

Ecological site R151XY008LA Fresh Fluid Marsh 60-64 PZ

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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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Approved by	Johanna Pate
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. **Number and extent of rills:** N/A

2. **Presence of water flow patterns:** Daily tidal exchange

3. **Number and height of erosional pedestals or terracettes:** Dissected by canals, bayous, and relict rivers. Significant amount of open water areas interspersed throughout the site.

4. **Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):** Expect less than 5% exposed soil surface.

5. **Number of gullies and erosion associated with gullies:** N/A

6. **Extent of wind scoured, blowouts and/or depositional areas:** N/A

7. **Amount of litter movement (describe size and distance expected to travel):** Excessive litter accumulation from herbaceous plants (leaves 3-6 inches wide and up to 4-8 feet tall). Little movement in normal conditions. Most is flushed away by extreme weather events.
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8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):** Soil surface around base of plants is subject to sheet erosion due to daily tidal activity. Shoreline is subject to erosion due to excessive wave action.
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9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):** 0-8 inches: dark gray muck, 8-60+ inches very fluid, very dark gray mucky clay. Significant amount of coarse fibers, roots, and plant litter.
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10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:** N/A
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11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):** N/A
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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: Warm-season grasses and grass-like
- Sub-dominant: Perennial forbs
- Other: Sod forming grasses, shrubs
- Additional:
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13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):** Perennial grasses will naturally exhibit a minor amount (less than 5%) of senescence and some mortality every year.
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14. **Average percent litter cover (%) and depth (in):** Significant litter (up to 30-40%). Litter and detritus is flushed away during extreme weather events. Litter is consumed by prescribed fires.
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15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):** 7000 to 20,000 pounds per acre
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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: N/A

17. **Perennial plant reproductive capability:** All perennial species should be capable of reproducing every year unless disrupted by catastrophic events occurring immediately prior to, or during the reproductive phase.
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