

Ecological site group DX035X04BESG04

Bisti Lowlands LRU Subset - Clayey Subgroup

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Key Characteristics

- Bisti Lowlands. This LRU subset is composed of Cretaceous materials, and is generally below 1900 m in elevation. The Bisti Lowlands subset is further distinguished from Chaco Mesa in that the former receives less monsoonal moisture, harbors less warm-season grass, and experiences low amounts of blowing sands.
- Sites that occur on "upland", water-shedding landforms. Elevated terraces are included in this group.
- Soils are > 50 cm to lithic or paralithic contact (root-restrictive bedrock).
- Soils lack both significant salinity and sodicity.
- Soils lack one or both of the following at the surface: Strong or violent response to dilute HCl or $\geq 5\%$ calcareous fragments.
- Sites with soils that have particle size classes of clayey, fine, or very fine.

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.

Physiography

Various upland, water-shedding landforms.

Soil features

Soils fall into the fine or very fine particle size classes

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XA130NM–Shale Hills 10-14" p.z.
- R035XB270AZ–Porcelanite Hills 6-10" p.z.
- R035XC306AZ–Clayey Upland 10-14" p.z.

Correlated Map Unit Components

23436560, 22999483

Stage

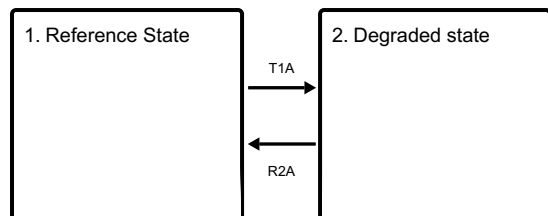
Provisional

Contributors

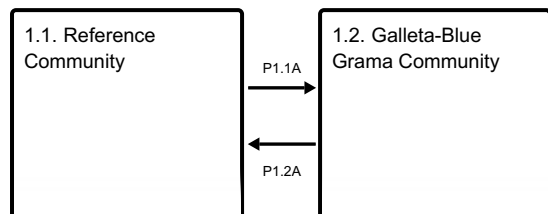
Curtis Talbot

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1

Reference State

This state is characterized by relatively intact topsoils and minimal evidence of erosion--such as pedestaling of grasses and surface fragments. Trees are often present, but are not a major component. But good

Community 1.1

Reference Community

Dominant plant species

- saltbush (*Atriplex*), shrub
- alkali sacaton (*Sporobolus airoides*), grass
- James' galleta (*Pleuraphis jamesii*), grass

Community 1.2

Galleta-Blue Grama Community

Dominant plant species

- saltbush (*Atriplex*), shrub
- James' galleta (*Pleuraphis jamesii*), grass
- blue grama (*Bouteloua gracilis*), grass

Pathway P1.1A

Community 1.1 to 1.2

Prolonged grazing and drought.

Pathway P1.2A

Community 1.2 to 1.1

Prescribed grazing

State 2

Degraded state

Moderate to severe topsoil loss has occurred. Pedestaling of grasses and/or surface fragments is typically widespread. Trees are a significant component at higher elevations. Production is markedly lower than in State 1, and bare ground is extensive.

Dominant plant species

- Utah juniper (*Juniperus osteosperma*), tree
- twoneedle pinyon (*Pinus edulis*), tree
- James' galleta (*Pleuraphis jamesii*), grass
- blue grama (*Bouteloua gracilis*), grass

Transition T1A

State 1 to 2

Prolonged continuous grazing and lack of fire. The latter can result from both intentional suppression or the mere lack of fine fuels.

Restoration pathway R2A

State 2 to 1

Some combination of prescribed/deferred grazing, fire, brush management, and/or seeding.

Citations