# Ecological site group DX035X02DESG10 Grand Canyon - Ustic Aridic - Volcanic or Clayey Hills

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

#### **Key Characteristics**

- Grand Canyon (D)
- Site parent material is volcanic or clayey.
- Site soils are ustic aridic or within a 10-14" precipitation zone.
- Site is and/or located on a hill 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 on a hill with slopes >15%. Physiography is complex.

#### 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 basalt or andesite. Soils are clay loam or clayey. Site consists of gently dipping shallow or moderately deep residuum weathered from volcanic rocks eroded into hills, steep cliff faces and canyons.

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

MLRA 035X Colorado Plateau

#### **Subclasses**

- R035XC303AZ-Cinder Hills 10-14" p.z.
- R035XC347AZ-Basalt Hills 10-14" p.z. Cobbly

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

22341046, 22341047, 22394966, 22394967

#### Stage

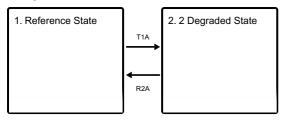
Provisional

#### **Contributors**

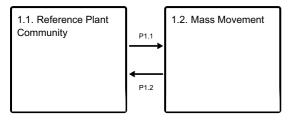
**Curtis Talbot** 

#### State and transition model

#### **Ecosystem states**



#### State 1 submodel, plant communities



#### State 1 Reference State

## Community 1.1 Reference Plant Community

Mix of grass, forbs, and shrubs

## **Community 1.2 Mass Movement**

Movement of material along slope churns up soil and plants.

### Pathway P1.1 Community 1.1 to 1.2

Mass movement of soil.

### Pathway P1.2 Community 1.2 to 1.1

Long term soil stability and plant growth.

### State 2 2 Degraded State

Excessive bare soil and erosion.

## Transition T1A State 1 to 2

Loss of plant cover due to excessive grazing which could be associated with mass movement.

## Restoration pathway R2A State 2 to 1

Soil stability and plant recovery.

### Citations