

Ecological Reference Worksheet

MT-NRCS

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Reference site used? No

Date: 04/23/2005 MLRA: 58AC Ecological Site: Thin Breaks 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>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), and (3) cite data. Continue descriptions on separate sheet if needed. Weight factors 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>Wgt. Factor</p>
<p>1. Number and extent of rills: Because all slopes on this site exceed 25% and bare ground is 30-60%, rills are present. They are generally < 3.0 inches deep, < 4.0 inches wide, and < 20.0 feet long.</p>	<p>1.0</p>
<p>2. Presence of water flow patterns: Will generally be rare on this site, but with the steeper slopes (>35%), and 15-30% bare ground, there may be areas which show accumulations of litter due to water movement, especially after severe storms.</p>	<p>1.0</p>
<p>3. Number and height of erosional pedestals or terracettes: Wind and water erosion occurs, and there may be some plants with pedestals up to 0.5 inches in height. Terracettes are generally not present, but where they do occur, they are a natural geological feature.</p>	<p>1.0</p>
<p>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground): Bare ground is between 30-60%.</p>	<p>1.0</p>
<p>5. Number of gullies and erosion associated with gullies: Gully erosion is possible, but has not been quantified for this site.</p>	<p>1.0</p>
<p>6. Extent of wind scoured, blowouts and/or depositional areas: Wind scoured areas are uncommon, but may be evident.</p>	<p>1.0</p>
<p>7. Amount of litter movement (describe size and distance expected to travel): Litter movement will be minimal on the gradual slopes, however on the steeper slopes there will be evidence of litter movement (i.e. debris dams) which may travel greater than 10 feet on steeper slopes.</p>	<p>1.0</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): Stability values of 2-3 in plant interspaces. Stability values of 3-4 under plant canopies and at plant bases.</p>	<p>1.0</p>
<p>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): Organic matter in the A-horizon is between 0.5–1.5%. A-horizon is 1-2 inches thick. Surface structure should be moderate or strong granular to subangular blocky.</p>	<p>1.0</p>
<p>10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: Bunchgrasses and shrubs/trees dominate this site. Perennial herbaceous plants are spaced 2-4 feet apart. Shrub species are spaced 4-16 feet apart. Trees are sparse. Areas of bare soil will have a higher potential for runoff and poorer infiltration rates. Larger areas with exposed rock will increase runoff on this site and may induce erosion below those areas.</p>	<p>1.0</p>
<p>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): None.</p>	<p>1.0</p>
<p>12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: >>, >, = to indicate much greater than, greater than, and equal to): cool season, mid-height, native perennial bunchgrasses >> native shrubs > warm season, short-height perennial grasses > native perennial and annual forbs.</p>	<p>1.0</p>
<p>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence): Plant mortality is low; decadence is minimal except in prolonged periods of drought.</p>	<p>1.0</p>
<p>14. Average percent litter cover (30-60%) and depth (0.1 to 1.0 inches).</p>	<p>1.0</p>
<p>15. Expected annual production (this is TOTAL above-ground production, not just forage production): 570 – 810 #/acre.</p>	<p>1.0</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, “will continue to increase regardless of the management of the site” and may eventually dominate the site: big sagebrush, silver sagebrush, rubber rabbitbrush, Rocky Mountain juniper, threadleaf sedge, blue grama, broom snakeweed, fringed sagewort, plains pricklypear, cheatgrass, Japanese brome, red threeawn.</p>	<p>1.0</p>
<p>17. Perennial plant reproductive capability: All species are capable of reproducing.</p>	<p>1.0</p>