

## Ecological Reference Worksheet

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Date: 4/26/2005 MLRA: 70A Ecological Site: Shallow Sandstone 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.

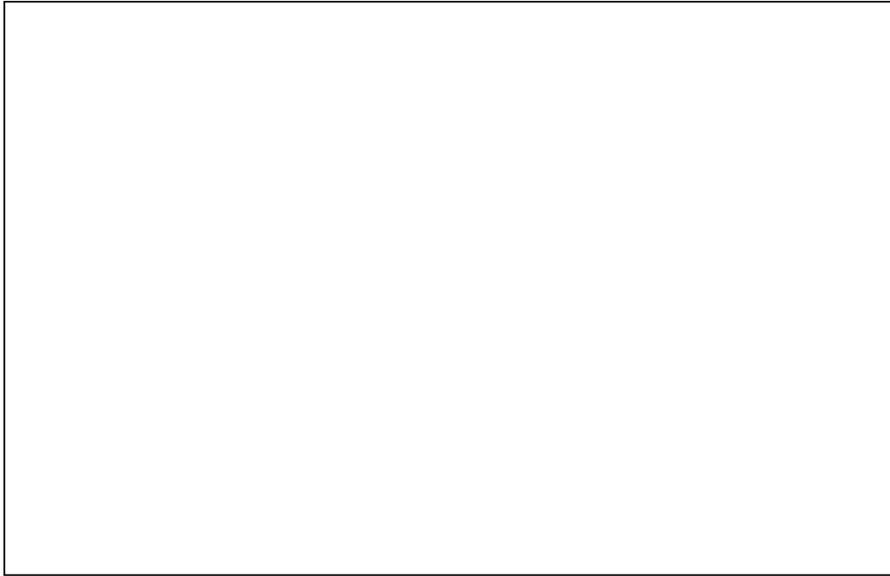
	Indicator Weight
<p><b>1. Number and extent of rills :</b></p> <p>Minor amount of rilling. Some on steeper slopes</p>	
<p><b>2. Presence of water flow patterns:</b></p> <p>Some evidence of water flow patterns. Flow patterns &lt; one meter caused by overland flow during extreme events.</p>	
<p><b>3. Number and height of erosional pedestals or terracettes:</b></p> <p>Rarely occurring on deeper level site but more evident on steeper shallow less productive parts of site.</p>	
<p><b>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) :</b></p> <p>30 to 35% Bare Ground, 20 to 25 % Surface Cobble and Stone, Gravel 1 to 5%.</p>	
<p><b>5. Number of gullies and erosion associated with gullies:</b></p> <p>None</p>	
<p><b>6. Extent of wind scoured, blowouts and/or depositional areas:</b></p> <p>None</p>	
<p><b>7. Amount of litter movement (describe size and distance expected to travel) :</b></p> <p>Very little litter movement &lt; one meter. Litter movement mostly on shallower more steep and less productive sites.</p>	
<p><b>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):</b></p> <p>Stability class rating anticipated to be 2-3 in interspaces at soil surface. These values need verification at reference site.</p>	
<p><b>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) :</b></p> <p>(Travessilla)A1-0 to 4 inches; light brownish gray (10YR 6/2) sandy loam, dark grayish brown (10 YR 4/2) when moist; weak fine granular structure; slightly hard when dry, very friable when moist; nonsticky and nonplastic when wet many fine and medium roots common fine pores.</p>	
<p><b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b></p> <p>Diverse grass, forb, shrub functional/structural groups and diverse root structure/patterns reduces raindrop impact slows overland flow providing increased time for infiltration to occur. Extended drought reduces short and mid bunchgrasses causing decreased infiltration and increased runoff following intense storm events especially in bare patch areas if present or exposed sandstone.</p>	
<p><b>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):</b></p> <p>None</p>	
<p><b>12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (&gt;&gt;), greater than (&gt;), and equal to (=) :</b></p> <p>Warm season midgrasses&gt;Warm season shortgrasses&gt;Perennial cool season&gt;Warm season Tall&gt;shrubs &amp; trees &gt; Perennial forbs.</p>	
<p><b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :</b></p> <p>Typically minimal. Expect short/mid bunchgrasses mortality/decadence during or following drought.</p>	
<p><b>14. Average percent litter cover (10 to 15 % ) and depth ( .25in inches).</b></p> <p>Litter production may be reduced during extended drought or wildfire events to less than 10%.</p>	
<p><b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b></p> <p>(Low Production 450 lbs./ac.) (Average RV Production 1,025lbs./ac.) (High Production 1,600 lbs./ac.) Production can be reduced following extended drought or the first growing season following wildfire.</p>	
<p><b>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":</b></p> <p>Pinon and One Seeded Juniper trees are the potential native invaders into this site increased trees into this site also greatly affects herbaceous production grasses and forbs.</p>	
<p><b>17. Perennial plant reproductive capability :</b></p> <p>All plants should be vigorous, healthy and reproductive depending on disturbances i.e.. Drought. Plants should have numerous seed heads, vegetative tillers etc. The only limitations are weather related, wildfire, and natural disease that may temporarily reduce reproductive capability.</p>	

**Photograph (s)**

**MLRA** :

**Date** :

**Ecological Site** :



**Photo # 1**

**Comments** :



**Photo # 2**

**Comments** :

