

Ecological site group DX035X04CESG07

Chaco Mesa LRU Subset - Clayey

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Key Characteristics

- Chaco Mesa. This LRU subset is composed of Cretaceous materials, is generally above 1900 m in elevation, and does not drain directly into the San Juan River. The Chaco Mesa subset is further distinguished from the Bisti Lowlands in that the former receives more monsoonal moisture, harbors more warm-season grasses, and experiences a considerable amount 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

Upland landforms. Elevated terraces included; drainageway bottoms included.

Soil features

Particle size class of fine or very fine. Soils at least 50 cm deep well-drained, and lacking in salinity/sodicity.

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

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Stage

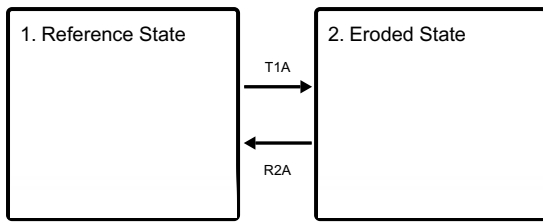
Provisional

Contributors

Curtis Talbot

State and transition model

Ecosystem states



State 1

Reference State

Perennial grasses dominant or codominant to shrubs. Soils not significantly eroded.

Dominant plant species

- shadscale saltbush (*Atriplex confertifolia*), shrub
- broom snakeweed (*Gutierrezia sarothrae*), shrub
- blue grama (*Bouteloua gracilis*), grass
- alkali sacaton (*Sporobolus airoides*), grass
- James' galleta (*Pleuraphis jamesii*), grass

State 2

Eroded State

Woody species dominant. Topsoils significantly truncated or absent.

Dominant plant species

- Utah juniper (*Juniperus osteosperma*), tree
- Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*), shrub
- broom snakeweed (*Gutierrezia sarothrae*), shrub
- squirreltail (*Elymus elymoides*), grass
- cheatgrass (*Bromus tectorum*), grass

Transition T1A

State 1 to 2

Prolonged continuous grazing coupled with periodic drought. Low basal cover leads to accelerated erosion. Invasive annuals gain competitive advantage.

Restoration pathway R2A

State 2 to 1

Prescribed/deferred grazing. Seeding, erosion control, and/or brush control may be necessary.

Citations