Ecological site R030XY055NV
WETLAND

Last updated: 2/24/2025
Accessed: 05/21/2025

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.

Author(s)/participant(s)	P.Novak-Echenique/E.Hourihan
Contact for lead author	STATE RANGE MANAGEMENT SPECIALIST
Date	11/16/2011
Approved by	Sarah Quistberg
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. **Number and extent of rills:** None

2. **Presence of water flow patterns:** None

3. **Number and height of erosional pedestals or terracettes:** None

4. **Bare ground from Ecological Site Description or other studies (rock, litter, lichen,**

moss, plant canopy are not bare ground): None

5. **Number of gullies and erosion associated with gullies:** None

6. **Extent of wind scoured, blowouts and/or depositional areas:** None

7. **Amount of litter movement (describe size and distance expected to travel):** Fine litter only expected to move during periods of flooding by adjacent streams.

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):** Surface soil stability values will range from 4 to 6. (To be field tested.)

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):** Immediate surface soil is often well-decomposed organic soil material with more than 12% OM. Mineral soils have platy or massive surface soil structure with organic matter ranging from 2.5 to over 5 percent in the upper 10 inches.

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:** These plant communities are ponded during most, if not all, of the year and there is no runoff.

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):** None

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: Reference Plant Community: Grass-like plants >>

Sub-dominant: water-loving, perennial, forbs > deciduous shrubs > water-loving, annual, forbs >> perennial grasses

Other: deciduous trees

Additional:

---

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):** Herbaceous plant mortality or decadence uncommon

---

14. **Average percent litter cover (%) and depth (in):** Litter cover is commonly 100% within plant interspaces and depth of litter is 6-inches to more than 24-inches.

---

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):** For normal or average growing season ± 2800 lbs/ac. Favorable years 4000+ lbs/ac and unfavorable yeras 2000 lbs/ac.

---

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:** Potential invaders include saltcedar, foxtail barley and thistles.

---

17. **Perennial plant reproductive capability:** All functional groups should reproduce in most years.