

Ecological site group DX035X02DESG07

Grand Canyon - Typic Ustic - Limestone or Loamy Upland

Last updated: 10/26/2022
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Key Characteristics

- Grand Canyon (D)
- Site parent material is limestone or dolomite, or soil is loamy.
- Site soils are within a 17-25" 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 within a 17-25" 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 limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

Vegetation dynamics

This site was developed under historic Colorado Plateau climatic conditions and reflects the natural influences of herbivores, climate fluctuations and occasional fire.

This community has an overstory layer dominated by mature and widely-spaced ponderosa pine. The shrub layer is intermittent. Grasses are dominantly cool-season perennials and make up a substantial part of the vegetation. Perennial and annual forbs are also well represented.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- F035XH805AZ–Loamy Hills 17-25" p.z. (PIPO)
- F035XH806AZ–Loamy Terrace 17-25" p.z. (PIPO)
- F035XH808AZ–Loamy Upland 17-25" p.z. (PIPO)
- R035XH807AZ–Loamy Upland 17-25" p.z.

Correlated Map Unit Components

22395255, 22395256, 22394873, 22394850, 22394852, 22394867, 22394865, 22394857, 22394860, 22394859, 22394978, 22394977

Stage

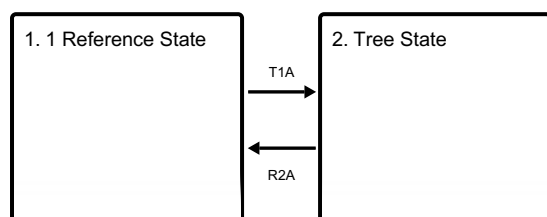
Provisional

Contributors

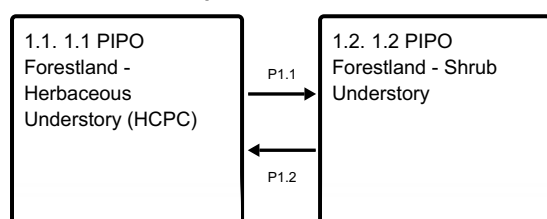
Curtis Talbot

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1

1 Reference State

Community 1.1

1.1 PIPO Forestland - Herbaceous Understory (HCPC)

This site was developed under historic Colorado Plateau climatic conditions and reflects the natural influences of herbivores, climate fluctuations and occasional fire. This community has an overstory layer dominated by mature and widely-spaced ponderosa pine. The shrub layer is intermittent. Grasses are dominantly cool-season perennials and make up a substantial part of the vegetation. Perennial and annual forbs are also well represented.

Community 1.2

1.2 PIPO Forestland - Shrub Understory

Fire suppression and grazing have decreased the amount of grass understory and various shrubs have increased on the site.

Pathway P1.1

Community 1.1 to 1.2

Fire suppression and grazing have decreased the amount of grass understory and various shrubs have increased on the site.

Pathway P1.2

Community 1.2 to 1.1

Prescribed fire and grazing management that promotes colonization of grasses.

State 2

Tree State

This state has a very dense overstory of ponderosa pine trees. Much of the understory vegetation is excluded from this plant community. It takes large amounts of energy to return to the reference plant community.

Transition T1A

State 1 to 2

Long term fire suppression coupled with excessive grazing which creates bare areas and loss of competition for seed germination.

Restoration pathway R2A

State 2 to 1

A mix of mechanical treatment, prescribed fire, and grazing management to promote palatable grass species and cover.

Citations