

Author(s)/participant(s): Maxine Rasmussen
 Contact for lead author: Glasgow Area Office, Glasgow, MT Reference site used? No
 Date: 6-18-04 MLRA: 53AE Ecological Site: Badlands 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.

<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 <u>each</u> community within the reference state, when appropriate & (3) cite data. Continue descriptions on separate sheet.</p>
<p>1. Number and extent of rills: Occasional rills would be expected. (Site occurs on >25% slopes)</p>
<p>2. Presence of water flow patterns: Water flow paths will be obvious, regular and continuous with debris dams occurring only on lesser slopes..</p>
<p>3. Number and height of erosional pedestals or terracettes: Erosional pedestals present with terracettes present at debris dams.</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 65 to 75%.</p>
<p>5. Number of gullies and erosion associated with gullies: Active gullies may be present on steeper slopes.</p>
<p>6. Extent of wind scoured, blowouts and/or depositional areas: Some could be expected. .</p>
<p>7. Amount of litter movement (describe size and distance expected to travel): Plant litter movement is expected</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): Plant cover and litter is at 20% or greater of soil surface. Stability class anticipated to be 3 or greater.</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): Use soil series description for depth and color of A-horizon.</p>
<p>10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: Sparse plant canopy (10% maximum), slow infiltration rates, and the high amount of bare ground contribute to a naturally high runoff rate even in HCPC..</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>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): Mid-stature, cool season bunch grasses = mid-stature, rhizomatous cool season grasses > mid-stature, warm season bunch grasses > shrubs > forbs</p>
<p>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence): Very low.</p>
<p>14. Average percent litter cover (5 to 10 %) and depth (0.25 to 0.5 inches). Litter cover is in contact with soil surface.</p>
<p>15. Expected annual production (this is TOTAL above-ground production, not just forage production): 400 #/acre in 12" p.z., but would expect a 50 pound increase or decrease with each gain or loss of 1 inch average annual precipitation.</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": Plains prickly pear, blue grama, Hood's phlox, hairy goldenaster, broom snakeweed & fringed sagewort</p>
<p>17. Perennial plant reproductive capability: All species are capable of reproducing.</p>