

Ecological site R007XY011OR Sands 8-10 PZ

Accessed: 05/04/2024

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) | Jeff Repp |
| Contact for lead author | Oregon NRCS State Rangeland Management Specialist |
| Date | 07/25/2012 |
| Approved by | Bob Gillaspay |
| Approval date | |
| Composition (Indicators 10 and 12) based on | Annual Production |

Indicators

1. **Number and extent of rills:** None, slight sheet & rill erosion hazard
-

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):** 10-20%
-

5. **Number of gullies and erosion associated with gullies:** Few
-

6. **Extent of wind scoured, blowouts and/or depositional areas:** Few to many; may be directional low dunes present; severe wind erosion hazard
-

7. **Amount of litter movement (describe size and distance expected to travel):** Fine - some movement expected (wind) over short distances

-
8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):** Slightly resistant to erosion; aggregate stability = 2-3
-
9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**
Moderately deep to very deep sands and loamy fine sands; low OM (1-2%)
-
10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:** Moderate ground cover (30-40%) and low (0-3%) slopes should reduce rainfall impact and overland flow; increased flow possible on steeper slopes (up to 20%)
-
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: Needle and thread > antelope bitterbrush > indian ricegrass > Thickspike wheatgrass > forbs > shallow rooted perennial grasses > other shrubs
- Sub-dominant:
- Other:
- Additional:
-
13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):** Normal decadence and mortality expected
-
14. **Average percent litter cover (%) and depth (in):** In areas with adequate plant cover
-
15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):** Favorable: 700, Normal: 500, Unfavorable: 400 lbs/acre/year at high RSI (HCPC)
-
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:** Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups

17. **Perennial plant reproductive capability:** All species should be capable of reproducing annually
