

Ecological Reference Worksheet

MT-NRCS

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Reference site used? No

Date: 04/10/2005 MLRA: 58AC Ecological Site: Sandy 11-14' 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.

<p><b>Indicators.</b> 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 either 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.</p>	<p><b>Wgt. Factor</b></p>
<p><b>1. Number and extent of rills:</b> Minor rills (less than 0.5 to 1.0 inches in depth; less than 2.5 feet long) may be present in the reference state when slopes are greater than 8%. Plant community 2 has more rills than Plant community 1.</p>	<p>1.0</p>
<p><b>2. Presence of water flow patterns:</b> Water flow patterns are generally not evident in Plant community 1 in the reference state. Following heavy thunderstorms, or on slopes over 8%, short (less than 6.0 feet long) flow patterns may be apparent.</p>	<p>1.0</p>
<p><b>3. Number and height of erosional pedestals or terracettes:</b> These should not be evident in the reference state.</p>	<p>1.0</p>
<p><b>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground):</b> Bare ground is less than 20% in the reference state. In HCPC, bare ground should not exceed 12%.</p>	<p>1.0</p>
<p><b>5. Number of gullies and erosion associated with gullies:</b> Gully erosion is not evident in the reference state.</p>	<p>1.0</p>
<p><b>6. Extent of wind scoured, blowouts and/or depositional areas:</b> These are uncommon, but may certainly occur in the reference state. Size and extent vary too greatly to describe an “average” situation.</p>	<p>1.0</p>
<p><b>7. Amount of litter movement (describe size and distance expected to travel):</b> Litter movement varies by size and depth of litter. In the reference state, litter should be coarse, anywhere from 1.5 inches up to 4 inches in length, and will not move more than a couple of inches from where it originated. Winds may move less persistent litter farther than water will move it.</p>	<p>1.0</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> Stability values of 2-3 in plant interspaces. Stability values of 3-5 under plant canopies and at plant bases.</p>	<p>1.0</p>
<p><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> Granular structure, light brown to dark brown color, A-horizon is approx 2-10 inches in depth. Organic matter in A-horizon approx 1-4%.</p>	<p>1.0</p>
<p><b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b> Deep-rooted native perennial grasses optimize infiltration and runoff. Grasses should be spaced approx 2-4 feet apart in the reference state.</p>	<p>1.0</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> No compaction layer present in the reference state.</p>	<p>1.0</p>
<p><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> cool season, mid-height, native perennial bunchgrasses &gt; warm season, mid- and short- height native perennial bunchgrasses &gt;&gt; native forbs &gt; native shrubs.</p>	<p>1.0</p>
<p><b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):</b> Plant mortality is very low; decadence is minimal except in prolonged periods of drought.</p>	<p>1.0</p>
<p><b>14. Average percent litter cover (50-70%) and depth (0.1 to 0.75 inches).</b></p>	<p>1.0</p>
<p><b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b> 1445 – 1910 #/acre.</p>	<p>1.0</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, “will continue to increase regardless of the management of the site” and may eventually dominate the site:</b> plains pricklypear, broom snakeweed, cheatgrass, Japanese brome, fringed sagewort, threadleaf sedge, blue grama, etc.</p>	<p>1.0</p>
<p><b>17. Perennial plant reproductive capability:</b> This is not impaired in the reference state. Except in extended periods of drought, plants are able to reproduce sexually or vegetatively.</p>	<p>1.0</p>