

# 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 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 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

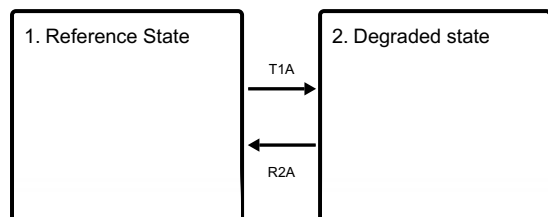
Provisional

## Contributors

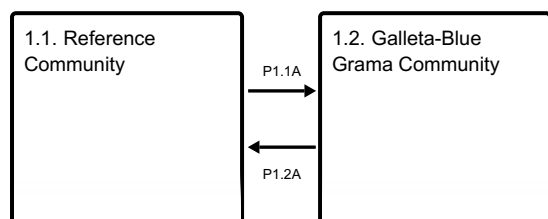
Curtis Talbot

## 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**