# Ecological site group DX035X02EESG19 Arizona Strip - Ustic Aridic - Limestone or Loamy Slopes

Last updated: 10/31/2022 Accessed: 04/19/2024

## **Key Characteristics**

- Arizona Strip (E)
- Site parent material is limestone or loamy.
- Soils are ustic aridic, or precipitation is within the 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%. Site soils are ustic aridic or within a 10-14" precipitation zone.

#### 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 limestone. Soils are loamy. Site consists of gently dipping shallow residuum weathered from sedimentary rocks eroded into steep cliff faces and canyons.

#### **Vegetation dynamics**

This site is a complex of trees, shrubs, forbs, and grasses. In the original plant community there is a mixture of cool and warm season plants. The plant community is composed of relatively equal amounts of shrubs, grasses, and forbs. It can be variable due to site conditions (aspect, soil depth, run-on & run-off areas).

Plants most likely to increase or invade when the site deteriorates are big sagebrush, snakeweed, juniper and cacti.

#### **Major Land Resource Area**

MLRA 035X Colorado Plateau

#### **Subclasses**

- R035XC302AZ—Sedimentary Cliffs 10-14" p.z.
- R035XC308AZ–Limestone/Sandstone Hills 10-14" p.z.
- R035XC310AZ-Limy Slopes 10-14" p.z.
- R035XC343AZ-Limestone/Sandstone Cliffs 10-14" p.z.

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

22338524, 22338542, 22338548, 22341620, 22341040, 22395212, 22395213, 22395211, 22394974, 22395215, 22395216, 22395108, 22395107, 22395201, 22395200, 22395199

### **Stage**

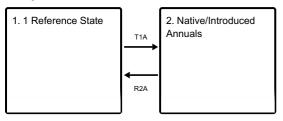
Provisional

#### **Contributors**

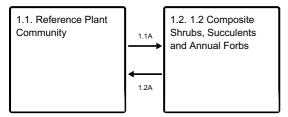
**Curtis Talbot** 

#### State and transition model

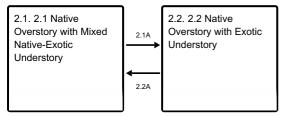
#### **Ecosystem states**



#### State 1 submodel, plant communities



#### State 2 submodel, plant communities



## State 1 1 Reference State

## Community 1.1 Reference Plant Community

This site is a complex of trees, shrubs, forbs, and grasses. In the original plant community there is a mixture of cool and warm season plants. The plant community is composed of relatively equal amounts of shrubs, grasses, and forbs. It can be variable due to site conditions (aspect, soil depth, run-on & run-off areas). Plants most likely to increase or invade when the site deteriorates are big sagebrush, snakeweed, juniper and cacti.

## Community 1.2

#### 1.2 Composite Shrubs, Succulents and Annual Forbs

Composite Shrub, Succulents, and Annual Forbs – Composite shrubs such as broom snakeweed, and succulents such as prickly pear increase over Big sagebrush and other palatable shrubs. Perennial bunchgrasses decrease in relation to annual grasses and forbs.

### Pathway 1.1A

## Community 1.1 to 1.2

Repetitive, high utilization of palatable grasses have given shrubs and succulents a competitive advantage.

## Pathway 1.2A Community 1.2 to 1.1

A set-back to shrubs and succulents along with management to improve palatable grass species.

#### State 2

#### **Native/Introduced Annuals**

## Community 2.1

## 2.1 Native Overstory with Mixed Native-Exotic Understory

Native Overstory with Mixed Native – Exotic Understory – Exotic annual grasses are present in the plant community but the amount and composition of native perennial grasses remains unchanged. Introduced annuals can range in composition from 2-10 percent in the total plant community composition.

## Community 2.2

## 2.2 Native Overstory with Exotic Understory

Native Overstory with Exotic Understory Exotic annual grasses dominate understory within the plant community. Introduced annuals can range in composition from 2-20 percent in the total plant community composition.

## Pathway 2.1A Community 2.1 to 2.2

Dominance of introduced invasive species in the understory.

## Pathway 2.2A Community 2.2 to 2.1

Management to give native species an opportunity to colonize.

## Transition T1A State 1 to 2

Invasion of introduced annuals

## Restoration pathway R2A State 2 to 1

Once introduced annuals have invaded it may not be possible to return to reference.

### **Citations**