

# Ecological site group DX035X01HESG08

## Black Mesa-Navajo Mtn-Clayey Uplands

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### Key Characteristics

- Black Mesa Navajo Mountain
- Clayey soils
- Clayey uplands

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 occurs on mesas and plains at elevations of 4800 to 6300 feet.

### Climate

Mean annual precipitation is typically 6 to 14 inches falling mostly in late summer. Mean annual air temperature is 47 to 52 degrees Fahrenheit.

### Soil features

Soils are moderately deep to very deep.

### Major Land Resource Area

MLRA 035X  
Colorado Plateau

### Subclasses

- DX035X03B630–Clay Loam Upland 13-17" p.z. (PIED)
- R035XA106AZ–Clayey Upland 10-14" p.z.
- R035XA107AZ–Clay Loam Upland 10-14" p.z.
- R035XB220AZ–Shale Upland 6-10" p.z.
- R035XC307AZ–Clay Loam Upland 10-14" p.z.
- R035XC320AZ–Shale Hills 10-14" p.z.

### Correlated Map Unit Components

22397518, 22397379, 22397378, 22397450

### Stage

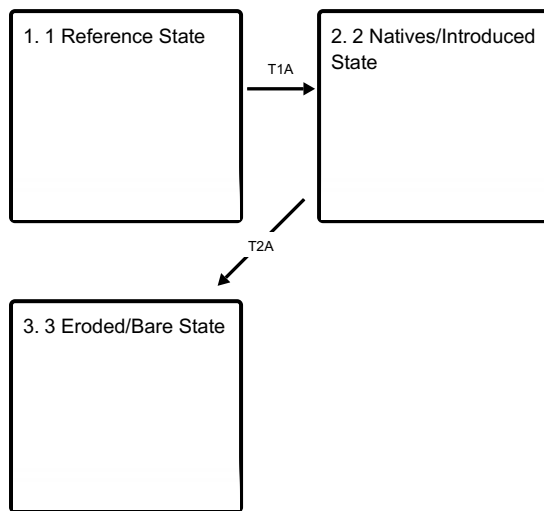
Provisional

### Contributors

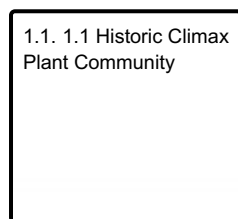
Harry Hosler  
Jeff Fenton

## State and transition model

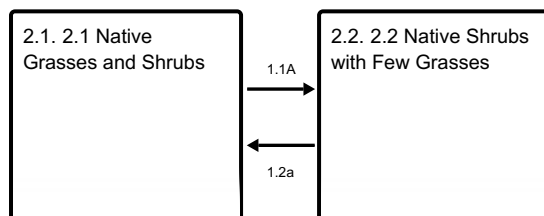
### Ecosystem states



### State 1 submodel, plant communities



### State 2 submodel, plant communities



## State 1

### 1 Reference State

#### Community 1.1

##### 1.1 Historic Climax Plant Community

The plant community is made up of mid and short grasses with a fair percentage of forbs and shrubs. In the original plant community, there is a mixture of both cool and warm season plants. Plant species most likely to invade or increase on this site when it deteriorates are galleta, Torrey seepweed, Greene rabbitbrush, cheatgrass and annual forbs. Continuous livestock grazing use during winter and spring will decrease cool season grasses, which are replaced by lower forage value grasses and shrubs.

## State 2

### 2 Natives/Introduced State

#### Community 2.1

##### 2.1 Native Grasses and Shrubs

Introduced exotic annual grasses and forbs are present in minor amounts in the plant community, but the amount

and proportions of native plants is similar to that found in plant community 1.1, Reference Plant Community.

## **Community 2.2**

### **2.2 Native Shrubs with Few Grasses**

This plant community is characterized by a dominance of shadscale saltbush, Torrey Seepweed, snakeweed, with a few alkali sacaton and galleta. Introduced exotic annual grasses and forbs are present in minor amounts in the plant community.

#### **Pathway 1.1A**

##### **Community 2.1 to 2.2**

Improper grazing, drought

#### **Pathway 1.2a**

##### **Community 2.2 to 2.1**

Prescribed grazing/Rest, favorable moisture/climate

### **State 3**

#### **3 Eroded/Bare State**

#### **Transition T1A**

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

Introduction of non-native annuals species creates an irreversible change in the plant community

#### **Transition T2A**

##### **State 2 to 3**

Continuous improper grazing, drought, loss of perennial plant cover results in significant erosion

### **Citations**