

Determination of Public Land (Rangeland) Health for 65084 DERRICK DRAW

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 the 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 Derrick Draw, allotment #65084, 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/Karen Kelleher
Field Manager

5/25/07
Date

Standards of Public Land Health

Evaluation of 65084 DERRICK DRAW Allotment

[12/19/2005]

The Roswell Field Office conducted Rangeland Health assessments at five (5) study sites within Derrick Draw, allotment #65084. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within each study site vicinity. 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 tab

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
65084-NORTHEAST-D169	X			X			N/A		
65084-SALTGRASS-D168	X			X			N/A		
65084-SANDHILLS-D167	X			X			N/A		
65084-SOUTH-D170	X			X			N/A		
65084-SOUTHEAST-D171	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for Derrick Draw, allotment #65084. Ten of these assessed soil/site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information from long-term monitoring studies on 5 study areas were utilized to assess rangeland health of public land within this allotment. These quantitative evaluations were performed by the Roswell Field Office staff starting in the early 1980's which included ground and vegetative cover/composition, production, frequency and ecological condition as calculated from those collections that are scheduled approximately every 5 years.

Ongoing dry weather conditions have impacted this allotment and others for several years. This allotment is located 6 mi/9.6 km SE of Hagerman, NM south of Aberdeen Highway and East of Buffalo Valley Road. This 'I' category allotment is authorized for 1,683 AUM's at 83 percent public land use on a Section 3 permit. Total public land acreage is 8,132 or 3,292 hectares. Numerous oil and gas wells can be found on this allotment with various stages of development that range from approximately 13 active or producing to just a handful abandoned in all pastures

with a major gas pipeline traversing north to south. Livestock also use this allotment as the allottee rotates cattle throughout five major pastures. Precipitation has been at best scattered throughout during growing seasons and intermittent yearlong. Northeast and South Pastures, both SD-3 Loamy ecological sites, have a Holloman-Gypsum land complex (HrC) soil phase with 3 to 5 percent slopes on 757 acres/306 hectares and 2,985 acres/1,208 hectares respectively. Elevation ranges from 3,300 ft/1,000 m to 3,600 ft/1,090 m. This complex occurs on uplands paralleling east sides of the Pecos River. Holloman and Gypsum land soil occurs in depressions and on small very low knolls respectively. This well-drained soil is very shallow and shallow over gypsum which formed in alluvium over soft to hard gypsum on uplands. A chemical brush treatment for mesquite (*Prosopis glandulosa*) was done in 1988 for the entire pasture with some leave-out areas designated. This treated area appears to have benefited from this 19 year old spray. Indicators assessed for Northeast Pasture rated None to Slight and Slight to Moderate indicating normal range of variability. Bare ground however rated Moderate to Extreme. Current estimates range from 60 to 80 percent exceeding long-term average and Ecological Site Description (ESD) parameters. Considering continued dry conditions, production for this site is adequate with a current estimate of 800 lbs/ac or kg/ha. Litter amount was also reduced from previous readings with an estimate of 5 percent and rated Moderate. Invasive plants in the form of mesquite also rate Moderate as this shrub is scattered. This site has upland influences with shrubs; creosote (*Larrea tridentata*), yucca (*Yucca* spp.), snakeweed (*Gutierrezia sarothrae*) and javelinabush (*Condalia* spp.) present in those areas. Tobosa (*Pleuraphis mutica*), sideoats grama (*Bouteloua curtipendula*), dropseed (*Sporobolus* spp.), little bluestem (*Schizachyrium scoparium*), burrograss (*Scleropogon brevifolius*) and blue grama (*Bouteloua gracilis*) are some graminoids on site.

South Pasture, located just southeast of Derrick Draw is the other SD-3 Loamy ecological site. It rates all indicators None to Slight and Slight to Moderate. Influences from oil and gas activity have yet to manifest themselves here. Access roads and pads surround this study area with an approximate radius of 200 meters. This ecological site however encompasses more area. Again, all indicators fell well within normal range of variability with very little deviation. Due to recent dry conditions, annual production is down from previous years with only 400 lbs/ac or kg/ha as an estimate and rated Moderate. Considering this low production, soil and hydrological attributes remain intact with a generous organic matter layer and physical crusting holding soil in place. A good mix of cover for quail (*Callipepla* spp.) and other upland birds exists with adequate grass density. These mosaic patterns lend themselves to quality wildlife habitat.

Saltgrass Pasture is one of three SD-3 Shallow ecological sites, previously treated for snakeweed with Spike (Tebuthiron) in 1988. The acreage is 1,767 or 715 hectares on a Tencee-Sotim (TS), gravelly fine sand soil association occurring on uplands east of the Pecos River. Slope is 0 to 9 percent on well-drained soil that is very shallow to shallow to indurated caliche and formed in gravelly and cobbly alluvium on uplands gently undulating and rolling on ridges. Sotim soil is level and gently sloping in depressions and formed in alluvium on uplands. Elevation ranges from 3,400 ft/1,030 m to 4,200 ft/1,272 m. Indicators assessed fell well within normal range of variability from that expected, with very few deviations. A generous litter layer has added adequate amounts of mulch to soil surfaces and helps resist soil erosion. Mesquite is scattered throughout but supplies good cover due to its current mosaic pattern.

Sandhills Pasture, the 2nd of three SD-3 Shallow ecological sites on public land is 1,515 acres/613 hectares in size. Soil association is also a Tencee-Sotim phase. The grama grass

component is lacking somewhat here and functional/structural groups rates Moderate. Again mesquite is scattered throughout and gives invasive plants a Moderate rating as well. Less than optimal cover density exists for quail and other upland wildlife. This suggests the 1988 chemical treatment for mesquite is still somewhat effective. Despite these discrepancies, all other major indicators fell well normal range of variability.

Southeast Pasture, the last of the SD-3 ecological sites is a Tencee soil phase, gravelly sandy loam on 1,108 acres/448 hectares. This study area matches all expected parameters for all soil, hydrological and biotic attributes. The usual compliment of upland vegetation and diversity is sustainable with wildlife habitat but not very dense cover especially the graminoids. Historically, this site is not noted for much annual production. Jackrabbit (*Lepus californicus*) and mule deer (*Odocoileus hemionus*) sign is abundant here. Creosote, javelinabush, cholla (*Opuntia imbricata*) and mesquite are the chief brush components on site.

Wildlife - Evaluation of the integrity of biotic community considered several indicators as attribute indices for this area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as functional/structural groups and plant mortality & decadence. In addition to these standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation.

For all evaluated areas, wildlife habitat and population indicators rate Slight to Moderate and None to Slight primarily for desert mule deer and pronghorn (*Antilocapra americana*) and a variety of game/non-game terrestrial species, including raptors and migratory birds which may utilize the uplands next to the Pecos River corridor as well as upland avians. Some areas do however exhibit some Moderate departure but not on a consistent basis. With respect to special status species, none are known to occur in this area of interest at this time and habitat and population indicators are, therefore rated None to Slight.

It is the professional opinion of the Assessment Team, public land within Derrick Draw, allotment #65084 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 these assessments.

Recommendations: Pasture rotation of livestock is more than sustainable on this allotment and should continue. Brush problems are minimal at the moment.

The present monitoring schedule should remain intact with those study areas evaluated approximately every 5 years. If in the event of any drop in herbaceous plant cover with an increase in shrub species, this should be depicted in cover and/or production figures.







DATE 12-30-05
FO RFO
ALLOT #65084
PASTURE SE
VEGID# 427

3.4.2000

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65084-NORTHEAST-D169

Legal Land Desc	NWSW 35 0140S 0270E Meridian 23	Acreage	757
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060007100 WHITE LAKE		
Observers	ARTHUN/MOE	Observation Date	12/30/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	HrC	Soil Taxon Name	HOLLOMAN
Texture Class	NM666 L	Soil Phase	HOLLOMAN- GYPSUM LAND
Texture Modifier	NM666 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	13.04	NOAA Growing Season Precipitation	8.93
NOAA Avg Annual Precipitation	12.54	NOAA Avg Growing Season Precipitation	10.43
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:	Current estimate is 60-80%.					
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:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Current estimate is 50%.					
B	Annual Production				X	
Comments:	Estimate is 800 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Mesquite is scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts observed. Some bio-crusts are also on site.					
B	Wildlife Habitat				X	
Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						

B	Special Status Species Populations					X
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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	5	4
H	Hydrologic	0	0	1	6	4
B	Biotic	0	0	1	6	6

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	1	10
Biotic		0	1	12

Site Notes: Good mix of cover for quail and other upland wildlife. Lots of rabbit sign. Good grass cover. Blue, sideoats, black grama, little bluestem, tobosa, creosote, burrograss, dropseed, javelinabush, snakeweed and mesquite found on site. Some forb growth also.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65084-SALTGRASS-D168

Legal Land Desc	SENW 4 0150S 0270E Meridian 23	Acreage	1767
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060007100 WHITE LAKE		
Observers	ARTHUN/MOE	Observation Date	12/30/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	TS	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-FSL	Soil Phase	TENCEE- SOTIM
Texture Modifier	NM666 GRAVELLY FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	13.04	NOAA Growing Season Precipitation	8.93
NOAA Avg Annual Precipitation	12.54	NOAA Avg Growing Season Precipitation	10.43
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:	Current estimate is 50-60%.					
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:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	30-40% is the current estimate.					
B	Annual Production				X	
Comments:	Current estimate is 350-400 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Mesquite and snakeweed are scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical and bio crusts observed.					
B	Wildlife Habitat			X		
Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						

B	Special Status Species Populations					X
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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	5	5
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	2	5	6

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	2	11

Site Notes: Good quail habitat. The site is in good ecological condition.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65084-SANDHILLS-D167

Legal Land Desc	SESW 33 0140S 0270E Meridian 23	Acreage	1515
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060007100 WHITE LAKE		
Observers	ARTHUN/MOE	Observation Date	12/30/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	TS	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-FSL	Soil Phase	TENCEE- SOTIM
Texture Modifier	NM666 GRAVELLY FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	13.04	NOAA Growing Season Precipitation	8.93
NOAA Avg Annual Precipitation	12.54	NOAA Avg Growing Season Precipitation	10.43
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:	Current estimate is 55%.					
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:	Some moderate departure.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	35% is the current estimate.					
B	Annual Production				X	
Comments:	350 lbs/ac or kg/ha is the current estimate.					
B	Invasive Plants			X		
Comments:	Mesquite and snakeweed scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical/bio crusts observed.					
B	Wildlife Habitat			X		
Comments:						
B	Wildlife Populations			X		
Comments:						
B	Special Status Species Habitat					X
Comments:						

B	Special Status Species Populations					X
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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	5	5
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	4	3	6

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	4	9

Site Notes: Less than optimal cover density for quail and other upland wildlife. Gramas are in lesser amounts.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65084-SOUTH-D170

Legal Land Desc	SWNW 14 0150S 0270E Meridian 23	Acreage	2985
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060007100 WHITE LAKE		
Observers	ARTHUN/MOE	Observation Date	12/30/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	HrC	Soil Taxon Name	HOLLOMAN
Texture Class	NM666 L	Soil Phase	HOLLOMAN- GYPSUM LAND
Texture Modifier	NM666 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	13.04	NOAA Growing Season Precipitation	8.93
NOAA Avg Annual Precipitation	12.54	NOAA Avg Growing Season Precipitation	10.43
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:	20-30 is current estimate					
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:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Current estimate is 70-80%					
B	Annual Production			X		
Comments:	Current estimate is 400 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	mesquite is scattered throughout					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Good physical crust and increase in o.m.					
B	Wildlife Habitat				X	
Comments:	Good mix of cover for quail and other upland game birds. Good grass density.					
B	Wildlife Populations				X	
Comments:	Signs of deer and quail indicate that these wildlife utilize this area.					
B	Special Status Species Habitat					X
Comments:						

B	Special Status Species Populations					X
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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	6	4
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	2	4	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	2	11

Site Notes: Good mix of cover for quail and other upland wildlife. Good grass density exists. A good diversity is in place regarding vegetative community. Tobosa, burrograss, muhleys, javelinabush, snakeweed, acacia, black grama, blue grama, yucca and croton are just some of the plants observed.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 65084-SOUTHEAST-D171

Legal Land Desc	NENW 19 0150S 0280E Meridian 23	Acreage	1108
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060007100 WHITE LAKE		
Observers	ARTHUN/MOE	Observation Date	12/30/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Te	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-SL	Soil Phase	TENCEE
Texture Modifier	NM666 GRAVELLY SANDYLOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	13.04	NOAA Growing Season Precipitation	8.93
NOAA Avg Annual Precipitation	12.54	NOAA Avg Growing Season Precipitation	10.43
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:	Current estimate is 55%.					
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:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Current estimate is 50%.					
B	Annual Production				X	
Comments:	350 lbs/ac or kg/ha is the current estimate.					
B	Invasive Plants				X	
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Dark bio-crust and physical crust as well.					
B	Wildlife Habitat			X		
Comments:						
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	5	5
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	2	4	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	2	11

Site Notes: Provides upland wildlife habitat; but cover not very dense, esp. grasses- rabbit sign, deer tracks.