting a standard but may warrant future monitoring.

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on the Hobbs Canyon allotment, 64041. Ten of these assessed soil site stability, 11 hydrologic functions 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

condition. 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 "M" (Maintain) category.

This allotment contains 10,640 acres of public land. The studies are located on two ecological sites; Loamy CP-2 and Loamy SD-3, in five separate pastures.

The Bluewater pasture location (on a Loamy CP-2 site) was rated overall well. A majority of the indicators for this location fell into the None to Slight or Slight to Moderate category, except for Litter amount. The interdisciplinary team estimated the production of litter on this location to be less than 25% of ground cover as expected for the ecological site. This indicator was rated as a Moderate departure from the ecological site description.

The Huggins pasture, also a Loamy CP-2 site, also was rated with all of the indicators falling in the None to Slight or Slight to Moderate category, as was Jess Pasture.

The two pastures containing the Loamy SD-3 ecological sites were Foreman and West. In both cases the team noted an increase in the amount of mesquite and recommended mapping the populations, and if warranted considering each of these areas for a vegetation treatment. The remaining categories exclusive of Litter amounts were rated as either None to Slight or Slight to Moderate. Again, Litter amount was rated as Moderate as the team determined that less litter was apparent than described in the ecological site description.

There are no riparian areas on the public land within this allotment.

Recommendations: With the majority of the indicators falling in the None to Slight category or Slight to Moderate, this allotment is rated as "Meeting" the standards 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 did recommend that the mesquite populations be mapped and if warranted by size and density that they be considered for a vegetation treatment. This would be in coordination with the private land owner, the New Mexico State Land Office and could be implemented with the Natural Resource Conservation Service, due to the land status patterns. If treatments were implemented a minimum of two growing seasons rest would be required for the pasture, post treatment.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64041-BLUEWATER-E176

Legal Land Desc	SENW 13 0050S 0240E Meridian 23	Acreage	1124
Ecosite	070BY052NM LOAMY CP-2	Photo Taken	Y
Watershed	13060003160 HUGGINS		
Observers	TRAUTNER & MCGEE	Observation Date	06/11/2010
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	PpA	Soil Taxon Name	POQUITA
Texture Class	NM644 L	Soil Phase	POQUITA
Texture Modifier	NM644 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:	estimated at 30%, ecological site description = 40%					
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:	low resistance in innerspaces, good in canopy					
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:	grass is mostly tobosa; higher level of desirable shrubs would be good					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:	Estimated at this location - 5%, ecological site description =25%					
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	scattered mesquite noted					
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	1	9
H	Hydrologic	0	0	1	1	9
B	Biotic	0	0	1	3	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	1	10
Biotic		0	1	10

Site Notes: Species noted at this location: tobosa, three-awn, mesquite, fluff grass, did not note grama or dropseeds.

Recommended monitor the mesquite population- size and density does not merit vegetation treatment at this time.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64041-FOREMAN-E175

Legal Land Desc	SESE 7 0060S 0250E Meridian 23	Acreage	1283
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060003200 FIVE MILE		
Observers	TRAUTNER & MCGEE	Observation Date	06/11/2010
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:	very little, no exposed roots					
S H	Bare Ground				X	

Comments:	Estimated at 30%, esd = 40%, large bare areas are present					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:	some mesquite dunes					
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:	dissolved very quickly in innerspaces, estimated at 5-6 in canopy					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	higher composition of shrubs - mesquite					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	grasses group is dominated by tobosa and three awn					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:	estimated at 5%, esd = 25%					
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:	a lots of crusts, especially among gypsic outcrops					
B	Wildlife Habitat				X	

Comments:	mesquite and pronghorn antelope					
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	4	6
H	Hydrologic	0	0	1	4	6
B	Biotic	0	1	1	4	5

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		1	1	9

Site Notes: species noted at this location: mesquite, yucca, tobosa, three awn, bush muhly, some black grama noted.

This site has inclusions of gypsic outcrops which has the most black grama present. Black grama is missing among the loamy soils. But seed bank is there. This location should be mapped and considered for mesquite treatment.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64041-HUGGINS-E172

Legal Land Desc	NESW 14 0050S 0240E Meridian 23	Acreage	3458
Ecosite	070BY052NM LOAMY CP-2	Photo Taken	Y
Watershed	13060003160 HUGGINS		
Observers	TRAUTNER & MCGEE	Observation Date	06/11/2010
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	RNA	Soil Taxon Name	REEVES
Texture Class	NM644 L	Soil Phase	REEVES-MILNER- HOLLOMEX
Texture Modifier	NM644 LOAM,MOIST		
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:	estimated to be 15-25%, esd=40%					
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:	Not very good in innerspaces, 5-6 in canopy covered areas					
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:	dominated by tobosa, low level of desirable shrubs					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	estimated at 25%, same as esd					
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:	biological and 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	1	9
H	Hydrologic	0	0	0	1	10
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: Species noted here: mostly tobosa, three awn, fluff grass, cholla, yucca, few grama and dropseeds noted.

recommend continue current management

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64041-JESS-E173

Legal Land Desc	NENE 28 0050S 0240E Meridian 23	Acreage	1899
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060003200 FIVE MILE		
Observers	TRAUTNER & MCGEE	Observation Date	06/11/2010
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:	estimated 15% for this location, esd=40%					
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:	dissolved quickly in innerspaces, 5-6 in canopy					
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:	dominated by tobosa, very few gramas					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	estimated 25% here, esd=25%					
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:	physical & biological crusts noted					
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	1	10
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: species: scattered mesquite, cholla, yucca and snakeweed. A lot of tobosa, very little grama or dropseed species noted. some bush muhly.

Monitor the mesquite, map the population and consider for treatment in the future.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64041-WEST-E174

Legal Land Desc	SENE 10 0060S 0240E Meridian 23	Acreage	2876
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060003200 FIVE MILE		
Observers	TRAUTNER & MCGEE	Observation Date	06/11/2010
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:	short and stable					
S H	Pedestals and/or Terracettes				X	
Comments:	no exposed roots					
S H	Bare Ground				X	

Comments:	esd=40%, estimated at 40% for this location, some bare spots exceeded 6".					
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:	estimated to 5-6 in innerspaces and under canopy					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	higher level of shrubs (mesquite) noted here than in esd					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	grasses dominated by tobosa and three-awns missing, extensive grama and desirable shrubs.					
B	Plant Mortality/Decadence					
Comments:						
H B	Litter Amount			X		
Comments:	estimated only at 5%, esd=25%					
B	Annual Production					X
Comments:						
B	Invasive Plants		X			
Comments:	high level of mesquite, definitely consider mesquite -vegetative treatment					
B	Reproductive Capability of Perennial Plants				X	
Comments:	lacking gramas and dropseeds					
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat				X	

Comments:	mesquite may be influencing pronghorn habitat use					
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	3	7
H	Hydrologic	0	0	1	4	6
B	Biotic	0	1	1	3	5

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		1	1	8

Site Notes: species noted at this location: mesquite, tobosa, three awn, some dropseeds, very few gramas seen, few desirable shrubs noted.

This location should be monitored and is deemed appropriate, considered for treatment.

Determination of Public Land (Rangeland) Health for 64041 HOBBS CANYON

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 Hobbs Canyon, allotment #64041, 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
Acting Assistant Field Manager

08/09/2010
Date