# **Ecological site group DX035X02EESG06 Arizona Strip - Ustic Aridic - Sandy Upland**

Last updated: 10/26/2022 Accessed: 04/19/2024

# **Key Characteristics**

- Arizona Strip (E)
- Site is sandy.
- Soils are Ustic Aridic, or precipitation is within a range of 10 to 14 inches
- 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 northeast except along escarpments.

#### Climate

Site soils are ustic aridic or within a 10-14" precipitation zone. Precipitation comes monsoonal patterns during months of July, August, and September, and is supplemented by winter storm patterns from November through March.

#### Soil features

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

#### **Vegetation dynamics**

Indian ricegrass, black grama, blue grama, galleta, sand sagebrush, fourwing saltbush, Mormon tea

# **Major Land Resource Area**

MLRA 035X Colorado Plateau

#### **Subclasses**

- DX035X03B625–Loamy Upland (PIED, JUOS) 13-17" p.z. (Provisional)
- F035XF619AZ–Limestone Upland 13-17" p.z. (JUOS, PIED)
- R035XC315AZ-Sandy Upland 10-14" p.z.
- R035XF605AZ–Loamy Upland 13-17" p.z.
- R035XF608AZ–Limestone / Sandstone Upland 13-17" p.z.

### **Correlated Map Unit Components**

22338551, 22340979, 22340980, 22394881, 22394862

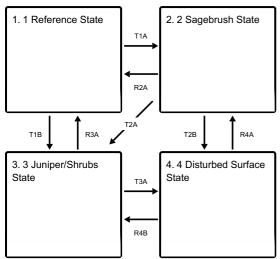
### Stage

### **Contributors**

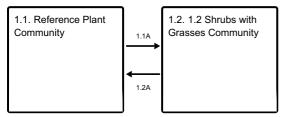
**Curtis Talbot** 

# State and transition model

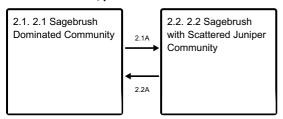
#### **Ecosystem states**



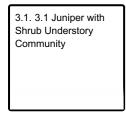
#### State 1 submodel, plant communities



#### State 2 submodel, plant communities



### State 3 submodel, plant communities



# State 4 submodel, plant communities

4.1. 4.1 Tree/Shrub with Introduced Annual Community

#### 1 Reference State

# Community 1.1 Reference Plant Community

Indian ricegrass, black grama, blue grama, galleta, sand sagebrush, fourwing saltbush, Mormon tea

# **Community 1.2**

# 1.2 Shrubs with Grasses Community

blue grama, galleta, sand sagebrush big sagebrush, dropseeds, sandhill muhly, snakeweed, rabbitbrush

# Pathway 1.1A

### Community 1.1 to 1.2

Repetitive high utilization of palatable grass species have given shrubs a competitive advantage.

# Pathway 1.2A

# Community 1.2 to 1.1

A set back to the shrubs such as fire plus management to improve palatable grass production.

#### State 2

# 2 Sagebrush State

### Community 2.1

# 2.1 Sagebrush Dominated Community

big sagebrush, sand sagebrush, Bigelow sagebrush, rubber rabbitbrush, snakeweed, blue grama, indian ricegrass, bottlebrush squirreltail, sandhill muhly, dropseeds

### Community 2.2

### 2.2 Sagebrush with Scattered Juniper Community

big sagebrush, snakeweed, Bigelow sagebrush, rubber rabbitbrush, blue grama, needleandthread, indian ricegrasss, sandhill muhly, sand dropseeds, junipers

#### Pathway 2.1A

### Community 2.1 to 2.2

Encroachment of juniper

### Pathway 2.2A

### Community 2.2 to 2.1

Natural disturbance or treatment of juniper.

### State 3

#### 3 Juniper/Shrubs State

#### Community 3.1

#### 3.1 Juniper with Shrub Understory Community

Junipers, sand sagebrush, snakeweed, Bigelow sagebrush, rubber rabbitbrush, Mormon tea, antelope bitterbrush, blue grama, sand dropseed, indian ricegrass, pinyon pine.

#### State 4

#### 4 Disturbed Surface State

# Community 4.1

# 4.1 Tree/Shrub with Introduced Annual Community

Junipers, rabbitbrush, snakeweed, big sagebrush, Mormon tea, native and introduced annuals.

# Transition T1A State 1 to 2

Repetitive, high utilization of palatable grass species have give sagebrush a competitive advantage.

# Transition T1B State 1 to 3

Loss of grass cover with an increase of shrubs along with juniper encroachment.

# Restoration pathway R2A State 2 to 1

A disturbance to set the sagebrush back along with management to improve colonization of palatable grass species.

# Transition T2A State 2 to 3

Juniper encroachment

# Transition T2B State 2 to 4

Excessive bare ground causing soil erosion.

# Restoration pathway R3A State 3 to 1

Fire and/or mechanical treatments on juniper and shrubs along with long-term management to promote colonization of grass species.

# Transition T3A State 3 to 4

Increased bare soil and soil erosion.

# Restoration pathway R4A State 4 to 2

Stabilization of soil from improved plant cover and organic matter.

# Restoration pathway R4B State 4 to 3

Improved plant cover and soil health.

#### **Citations**