# Ecological site group DX035X01HESG10 Black Mesa-Navajo Mtn-Shallow Sandy Loam Uplands

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## **Key Characteristics**

- Black Mesa Navajo Mountain
- Sandy loam soils
- Shallow sandy loam soils
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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 group is on sandstone uplands, hills, pediments, and structural benches. Slopes are typically 1 to 15 percent but ranges to 60 percent

#### Climate

The mean annual precipitation ranges from 6 to 14 inches the bulk of which generally falls during the growing season. Mean annual air temperature is 47 to 54 degrees Fahrenheit. Typically summers are warm and winters are cool and dry.

#### **Soil features**

Soils are shallow to a restrictive layer, typically sandstone bedrock. Parent material consists of eolian deposits, local alluvium, colluvium and residuum typically derived from sandstone.

#### **Vegetation dynamics**

Vegetation is typically Bigelow sagebrush, Indian ricegrass, galleta, and blue gramma.

#### Major Land Resource Area

MLRA 035X Colorado Plateau

#### Subclasses

- DX035X04B204–Sandstone Upland 6-10" p.z.
- DX035X04B314–Sandstone Upland 10-14" p.z.
- DX035X04B321–Sandstone Hills 10-14" p.z.
- R035XA115AZ–Sandstone Upland 10-14" p.z.
- R035XB255AZ–Sandstone Rockland 6-10" p.z.
- R035XY130UT–Desert Shallow Sandy Loam (Shadscale)

#### **Correlated Map Unit Components**

22397340, 22397345, 22601802, 22601304, 22601518, 22600878, 22600880, 22601538, 22601106, 22601535,

22600895, 22601550, 22601345

### Stage

Provisional

#### Contributors

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### State and transition model

**Ecosystem states** 



#### State 1 submodel, plant communities



## State 1 1 Reference State

The dominant aspect of this site is a grassland and shrub mix with scattered trees.

## Community 1.1 1.1 Historic Climax Plant Community

The dominant aspect of this site is a grassland and shrub mix with scattered Utah juniper and/or Colorado Pinyon. Major grassses are Indian ricegrass, needle and thread, blue grama and galleta. Shrubs include Bigelow sagebrush, antelope bitterbrush, stansbury cliffrose and green mormon tea. There may trace amounts of non-native annuals present. Plant species most likely to increase or invade on this site are cheatgrass, thrifty goldenweed, stemless goldenweed, annual weeds, broom snakeweed, Greene rabbitbrush Bigelow rubber rabbitbrush and Bigelow sagebrush. Continuous grazing during the winter and spring will decrease cool season grasses which are replaced by lower forage value grasses and forbs.

## Community 1.2 1.2 Half Shrubs - Short Grasses with Trees

This plant community is characterized by an increase of low growing shrubs such as snakeweed, rabbitbrush, Bigelow sagebrush and other native shrubs. There is a decline of cool season grasses in the interspaces and an increase of shortgrasses such as blue grama. There may trace or minor amounts of non-native annuals present.

## Pathway 1.1a Community 1.1 to 1.2

Drought, improper grazing

Pathway 1.2a

# Community 1.2 to 1.1

Favorable precipitation, prescribed grazing

## Citations