

Rangeland Health Evaluation Summary Worksheet

NM-RFO-RHA-2013-0001

Part 1. Area of Interest Documentation

Observation Date: 10/1/2012 **Fiscal Year:** 2013 **RHA Type:** Grazing Unit 63093, Ponderosa Windm
State: New Mexico **Field Office:** Roswell Field Office **Legal Location:** T60S, RE, Sec. 8 SWSW
Watershed Name: _____ **Major Land Resource Area:** CP-3
Geographic Work Area: _____ **Ecological Range Site:** Loamy
Pasture Name: Draw **Study Name and #:** Idsu-137
Observer(s): Lu Burger **Size of Evaluation Area:** _____ **Photos Taken**

Soil/Site Verification

Map Unit Name: 1, Andergeorge-Darvey-Asparas association, gently sloping
Parent Material: alluvium derived from igneous and sedimentary rock
Soils Series: Andergeorge
Surface Texture: gravelly fine sandy loam
Depth: Shallow, 10" - 20"
Topographic Position: hillslopes
Avg. Annual Precip: 12.75 **Aspect:** _____
Recent Weather: Drought **Elevation:** _____

List Diagnostic horizons in profile and depth

- A1 - 0 - 5 in, brown (10YR 5/3) gravelly fine sandy loam, brown (10YR 4/3) moist; moderate fine granular structure; soft, very friable, many fine and very fine roots; 25 percent pebbles; violently effervescent, moderately alkaline; clear smooth boundary. (4 to 9 inches thick)
- A2 - 5 - 9 in, light yellowish brown (10YR 6/4) extremely gravelly loam, yellowish brown (10YR 5/4) moist; weak fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and common medium roots; 70 percent pebbles; violently effervescent; moderately alkaline; clear smooth boundary. (0 to 9 inches thick)
- Bk - 9 - 22 in, very pale brown (10YR 7/4) very gravelly loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine and fine

Soils Series Description:

medium roots; 50 percent pebbles; violently effervescent; strongly alkaline; abrupt wavy boundary. (2 to 13 inches thick)

- Bky1 - 22 - 42 in, very pale brown (10YR 8/2) very gravelly sandy loam, very pale brown (10YR 7/3) moist; massive; hard, friable, few fine roots; 50 percent pebbles; many gypsum crystals in pockets 6 to 10 inches in diameter; violently effervescent; slightly alkaline; clear wavy boundary. (10 to 20 inches thick)
- Bky2 - 42 - 65 in, pink (7.5YR 7/4) extremely gravelly sandy loam, light brown (7.5YR 6/4) moist; weak medium subangular blocky structure; soft, friable, few fine roots; 70 percent pebbles; gypsum crystals on undersides of pebbles; violently effervescent; slightly alkaline.

The Andergeorge series consists of very deep, well drained, moderately rapidly permeable soils that formed in gravelly alluvium from igneous and sedimentary rocks. These soils are on Piedmont slopes. Well drained. Permeability is moderately rapid. Runoff is very low on 1 to 5 percent slopes and low on 5 to 10 percent slopes.

Recent Weather Additional Notes:

The Field Office has been experiencing a drought for the past 2 years.

Wildlife and Livestock Description:

No additional Comments

Off Site Influence Description:

No additional Comments

Additional Notes:

This RHA was completed by Burger and Braund.

Part 2. Indicator Rating

		Departure from Ecological Site Description/ Ecological Reference Area(s)				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S,H	1. Rills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S,H	2. Water Flow Patterns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S,H	3. Pedestals and/or Terracettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>						
S,H	4. Bare Ground	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>						
S,H	5. Gullies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S	6. Wind-Scoured, Blowouts, and/or Deposition Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
H	7. Litter Movement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Very little evidence of litter.</i>						
S,H,B	8. Soil Surface Resistance to Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Comments: More bare ground with no litter cover.</i>						
S,H,B	9. Soils Surface Loss or Degradation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>						
H	10. Plant Community Composition and Distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Not enough shrubs.</i>						
S,H,B	11. Compaction Layer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	12. Functional/Structural Groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Missing important shrub species.</i>						
B	13. Plant Mortality/Decadence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						

H,B	14. Litter Amount	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Possibly due to wind movement, or the drought.</i>						
B	15. Annual Production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Grasses were eaten down.</i>						
B	16. Invasive Plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	17. Reproductive Capability of Perennial Plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Possibly due to drought.</i>						

Part 2. Indicator Rating

		Departure from Ecological Site Description/ Ecological Reference Area(s)				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
B	18. Wildlife Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	19. Wildlife Populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	20. Special Status Species Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	21. Special Status Species Populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						

Part 3. Summary

A. Indicator Summary-Each of the indicators are associated with the 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 Attributes		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight	Total Attributes
S	Soil/Site Stability (Indicators 1-6, 8, 9 11)	0	0	1	3	5	9
H	Hydrologic Function (Indicators 1-5, 7-11 14)	0	0	1	6	4	11
B	Biotic Integrity (Indicators 8-9, 11-21)	0	0	1	5	7	13

Part 3. Summary

B. Attribute Summary - In this table, the Extreme and Moderate to Extreme columns in the table above are merged to form the "Does Not Meet" column, Moderate becomes "May Need More Info". Slight to Moderate and None to Slight merge to form the "Meets" columns. Values from the table above 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	Does Not Meet	May Need More Info.	Meets
Soil/Site Stability Rationale: No additional Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hydrologic Function Rationale: No additional Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Biotic Integrity Rationale: No additional Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Overall Rangeland Health Assessment:	Does Not Meet	May Need More Info.	Meets
The Ecological Site Description notes that year long grazing can decrease certain species that were not observed at the study site. However, this could be caused by the drought or wind movement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

