

## Standards of Public Land Health Evaluation of 62071 Wire Lake Allotment [ 01/11/2008 ]

The Roswell Field Office conducted Rangeland Health Assessments at four study sites within allotment #62071, Wire Lake. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data and ecological site descriptions were incorporated into and in support of this field assessment. A 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
62071-BAKER-E023	X			X			N/A		
62071-NORTH BURRO-E022	X			X			N/A		
62071-SOUTH BURRO-E021	X			X			N/A		
62071-WIRE LAKE-E020	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Wire Lake, allotment #62071. Of these 10 assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with ecological site descriptions and quantitative information gathered from previous data collected on 4 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 is authorized for 164 cattle yearlong @100% public land use for 1,968 AUM's under a Section 15 lease. Conservative to moderate use by livestock was observed. North and South Burro, Baker and Wire Lake Pastures all are loamy ecological sites with pronghorn (*Antilocapra americana*) traversing the side slopes and draws utilizing the forb and cholla (*Opuntia spinosa*) component. Most all indicators assessed fell well within normal range with very little deviation from expected parameters. Biotic, soil and hydrological indicators demonstrate a wise and prudent use by cattle on the range. Invasives however consistently rated Moderate and above, due to amounts of cholla observed throughout this allotment. It is a problem throughout this allotment. It's presence suggests historical sheep grazing was a common practice not only on this allotment but those surrounding as well.

Mule deer (*Odocoileus hemionus*), pronghorn, upland birds, lagomorphs and burrowing animal were all observed during our field evaluation. Populations of various forms of wildlife are stable and remain with potential for some improvement.

It is the professional opinion of Assessment Team, public land within allotment #62071, Wire Lake 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 this assessment.

**Recommendations:** Recommend a prescribed burn to control some of the cholla that is becoming a problem throughout this allotment. This should control it and rejuvenate the range, prevent vegetation from becoming stagnant, release nutrients and improve overall rangeland health. A Cooperative Agreement between BLM and the allottee would facilitate a burn plan in consultation with the fire and fuels crew.

Current rotation of livestock is adequate and should continue. Watering points are also properly spaced and allow for utilization levels conducive to rangeland health. The current monitoring schedule is sufficient to evaluate any trend through time for this allotment.

<b>RFOs Upland and Biotic Standard Assessment Summary Worksheet</b>			
<b>SITE 62071-BAKER-E023</b>			
Legal Land Desc	SENW 23 0020S 0210E Meridian 23	Acreage	1380
Ecosite	070BY052NM LOAMY CP-2	Photo Taken	Y
Watershed	13060003140 RAMON		
Observers	NAVARRO/POST	Observation Date	04/30/2008
County Soil Survey	NM011 DE BACA	Soil Var/Taxad	
Soil Map Unit	035	Soil Taxon Name	TUCUMCARI
Texture Class	NM011 SCL	Soil Phase	TUCUMCARI- REDONA
Texture Modifier	NM011 SANDY CLAY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	9.83	NOAA Growing Season Precipitation	7.66
NOAA Avg Annual Precipitation	9.49	NOAA Avg Growing Season Precipitation	7.58

Disturbances and Animal Use:	Moderate use by livestock and pronghorn. Trailing along ranch road is evident. Blue grama ( <i>Bouteloua gracilis</i> ) is utilized ahead of other grasses.
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**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:						
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:	20% is the current estimate					
B	Annual Production			X		
Comments:	600 lbs/ac or kg/ha is the current estimate					
B	Invasive Plants			X		
Comments:	Cholla is scattered and increasing					
B	Reproductive Capability of Perennial Plants			X		
Comments:	Moderate use by livestock has limited this capability; only blue grama seed heads are visible and scattered.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	good physical crusts					
B	Wildlife Habitat				X	
Comments:	very good for pronghorn and deer					
B	Wildlife Populations				X	
Comments:	adequate pops seen					
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	6	4
H	Hydrologic	0	0	0	8	3
B	Biotic	0	0	4	6	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	0	10
Hydrologic		0	0	11
Biotic		0	4	9

Site Notes: Moderate use by livestock was observed and is occurring. Some trailing was also observed as this site is about .8 mile distance from water. Pronghorn herds were seen throughout this pasture and allotment in general.

Cholla is scattered on uplands but common in the drainage-ways. This poses a potential threat to the rest of this pasture. This site is a possible candidate for cholla control by burning, mechanical or chemical methods.

### RFOs Upland and Biotic Standard Assessment Summary Worksheet

#### SITE 62071-NORTH BURRO-E022

Legal Land Desc	SWNE 6 0030S 0210E Meridian 23	Acreage	1378
Ecosite	070BY052NM LOAMY CP-2	Photo Taken	Y
Watershed	13060003140 RAMON		
Observers	NAVARRO/POST	Observation Date	04/30/2008
County Soil Survey	NM011 DE BACA	Soil Var/Taxad	
Soil Map Unit	026	Soil Taxon Name	HOLLOMAN
Texture Class	NM011 L	Soil Phase	HOLLOMAN- REEVES
Texture Modifier	NM011 SILT LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	9.83	NOAA Growing Season Precipitation	7.66
NOAA Avg Annual Precipitation	9.49	NOAA Avg Growing Season Precipitation	7.58
Disturbances and Animal Use:	Moderate use by livestock and some trailing observed. Roads are of a more minor concern.		

<b>Part 2. Attributes and Indicators</b>						
		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:	40% is the current estimate.					
S H	Gullies				X	
Comments:	These are associated with the roads.					
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:	15% is the current estimate.					
B	Annual Production			X		
Comments:	500-600 lbs/ac or kg/ha is the current estimate.					
B	Invasive Plants				X	
Comments:						
B	Reproductive Capability of Perennial Plants				X	
Comments:	Moderate use by livestock is limiting this capability.					
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat				X	
Comments:	good pronghorn habitat					
B	Wildlife Populations				X	
Comments:	good pronghorn pops.					
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	7	3
H	Hydrologic	0	0	1	8	2
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	0	10
Hydrologic		0	1	10
Biotic		0	3	10

Site Notes: This site is located in proximity to a fence with some scatterings of cholla. Some bare patches were recorded. Pronghorn were observed throughout this pasture and allotment in general.

### RFOs Upland and Biotic Standard Assessment Summary Worksheet

#### SITE 62071-SOUTH BURRO-E021

Legal Land Desc	NESW 5 0030S 0210E Meridian 23	Acreage	1538
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060003140 RAMON		
Observers	NAVARRO/POST	Observation Date	04/30/2008
County Soil Survey	NM011 DE BACA	Soil Var/Taxad	
Soil Map Unit	069	Soil Taxon Name	DEAMA
Texture Class	NM011 L	Soil Phase	DEAMA-DARVEY
Texture Modifier	NM011 GRAVELLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	9.83	NOAA Growing Season Precipitation	7.66
NOAA Avg Annual Precipitation	9.49	NOAA Avg Growing Season Precipitation	7.58
Disturbances and Animal Use:	Conservative use by livestock and some roads may be impacting but not serious.		

#### 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: 25% is the 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: Moderate departure observed.						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments: 30% is the current estimate.						
B	Annual Production			X		
Comments: 450-500 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:						
B	Wildlife Habitat				X	
Comments:	good pronghorn habitat					
B	Wildlife Populations				X	
Comments:	good pronghorn pops					
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	5	5
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	2	6	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	0	11
Biotic		0	2	11

Site Notes: This site almost mirrors N. Burro. The short distance between suggests an allotment consolidation and pasture re-configuration. No other problems appear here.

**RFOs Upland and Biotic Standard Assessment Summary Worksheet**

**SITE 62071-WIRE LAKE-E020**

Legal Land Desc	NWSW 12 0030S 0200E Meridian 23	Acreage	2546
Ecosite	070CY109NM LOAMY CP-3	Photo Taken	Y
Watershed	13060005040 FIFTEEN MILE		
Observers	NAVARRO/POST	Observation Date	04/30/2008
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	DaA	Soil Taxon Name	DARVEY
Texture Class	NM644 L	Soil Phase	DARVEY
Texture Modifier	NM644 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	9.83	NOAA Growing Season Precipitation	7.66
NOAA Avg Annual Precipitation	9.49	NOAA Avg Growing Season Precipitation	7.58
Disturbances and Animal Use:	Moderate use by livestock. Pronghorn use also. Trailing along ranch road is evident. Blue grama is utilized ahead of black grama ( <i>Bouteloua eriopoda</i> ).		

**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:	Slight activity is seen here. No terracettes present however the elevation on some grass plants suggests soil loss.					
S H	Bare Ground				X	

Comments:	25% is the 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:	Organic matter reduced					
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:	10% is the current estimate					
B	Annual Production			X		
Comments:	600 lbs/ac or kg/ha is the current estimate.					
B	Invasive Plants			X		
Comments:	cholla is scattered					
B	Reproductive Capability of Perennial Plants			X		
Comments:	Moderate use by livestock is inhibiting this.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	strong physical and biotic					
B	Wildlife Habitat				X	

Comments:						
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	2	4	4
H	Hydrologic	0	0	2	6	3
B	Biotic	0	0	5	5	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	2	8
Hydrologic		0	2	9
Biotic		0	5	8

Site Notes: This pasture is Moderately used by livestock and appears somewhat degraded due to a combination of dry conditions and cattle use. However the impacts are not as prevalent, because this pasture is very resilient and the rotation is working towards recovery of this pasture. Trailing is quite evident along the ranch two-track and this was noted as well.

Blue grama is forming a solid stand in some places and is grazed down to 3-4" stubble with some seed heads still intact.

## **Determination of Public Land (Rangeland) Health for #62071 Wire Lake**

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 Wire Lake, allotment #62071, 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/ \_\_\_\_\_  
Assistant Field Manager

\_\_\_\_\_  
Date