

Ecological site R035XB211AZ Loamy Wash 6-10" p.z. Saline-Sodic

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

Indicators

- Number and extent of rills:** 1 to 2 rills per 150 foot transect.

- Presence of water flow patterns:** Several (5 to 6) water flow patterns per 150 foot tape.

- Number and height of erosional pedestals or terracettes:** None

- Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):** 10 to 15% bare ground

- Number of gullies and erosion associated with gullies:** None

- Extent of wind scoured, blowouts and/or depositional areas:** Bare scoured areas with high levels of salts occur irregularly throughout the site

- Amount of litter movement (describe size and distance expected to travel):** Litter remains in place under shrubs and grasses; small amounts may be swept into scoured areas by water or moved short distances by wind (less than 1

foot)

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):** Wind-scoured sodic bare areas will have stability values of 1 to 2; vegetated areas with samples taken under canopy will be 3-5.
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9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):** Soil surface structure will be platy on bare wind-scoured sodic areas; surface structure will be granular or platy under grass and shrub canopy. Soil organic matter will increase under any canopy cover and decrease as vegetation decreases on the surface.
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10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:** Increased infiltration on areas that have canopy cover; decreased infiltration in areas that have been wind-scoured; these areas may collect water and due to decreased infiltration rates water may pool in these areas; as the water evaporates salts will increase and concentrate.
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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):** None; may be difficult to excavate
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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: Grasses > shrubs > bare ground

Sub-dominant:

Other:

Additional:

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):** None
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14. **Average percent litter cover (%) and depth (in):**
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15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):** 700-1600 lbs/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: Russian thistle, groundsel, camelthorn

17. **Perennial plant reproductive capability:** With the exception of large concentrations of salt, there are no environmental factors inhibiting plant growth on this site.
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