

## Appendix 2.

## Ecological Reference Worksheet

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Contact for lead author : Brenda Simpson Reference site used? Yes/No No

Date: 8/1/2005 MLRA: WP-2 Ecological Site: Shallow WP-2 This must be verified based on soils and climate (see Ecological Site Description). Current plant community cannot be used to identify the ecological site.

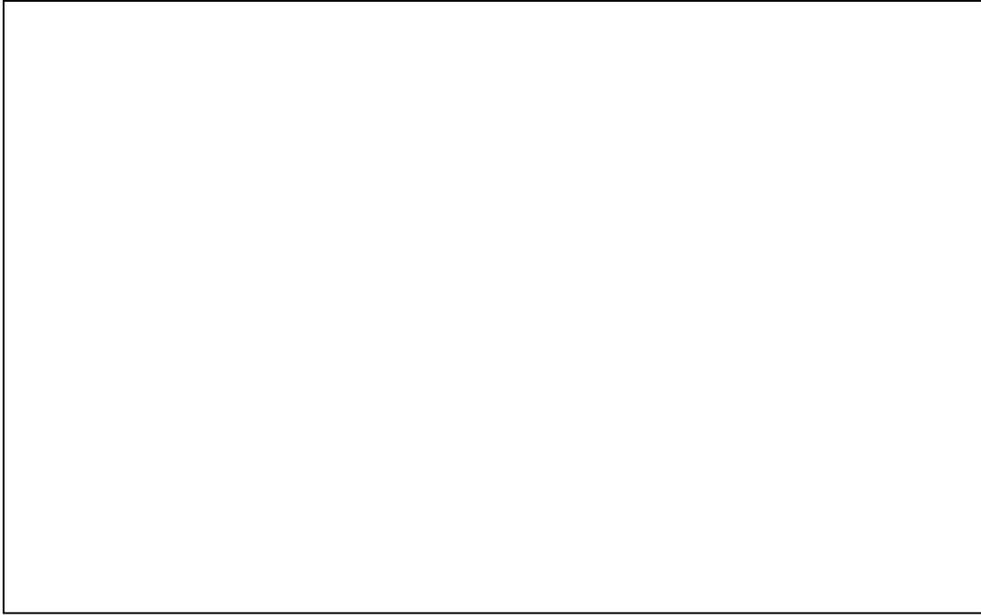
| Indicators: For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for <u>each</u> community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.  | Indicator Weight |
|---|------------------|
| <b>1. Number and extent of rills :</b><br>No rills or past evidence.  | 1                |
| <b>2. Presence of water flow patterns:</b><br>Flow patterns are few, disconnected, and < 3'.  | 1                |
| <b>3. Number and height of erosional pedestals or terracettes:</b><br>Very few erosional pedestals (< 1/4 inch) and no terracettes present on site.   | 1                |
| <b>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) :</b><br>Bare ground is 30%. Bare areas are interspersed and < 6" in diameter.   | 1                |
| <b>5. Number of gullies and erosion associated with gullies:</b><br>Gullies uncommon. Natural drainages have minimal erosion with stabilized vegetation.  | 1                |
| <b>6. Extent of wind scoured, blowouts and/or depositional areas:</b><br>Scour and depositional areas are < 5% of area and size of scour areas is < 8' in diameter - not connected.   | 1                |
| <b>7. Amount of litter movement (describe size and distance expected to travel) :</b><br>Mostly fine litter (< 3/8 inch), some moderately coarse litter from half-shrubs, traveling < 3 feet.   | 1                |
| <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><br>Soil Stability Class 5 under plants and Class 4 in interspaces.   | 1                |
| <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><br>Soil surface structure is moderate fine granular; A-horizon color is brown (7.5 YR 5/4) - 0-3 inches thick; SOM is 1.5%.   | 1                |
| <b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b><br>Plant composition of mixed warm and cool bunch grasses are evenly distributed across the site providing adequate protection. Infiltration is good with minimal runoff in moderate storm events. Permeability is moderate to rapid with low holding capacity (shallow soil). | 1                |
| <b>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):</b><br>Potential for a compaction layer is not present. B horizon is friable and < 25% clay.  | 1                |
| <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><br>Warm Shortgrass > or equal to Cool Midgrass > Warm Midgrass >> Half-Shrubs >> Forbs. See appendix for species list.  | 1                |
| <b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :</b><br>New plants, mature plants, and decadence of old plants is proportional to maintaining the dominant species. Cool and Warm bunchgrasses are most susceptible to extended disturbances.   | 1                |
| <b>14. Average percent litter cover ( 12 % ) and depth ( 0.3 inches).</b><br>Most litter is fine and very near the source.  | 1                |
| <b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b><br>Average TOTAL production is rated at 575# annually. Low = 300#. High = 850#.  | 1                |
| <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><br>Juniper is the primary invader risk.   | 1                |
| <b>17. Perennial plant reproductive capability :</b><br>All plants are capable of reproduction. The only limitations are weather-related or a natural disease affecting reproduction.   | 1                |

**Photograph (s)**

**MLRA** :

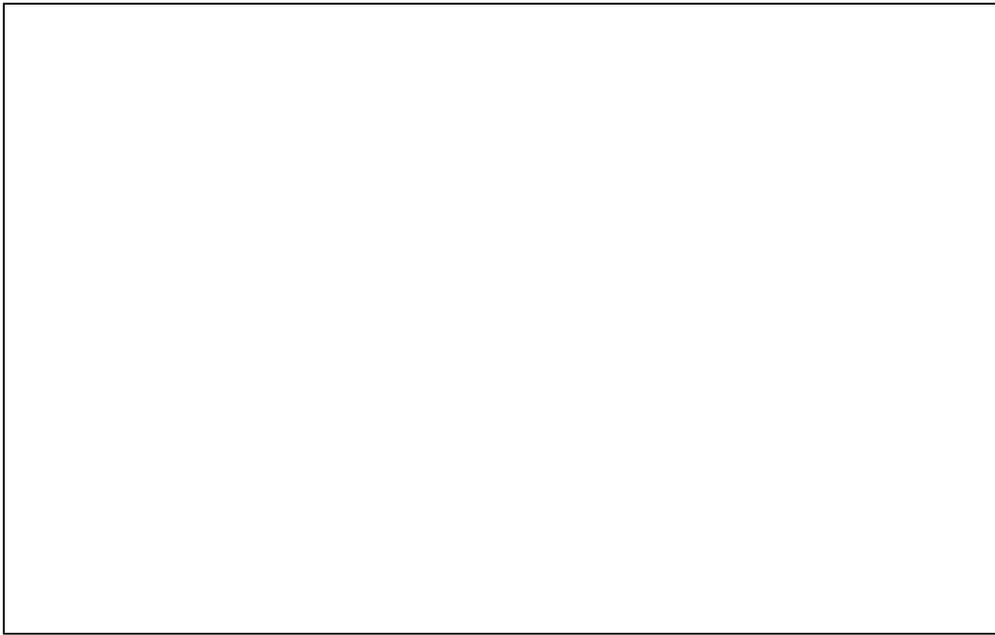
**Date** :

**Ecological Site** :



**Photo # 1**

**Comments** :



**Photo # 2**

**Comments** :

