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Date: 05/04/05 MLRA: 52XC Ecological Site: Sandy 10-14" p.z. 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 <b>each</b> community within the reference state (when appropriate), and (3) cite data. Continue descriptions on separate sheet if needed. <b>Weight factors</b> are 0.5, 1.0 or 2.0. The default factor is 1.0. A maximum of 8 indicators may be changed to 0.5 or 2.0. The rest remain at 1.0.	Wgt. Factor
<b>1. Number and extent of rills:</b> Rills should not be present in HCPC. If in plant community A, careful examination will yield slight evidence of rills that are less than ½ inch deep, linear, but short in length. If in plant community B, rills would be visible, ½ inch deep or more, linear, rarely exceeding 1 foot in length. Distance between rills is irregular. If in plant community B, rills would be visible.	1.0
<b>2. Presence of water flow patterns:</b> Water flow patterns should not be observable in HCPC. If in plant community A, careful examination will yield short discontinuous water flow patterns. If in plant community B, water flow patterns would be visible as long (more than 1feet) and continuous across the landscape.	1.0
<b>3. Number and height of erosional pedestals or terracettes:</b> Pedestals are nonexistent in HCPC. If in plant community A, careful examination on slopes > 8% yield occasional pedestals and terracettes approximately ¼ inch above the soil surface. If in plant community B on slopes > 8%, pedestals and terracettes are frequent and ½ - ¾ inch above the soil surface.	1.0
<b>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground):</b> Less than 5% of the soil surface should be bare in HCPC. Bare ground should be less than 2" in diameter. If in plant community A, 5-10% of the soil surface can be exposed. If in plant community B, 20% of the soil surface can be exposed.	1.0
<b>5. Number of gullies and erosion associated with gullies:</b> None.	1.0
<b>6. Extent of wind scoured, blowouts and/or depositional areas:</b> None.	1.0
<b>7. Amount of litter movement (describe size and distance expected to travel):</b> Litter movement is not expected with HCPC or plant community A. If in plant community B, litter, both fine and coarse, movement is visible, especially on slopes > 8%, but the distance moved is less than 1 foot.	1.0
<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> Stability class anticipated to be 2 to 4 if the surface texture is sandy loam and 5 or 6 if the surface texture is fine sandy loam or loamy fine sand.	1.0
<b>9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different):</b> The surface layer is 1-9" thick. The color ranges from light brownish gray, grayish brown, dark grayish brown and dark brown. Surface textures include fine sandy loam, sandy loam and loamy fine sand. Soil organic matter ranges from 0.5-4.0%.	1.0
<b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b> In HCPC, 95% plant canopy and 80-85% basal cover with small gaps between plants should reduce raindrop impact and slow overland flow, providing increased time for infiltration to occur. Healthy, deep rooted native grasses enhance infiltration and reduce runoff. Infiltration rate is rapid. If in plant community A, 90-95% plant canopy and 70-80% basal cover with small gaps between plants will still reduce raindrop impact and decrease overland flow. If in plant community B, 40-70% plant canopy and 50-75% basal cover with moderate gaps between plants, intensifies raindrop impact and increases overland flow. The site tends to be more xeric as runoff increases.	1.0
<b>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):</b> None.	1.0
<b>12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: &gt;&gt;, &gt;, = to indicate much greater than, greater than, and equal to) :</b> HCPC: Tall stature, warm season rhizomatous grasses > mid-stature, warm season bunchgrasses > mid-stature, warm season bunch grasses > forbs > shrubs. Plant community A: Mid-stature, cool season bunch grasses > mid-stature, cool season rhizomatous grasses > short stature, warm season rhizomatous > forbs > shrubs. Plant community B: Mid-stature cool season bunch grasses > mid-stature, cool season rhizomatous grasses > short stature, warm season rhizomatous grasses > forbs > shrubs.	1.0
<b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):</b> Plant mortality and decadence very low in HCPC and Plant community A. In periods of drought, shrubs would exhibit decadence in the state 1 reference communities.	1.0
<b>14. Average percent litter cover (50-60%) and depth (0.5 to 1.0 inches).</b> Litter cover is in contact with soil surface. Litter decreases in Plant community A to 40-50% and depth is reduced to 0.5 inch. Litter decreases to about 15% in Plant community B and is less than ½ inch deep.	1.0
<b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b> 1000 - 2000 #/acre from Plant community B to HCPC in the State 1 reference community.	1.0
<b>16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "will continue to increase regardless of the management of the site" and may eventually dominate the site: "</b> Needle and thread, blue grama, threadleaf sedge, fringed sagewort, green sagewort, plains prickly pear, broom snakeweed, yucca, leafy spurge, dense clubmoss.	1.0
<b>17. Perennial plant reproductive capability:</b> All species are capable of reproducing in HCPC and Plant community A. In Plant community B, plant seedlings will be weighed in favor of marginal and undesirable species. Replacement of desirable species will be very few.	1.0