

# Ecological site group DX035X04AESG04

## San Juan River Corridor LRU Subset - Limy 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 have a combination of free carbonates and calcareous rock fragments at the surface. Strong or violent response to dilute HCl and  $\geq 5\%$  calcareous fragments.

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 drainageways and floodplains are excluded from the Limy concept.

### Soil features

Soils 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

- DX035X03E003–Limy
- R035XB267AZ–Sandy Loam Upland 6-10" p.z. Limy

### Correlated Map Unit Components

23435733, 23435734, 23435738, 23435722, 23435779, 23435780, 23435755, 23435784, 23435862

### Stage

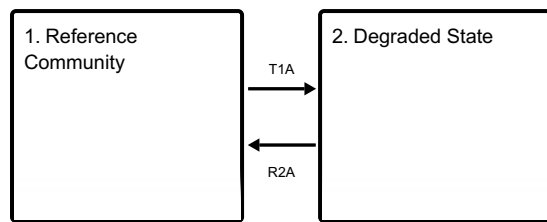
Provisional

### Contributors

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## State and transition model

### Ecosystem states



### State 1

#### Reference Community

This community is dominated by perennial grasses, with a significant component of shrubs.

#### Dominant plant species

- shadscale saltbush (*Atriplex confertifolia*), shrub
- broom snakeweed (*Gutierrezia sarothrae*), shrub
- Indian ricegrass (*Achnatherum hymenoides*), grass

### State 2

#### Degraded State

Shrub-dominated community with a mix of perennial and invasive annual grasses. Topsoils are significantly degraded.

#### Dominant plant species

- shadscale saltbush (*Atriplex confertifolia*), shrub
- broom snakeweed (*Gutierrezia sarothrae*), shrub
- James' galleta (*Pleuraphis jamesii*), grass
- cheatgrass (*Bromus tectorum*), grass

### Transition T1A

#### State 1 to 2

Prolonged continuous grazing, followed by a drought event, leads to significant mortality of perennial grasses. Low plant basal area leads to accelerated erosion. Invasive annuals and shrubs gain a competitive advantage.

### Restoration pathway R2A

#### State 2 to 1

This restoration pathway involves the recovery of perennial grasses and the reversal of erosion. Prescribed/deferred grazing is a necessary component. Additionally, shrub control, erosion control, and seeding may be necessary.

## Citations