Ecological site R058AC043MT
Wet Meadow (WM) RRU 58A-C 11-14" p.z.

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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.

Author(s)/participant(s)	Loretta Metz
Contact for lead author	
Date	04/11/2005
Approved by	Kirt Walstad
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):** Bare ground is less than 1% in the reference state.

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):** None.

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):** Stability values of 6 in all cases.

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):** On mineral soils (with or without a 1 to 6 inch organic layer): The A-horizon structure is strong granular and is 6 to 24 inches thick. Organic matter is 4-8%. Seasonal water tables are typically at 1.0 to 2.0 feet. On organic soils: The organic layer ranges from 8 to >60 inches thick. Seasonal water tables are typically 0.0 to 1.0 ft.

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:** Deep-rooted native perennial grasslikes and grasses optimize infiltration and 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: Native perennial grasslikes = native perennial bunch and rhizomatous grasses >> native shrubs = native forbs.

    Sub-dominant:

    Other:

    Additional:

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):** Plant mortality is low; decadence is minimal except in prolonged periods of drought (>5-6 years).

14. **Average percent litter cover (%) and depth (in):**

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):** 4400 – 6700 #/acre.

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:** Kentucky/Canada/fowl bluegrasses, redtop, quackgrass, reed canarygrass (may have been seeded), pussytoes, cudweed sagewort, foxtail barley, Canada thistle, dandelion, purple loosestrife, Garrison creeping

foxtail (may have been seeded)

17. **Perennial plant reproductive capability:** Except in extended periods of drought, plants are able to reproduce sexually or vegetatively.