Ecological site group DX035X04AESG07
San Juan River Corridor LRU Subset - Clayey Subgroup

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Key Characteristics

- San Juan River Corridor. This LRU subset consists of landforms which drain directly into the San Juan River. Elevations are mostly under 1900 meters. Stratigraphy is varied, ranging from the Mancos to the Nacimiento formations. This LRU subset is distinct from the rest of 35.4 in that it provides irrigation water. Thus, upland landforms which contribute significant water are included.
- 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 f the following at the surface: Strong or violent response to dilute HCl or ≥ 5% calcareous fragments.
- Sites with soils that have particle size classes of 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

This site occupies various water-shedding landforms, including elevated terraces and alluvial fans. Water-collecting landforms such as floodplains and drainageways are excluded from the Clayey concept.

Soil features

Soils have particle size classes of clayey, fine, or very fine.
Soils do not contain a combination of calcareous fragments and free carbonates at the surface, and lack significant salinity and/or sodicity.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- DX035X03E004–Clayey
- R035XA130NM–Shale Hills 10-14"p.z.
- R035XB009NM–Shale Hills

Correlated Map Unit Components

23435749, 23435810, 23435827, 23435831, 23435860, 23435873, 23435971, 23435972, 23435975, 23435976, 23435979, 23435985, 23435996, 22999955

Stage

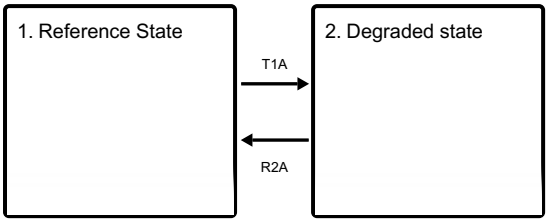
Provisional

Contributors

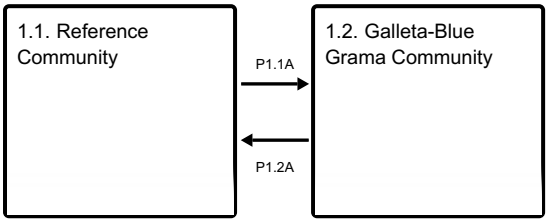
Curtis Talbot

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.

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