

# Rangeland Health Evaluation Summary Worksheet

NM-RFO-RHA-2013-0001

## Part 1. Area of Interest Documentation

**Observation Date:** 10/2/2012 **Fiscal Year:** 2013 **RHA Type:** Grazing Unit 64078, Two Mountain Ran  
**State:** New Mexico **Field Office:** Roswell Field Office **Legal Location:** T140S, R24E, Sec. 29 NENE  
**Watershed Name:** \_\_\_\_\_ **Major Land Resource Area:** SD-3  
**Geographic Work Area:** \_\_\_\_\_ **Ecological Range Site:** Loamy  
**Pasture Name:** \_\_\_\_\_ **Study Name and #:** Idsu-167  
**Observer(s):** Kyle Arnold **Size of Evaluation Area:** \_\_\_\_\_ **Photos Taken**

## Soil/Site Verification

**Map Unit Name:** PH, Pecos-Dev association  
**Parent Material:** calcareous alluvium derived from sedimentary rock  
**Soils Series:** Pecos **List Diagnostic horizons in profile and depth**  
**Surface Texture:** silty clay loam

- A11 - 0 - 1 in, light reddish brown fine sandy loam, slightly calcareous
- A12 - 1 - 9 in, dark reddish gray silty clay loam, slightly calcareous
- A13 - 9 - 16 in, reddish brown silty clay, moderately calcareous
- C1 - 16 - 34 in, reddish brown clay, moderately saline, moderately calcareous
- C2cs - 34 - 47 in, reddish gray clay, moderately saline, many gypsum crystals, strongly calcareous
- IIC3 - 47 - 66 in, light reddish brown sandy clay loam, few gypsum crystals, strongly calcareous

  
**Depth:** Shallow, 10" - 20"  
**Topographic Position:** sandhills  
**Avg. Annual Precip:** 12.75 **Aspect:** \_\_\_\_\_  
**Recent Weather:** Drought **Elevation:** \_\_\_\_\_

### Soils Series Description:

The Pecos series consists of deep, moderately well drained soils. These soils formed in alluvium on flood plains that

are rarely flooded. Permeability is very slow, and available water capacity is 6 to 9 inches.

**Recent Weather Additional Notes:**

The field office has been experiencing a drought for 2 years.

**Wildlife and Livestock Description:**

No additional Comments

**Off Site Influence Description:**

No additional Comments

**Additional Notes:**

This RHA was completed by Burkhardt 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	<b>1. Rills</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S,H	<b>2. Water Flow Patterns</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S,H	<b>3. Pedestals and/or Terracettes</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S,H	<b>4. Bare Ground</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments: Percentage of bare ground falls within the ecological site description.</i>						
S,H	<b>5. Gullies</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S	<b>6. Wind-Scoured, Blowouts, and/or Deposition Areas</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
H	<b>7. Litter Movement</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
S,H,B	<b>8. Soil Surface Resistance to Erosion</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments: The soil was a rock mulch.</i>						
S,H,B	<b>9. Soils Surface Loss or Degradation</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
H	<b>10. Plant Community Composition and Distribution</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: More shrubs and cacti were evident.</i>						
S,H,B	<b>11. Compaction Layer</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	<b>12. Functional/Structural Groups</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Borrowgrass is dominate.</i>						
B	<b>13. Plant Mortality/Decadence</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						

H,B	<b>14. Litter Amount</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	<b>15. Annual Production</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Grasses tended to be shorter and smaller causing not very much cover.</i>						
B	<b>16. Invasive Plants</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Creosote, various species of cacti.</i>						
B	<b>17. Reproductive Capability of Perennial Plants</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments: Few seed heads were evident</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	<b>18. Wildlife Habitat</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments: Horned lizard</i>						
B	<b>19. Wildlife Populations</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	<b>20. Special Status Species Habitat</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Comments:</i>						
B	<b>21. Special Status Species Populations</b>	<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	<b>Soil/Site Stability (Indicators 1-6, 8, 9 11)</b>	0	0	0	0	9	9
H	<b>Hydrologic Function (Indicators 1-5, 7-11 14)</b>	0	0	0	1	10	11
B	<b>Biotic Integrity (Indicators 8-9, 11-21)</b>	0	0	1	3	9	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
<b>Soil/Site Stability Rationale:</b> No additional Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Hydrologic Function Rationale:</b> No additional Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Biotic Integrity Rationale:</b> No additional Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Overall Rangeland Health Assessment:</b>	Does Not Meet	May Need More Info.	Meets
Borrowgrass is the dominate grass. Also saw red love grass and patches of tobosa. The lack of other important grass species and the increase in the previous species is most likely due to the drought.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

# Species Dominance Worksheet

## Part 1 (Required)

The most common species, noxious weeds (state-listed) invasive natives, invasives exotics (non-noxious) are ranked according to dominance using  **Cover**  **Weight**

### Dominant Species on Site

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

### Noxious Weeds

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

### Invasive Natives

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

### Invasive Exotics

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

## Part 2 (Optional) Dominant Species by Life Form

The most common species are ranked according to dominance using  **Cover**  **Weight**

### Annual Grasses

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

### Annual Forbs

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

### Perennial Grasses

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_

### Perennial Forbs

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_

3 \_\_\_\_\_

**Shrubs and Trees**

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

**Biological Crust**

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

3 \_\_\_\_\_

**Succulents**

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_