

# Ecological site group DX035X02GESG10

## Marble Canyon - Typic Aridic - Limestone or Loamy Upland

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### Key Characteristics

- Marble Canyon (G)
- Soil at site is sedimentary or loamy.
- Site soils are typic aridic or within a 6-10" precipitation zone.
- Site is and/or located in an upland with slopes <15%.

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

Site is and/or located in an upland with slopes <15%. Aspects tend toward Marble Canyon, and more generally, the northeast.

### Climate

Site soils are typic aridic or within a 6-10" precipitation zone. No clear pattern exists in the seasonal timing of precipitation, generally driest in late spring.

### Soil features

Parent material is limestone. Soils are loamy. Site consists of limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

### Vegetation dynamics

This site exists on summits and side slopes of plateaus, mesas, and pediments. The site is characterized by a mix of shrubs with scattered perennial grasses and forbs. Primary shrubs are blackbrush and Torrey's jointfir with James' galleta and Indian ricegrass as the understory. Other shrubs present include cliffrose, snakeweed and Greenes' rabbitbrush.

### Major Land Resource Area

MLRA 035X  
Colorado Plateau

### Subclasses

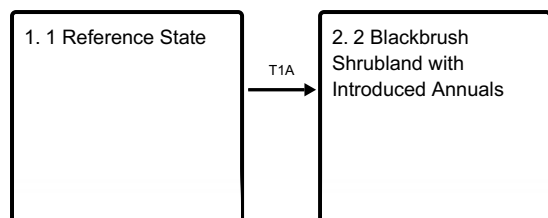
- R035XB226AZ–Sandstone/Shale Upland 6-10" p.z. Warm
- R035XB283AZ–Mudstone Slopes 6-10" p.z.

### Stage

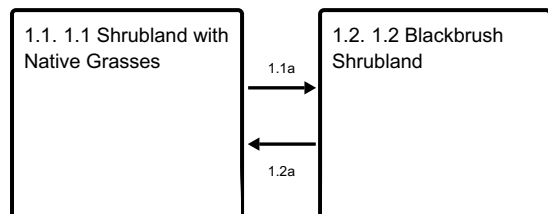
Provisional

### State and transition model

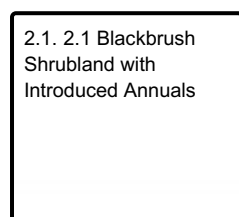
## Ecosystem states



## State 1 submodel, plant communities



## State 2 submodel, plant communities



## State 1

### 1 Reference State

This site exists on summits and side slopes of plateaus, mesas, and pediments. The site is characterized by a mix of shrubs with scattered perennial grasses and forbs. Primary shrubs are blackbrush and Torrey's jointfir with James' galleta and Indian ricegrass as the understory. Other shrubs present include cliffrose, snakeweed and Greenes' rabbitbrush.

### Community 1.1

#### 1.1 Shrubland with Native Grasses

The Shrubland with Native Grasses plant community is characterized by a dominance of shrubs with scattered perennial grasses and forbs. Primary shrubs are blackbrush and Torrey's jointfir with James' galleta and Indian ricegrass as the understory. Other shrubs present include cliffrose, snakeweed and Greenes' rabbitbrush.

### Community 1.2

#### 1.2 Blackbrush Shrubland

Blackbrush Shrubland - The dominant aspect of this site is of blackbrush. Other shrubs are present but in small amounts. Perennial forbs and grasses are present, but in minor amounts. Grasses commonly present are James galletaa and Indian ricegrass. Shrubs commonly present include blackbrush, Torrey jointfir along with other native shrubs in small amounts.

### Pathway 1.1a

#### Community 1.1 to 1.2

Repetitive, high utilization of palatable species gives shrubs a competitive advantage.

### Pathway 1.2a

#### Community 1.2 to 1.1

A set-back to shrubs with management to increase palatable grass species.

## **State 2**

### **2 Blackbrush Shrubland with Introduced Annuals**

#### **Community 2.1**

##### **2.1 Blackbrush Shrubland with Introduced Annuals**

Blackbrush Shrubland - The dominant aspect of this site is of blackbrush. Other shrubs are present but in small amounts. Perennial forbs and grasses are present, but in minor amounts. Grasses commonly present are James galletaa and Indian ricegrass. Shrubs commonly present include blaackbrush, Torrey jointfir along with other native shrubs in small amounts. Introduced annuals occur, but are a very minor part of the plant community, usually only found in trace amounts.

#### **Transition T1A**

##### **State 1 to 2**

Invasion of introduced species. Once this occurs the site is unlikely to be restored to reference. This coupled with repetitive high utilization of palatable grass species and resulting soil erosion.

#### **Citations**