

Appendix 2.

Ecological Reference Worksheet

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Contact for lead author : Don Ashby Jr. **Reference site used? Yes/No** No

Date: 3/7/2005 **MLRA:** 70 **Ecological Site:** Loamy CP-3 This must be verified based on soils and climate (see Ecological Site Description). Current plant community cannot be used to identify the ecological site.

Indicators: For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for each community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.	Indicator Weight
<p>1. Number and extent of rills :</p> <p>None</p>	
<p>2. Presence of water flow patterns:</p> <p>None, unless adequate vegetation cover is not present, then the potential for water flow patterns can become severe.</p>	
<p>3. Number and height of erosional pedestals or terracettes:</p> <p>None</p>	
<p>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) :</p> <p>Bare ground will be present up to 55% Bare patches should be small and sporadically connected.</p>	
<p>5. Number of gullies and erosion associated with gullies:</p> <p>None</p>	
<p>6. Extent of wind scoured, blowouts and/or depositional areas:</p> <p>Soil blowing hazards can be severe on this site when adequate vegetation cover is not present.</p>	
<p>7. Amount of litter movement (describe size and distance expected to travel) :</p> <p>Fine (plant material) litter movement up to 6 inches can be expected under normal rainfall events.</p>	
<p>8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different):</p> <p>Anticipated to be 4-5 at the surface and subsurface in the interspaces and 5-6 at the surface and subsurfaces under vegetation.</p>	
<p>9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) :</p> <p>Soils are fine sandy loam to silty clay-clay loams, light brown to light brownish grey with the A horizon 0-6 inches in depth. Soils are well drained, moderately deep to deep with moderately to moderately slow permeability.</p>	
<p>10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff:</p> <p>Grass and forbs account for 93% of the annual herbaceous production for this site and make up 18% of the site composition. Infiltration is best with low intensity rainfall events. Runoff can occur if adequate vegetation cover is not present.</p>	
<p>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):</p> <p>None</p>	
<p>12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) :</p> <p>Cool Season rhizome grasses=Warm season bunch grasses>Warm season rhizome grasses=Warm Season bunch grasses>Warm season stolon grasses>Shrubs(Fourwing, Winterfat, Ehpedra)>(Wolfberry, Apacheplum, Broomweed)>Forbs(milkvetch, globemallow)</p>	
<p>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :</p> <p>Most of the perennial grasses, forbs, and shrubs are long lived. Extended drought periods tend to cause high mortality rates in grass species and some mortality with the forbs. Shrub mortality can occur in severe, multiple year droughts.</p>	
<p>14. Average percent litter cover (8-10%) and depth (0.75 inches).</p> <p>Percent litter and depth will increase with multiple, above average rainfall years.</p>	
<p>15. Expected annual production (this is <u>TOTAL</u> above-ground production, not just forage production):</p> <p>400 lbs/ac low precip years, 950 lbs/ac in average precip years, 1500 lbs/ac in above average years. Grass/grasslikes make up 85% of the total annual production.</p>	
<p>16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do , continue to increase regardless of the management of the site and may eventually dominate the site":</p> <p>Juniper, Cholla, and Broomsnake weed have the potential to invade and dominate these sites when extended periods of drought and/or overgrazing have degraded the site.</p>	
<p>17. Perennial plant reproductive capability :</p> <p>Weather related and natural disease can result in reduced reproductive capabilities Favorable precip years will maintain perennial plant reproduction.</p>	

Photograph (s)

MLRA : 70

Date : _____

Ecological Site : Loamy CP-3



Photo # 1

Comments : _____

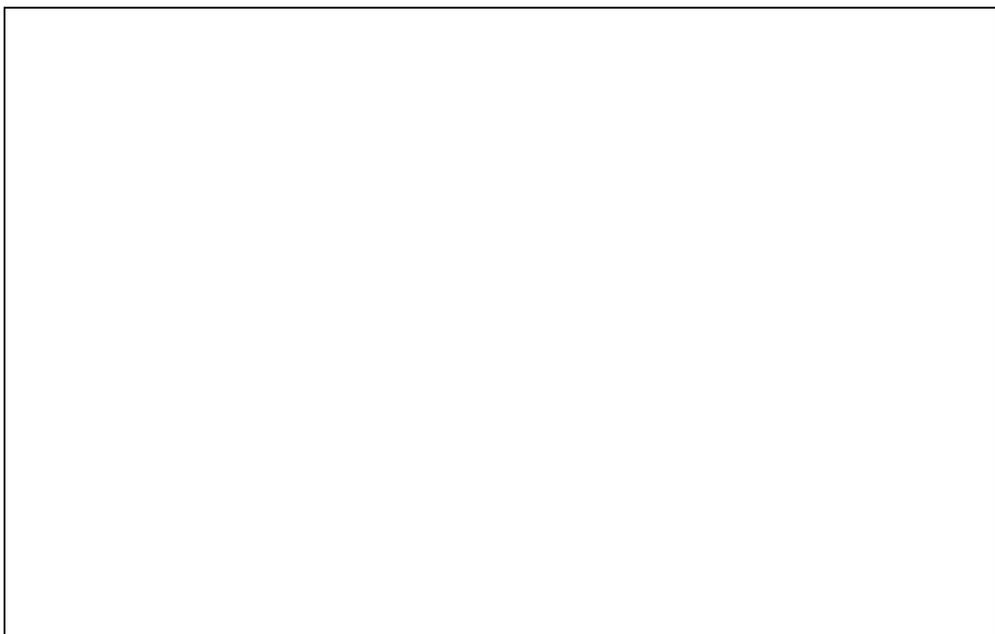


Photo # 2

Comments : _____

