

Ecological site R080AY083OK Shallow Upland

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Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

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Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

- 1. Number and extent of rills: Very few.
- 2. Presence of water flow patterns: Few, usually only after high intensity rains.
- 3. Number and height of erosional pedestals or terracettes: Some, but rarely more than 1 inch depth.
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground): Variable, but should average less than 15%.
- 5. Number of gullies and erosion associated with gullies: Very few. Stabilized sides and base.
- 6. Extent of wind scoured, blowouts and/or depositional areas: None
- 7. Amount of litter movement (describe size and distance expected to travel): Less than 12 inches, and usually only after high intensity rainfall.

- 8. Soil surface (top few mm) resistance to erosion (stability values are averages most sites will show a range of values): Stability score 5 6.
- 9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness): Dark reddish brown 0 6 inches. Subangular blocky structure, very hard.

Refer to specific description for component sampled.

- 10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff: Mid and shortgrass community. Tallgrasses random, occurring in drains and scattered along slopes. Slow permeability and moderate cover can results in high runoff.
- 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): None, fine textured, hard soils can be mistaken for compaction.
- 12. Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant: Midgrass (little bluestem)

Sub-dominant: shortgrasses

Other: tall grasses warm-season perennial forbs shrubs cool season grasses and grasslikes.

Additional: Midgrass (little bluestem) shortgrasses tall grasses warm-season perennial forbs shrubs cool season grasses and grasslikes.

- Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence): There can be some plant loss due to droughty nature of the site, especially after severe drought, but should be less than 10%.
- 14. Average percent litter cover (%) and depth (in): Litter cover should average 40 60% at a depth not more than $\frac{1}{2}$ inch. Basal cover around 22%.
- 15. Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annualproduction): Reference production is 2,500-4,250#/acre, annually.
- 16. Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that

become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site: Eastern redcedar with a lack of regular burning. Mesquite in the south.

17. Perennial plant reproductive capability: All plants capable of reproducing at least every 2 – 3 years.