

# Ecological site group DX035X04CESG02

## Chaco Mesa LRU subset - Shallow

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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).

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 occurs on bedrock-controlled, upland landforms such as plateau summits and escarpments.

### Soil features

Soils are < 50 cm to lithic or paralithic contact.

### Major Land Resource Area

MLRA 035X  
Colorado Plateau

### Subclasses

- DX035X03A121–Shallow Sandstone
- DX035X03E006–Shallow
- DX035X04B204–Sandstone Upland 6-10" p.z.
- DX035X04B321–Sandstone Hills 10-14" p.z.
- DX035X04B335–Sandstone/Shale Hills 10-14" p.z.
- F035XC322AZ–Sandstone Upland 10-14" p.z. (JUOS)
- R035XA101AZ–Breaks 10-14" p.z.
- R035XB201AZ–Mudstone/Sandstone Hills 6-10" p.z.
- R035XB215AZ–Sandstone/Shale Upland 6-10" p.z.
- R035XC302AZ–Sedimentary Cliffs 10-14" p.z.

### Correlated Map Unit Components

22960349, 23186667, 23187064, 23187713, 22976307

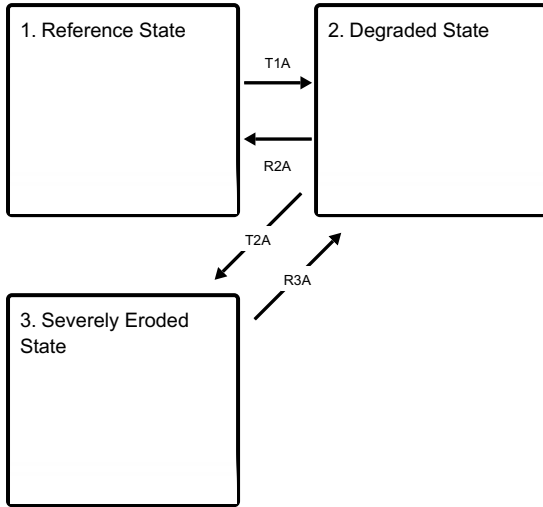
### Stage

Provisional

### Contributors

## State and transition model

### Ecosystem states



### State 1

#### Reference State

Mix of grasses and shrubs and, in some cases, trees. Late-seral (decreaser) grass species remain well-established. At higher elevations, this can be a woodland/savannah community.

#### Dominant plant species

- Bigelow sage (*Artemisia bigelovii*), shrub
- winterfat (*Krascheninnikovia arborescens*), shrub
- Indian ricegrass (*Achnatherum hymenoides*), grass
- black grama (*Bouteloua eriopoda*), grass
- James' galleta (*Pleuraphis jamesii*), grass

### State 2

#### Degraded State

Shrub-dominated community with a mix of grasses, forbs, and, often, trees. Many late-seral (decreaser) grass species have been extirpated. At higher elevations, this can be a woodland/savannah community.

#### Dominant plant species

- Utah juniper (*Juniperus osteosperma*), tree
- twoneedle pinyon (*Pinus edulis*), tree
- Bigelow sage (*Artemisia bigelovii*), shrub
- mormon tea (*Ephedra viridis*), shrub
- broom snakeweed (*Gutierrezia sarothrae*), shrub
- green rabbitbrush (*Ericameria teretifolia*), shrub
- James' galleta (*Pleuraphis jamesii*), grass
- blue grama (*Bouteloua gracilis*), grass
- threeawn (*Aristida*), grass

### State 3

#### Severely Eroded State

This community contains a mix of shrubs, forbs, grasses, and, sometimes, trees. Considerable amounts of non-native, annual grasses and forbs are present. At higher elevations, this can be a woodland/savannah community. Halogeton is often a major component in this state.

## **Dominant plant species**

- Utah juniper (*Juniperus osteosperma*), tree
- twoneedle pinyon (*Pinus edulis*), tree
- green rabbitbrush (*Ericameria teretifolia*), shrub
- broom snakeweed (*Gutierrezia sarothrae*), shrub
- James' galleta (*Pleuraphis jamesii*), grass
- threeawn (*Aristida*), grass
- cheatgrass (*Bromus tectorum*), grass

## **Transition T1A**

### **State 1 to 2**

Prolonged continuous grazing. Drought event kills weakened perennial grasses. Significant erosion ensues.

## **Restoration pathway R2A**

### **State 2 to 1**

Multifaceted restoration operation including prescribed/deferred grazing. Shrub control and/or seeding may also be required.

## **Transition T2A**

### **State 2 to 3**

Continuous prolonged grazing. Same mechanisms as T1A.

## **Restoration pathway R3A**

### **State 3 to 2**

Multifaceted restoration operation including prescribed/deferred grazing. Shrub control and/or seeding may also be required.

## **Citations**