Ecological site group DX035X02DESG14
Grand Canyon - Ustic Aridic - Sandstone or Sandy Loam Upland

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Key Characteristics

- Grand Canyon (D)
- Site parent material is sandstone or soil is a sandy loam.
- Site soils are ustic aridic or within a 10-14" precipitation zone.
- 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%. 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 sandstone. Soils are sandy or sandy loams. Site consists of gently dipping shallow residuum weathered from sedimentary rocks eroded into steep cliff faces and canyons.

Vegetation dynamics

The dominant aspect of the site is a sparse stand of trees with shrubs and mid grasses.
Utah juniper and singleleaf pinyon are the trees. Major shrubs are blackbrush, green mormontea and banana yucca. Dominant grasses include black grama, bottlebrush squirreltail and indian ricegrass.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- DX035X01I117–Sandy Loam Upland 10-14" p.z.
- R035XC346AZ–Shallow Sandy Loam 10-14" p.z.

Correlated Map Unit Components

22394080, 22395039, 22395101, 22395165

Stage

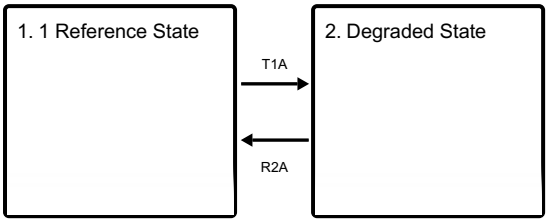
Provisional

Contributors

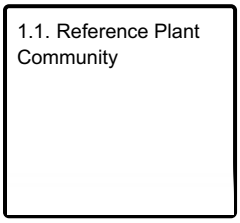
Curtis Talbot

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1
1 Reference State

Community 1.1
Reference Plant Community

The dominant aspect of the site is a sparse stand of trees with shrubs and mid grasses. Utah juniper and singleleaf pinyon are the trees. Major shrubs are blackbrush, green mormontea and banana yucca. Dominant grasses include black grama, bottlebrush squirreltail and indian ricegrass.

State 2
Degraded State

Loss of plant, soil, and water resources.

Transition T1A
State 1 to 2

Excessive herbivory coupled with drought and lengthening of the fire regime leads to bare ground, erosion and degradation.

Restoration pathway R2A
State 2 to 1

Long term restoration of soil, plants, and water resources including the re-establishment of the fire regime.

Citations