

Ecological site R023XY515OR

DROUGHTY ASHY

9-12 PZ

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General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Ecological site concept

Currently there is only a draft of the initial concept for this ecological site. The initial concept for this site places it within the Ashy or Loamy Skeletal Mod Deep 10-20 PZ High-Resilience Mountain Big Sagebrush and Idaho Fescue Ecological Site Group. To view the General STM and other information available for this ESG please go to <https://edit.jornada.nmsu.edu/catalogs/esg/023X/R023XY906NV>

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on gentle plateau slopes, rolling hills and the floor of basins, primarily on the eastern edge of the pumice mantle in the High Desert Slopes range from 1 -10 percent. Elevations range from 4,500 to 5,200 feet.

Table 2. Representative physiographic features

Climatic features

The annual precipitation ranges primarily from 9 to 11 inches which occurs mainly between the months of November and June, mostly in the form of snow and spring-fall rains. The soil temperature regime is frigid. The average annual air temperature is 45 degrees F with extreme temperatures ranging from -24 to 104 degrees F. The frost free period is 50 to 90 days. The optimum period for plant growth is from April through early July.

Influencing water features

No water features are associated with this site.

Soil features

The soils of this site are moderately deep and well drained. They have sandy loam surface textures and medium textured subsoils. They are generally formed in residuum from basalt bedrock with additions of volcanic ash on the surface. Permeability is moderately slow and the available water holding capacity (AWC) is 3.0 to 5.0 inches for the profile. The potential for wind erosion high.

This site is correlated with Reluctan Silt Loam.

Ecological dynamics

State and transition model

Additional community tables

Approval

Kendra Moseley, 4/10/2025

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)	
Contact for lead author	
Date	09/14/2026
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. Number and extent of rills:

2. Presence of water flow patterns:

3. Number and height of erosional pedestals or terracettes:

4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):

5. Number of gullies and erosion associated with gullies:

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

7. Amount of litter movement (describe size and distance expected to travel):

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

9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):

10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on 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):

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:

Sub-dominant:

Other:

Additional:

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

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):

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:

17. Perennial plant reproductive capability:
