

### Ecological Reference Worksheet\*

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**Contact for lead author:** Phil Smith **Reference site used?** \_\_\_

**Date:** 08/28/03 **MLRA:** SD-2 **Ecological Site:** Arroyo **Applies to** All (write year or "All")

<b>Indicators.</b> For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range for poor B good production year and (3) cite data. Continue descriptions on a separate sheet.	<b>ERA Match?</b>
<b>1. Number and extent of rills:</b> Numerous rills form as a consequence of flooding which occurs frequently with high intensity short duration precipitation events.	
<b>2. Presence of water flow patterns:</b> Abundant flow patterns form as a consequence of flooding which occurs frequently with high intensity short duration precipitation events.	
<b>3. Number and height of erosional pedestals or terracettes:</b> Numerous terracettes and some pedestals form as a consequence of flooding which occurs frequently with high intensity short duration precipitation events. New ones form after each flood event.	
<b>4. Bare ground from Ecological Site Description or other studies:</b> <25% bareground, bareground patch size generally small and not connected.	
<b>5. Number of gullies and erosion associated with gullies:</b> No gullies are expected for this.	
<b>6. Extent of wind scoured, blowouts and/or depositional areas:</b> None	
<b>7. Amount of litter movement (describe size and distance expected to travel):</b> This site transports large amounts of debris of varying sizes from both onsite and offsite.	
<b>8. Soil surface (top few mm) resistance to erosion (stability values are averages B most sites will show a range of values):</b> Soils are fluvial in nature. These soils are very dynamic, changing with almost every flood event.	
<b>9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness):</b> Soil surface and subsurface texture and structure vary with flood events. Depending on intensity of event soils are either deposited or removed.	
<b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b> Canopy and basal cover of grasses and shrubs impede the flow of water catching debris accumulating sediment. These systems handle high intensity – high flow event without accelerated erosion (losing the ability to maintain itself).	
<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	
<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> Sideoats grama, Cain bluestem > Bush Muhly = Arizona cottontop = plains bristlegrass > dropseeds = Apache Plume, Bricklebush., Sumac., Chli2, Catclaw, Mesquite, Virgin’s bower > Forbs	
<b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):</b> Some natural mortality and decadence expected. Decadence be limited to ungrazed bunchgrasses while mortality occurs most in the cyclic plants such as dropseeds. Numbers of these plants fluctuate with precipitation.	
<b>14. Expected litter amount: Average 25-30% cover and less than 0.5 inch deep.</b> These systems are expected to catch and accumulate large amounts of litter from both offsite and onsite.	
<b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b> 500 lbs in unfavorable years and 1500 lbs in favorable years	
<b>16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, Awill continue to increase regardless of the management of the site@ and may eventually dominate the site:</b> Mesquite, Salt Cedar, Creosote, Catclaw	
<b>17. Perennial plant reproductive capability:</b> Seed production is common from most plants expected on the site. Some of the grasses prefer vegetative reproduction. Recruitment apparent with various age classes in all spp.	
<b>18. Wildlife habitat (habitat component analysis):</b>	
<b>19. Wildlife populations (animal species diversity):</b>	
<b>20. Special Status Species Habitat:</b> SHS is Arroyo.	
<b>21. Special Status Species Populations:</b>	

\*This sheet can also be used to describe Ecological Reference Areas (ERA=s). For ERA=s, you must also complete the following page and describe status of each indicator. In the far right column, write AYes@ (ERA matches expected for site) or ANo@ (ERA does not match expected for the site). Where the answer is ANo@, explain difference in comments.