Ecological site group DX035X02EESG21
Arizona Strip - Aridic Ustic - Limestone or Loamy Slopes

Last updated: 10/31/2022
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Key Characteristics

- Arizona Strip (E)
- Site parent material is limestone or loamy.
- Soils are aridic ustic, or precipitation is within the range of 13 to 17 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 aridic ustic or within a 14-18" 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 characterized by an overstory dominance of trees with an understory of shrubs and herbaceous species. Tree canopy is typically 25-40% with a range of 15 to 55% depending on aspect, elevation, slopes, rock cover and soil depth. Major overstory species are pinyon and juniper with scattered large shrubs including Freemont barberry, Stansbury cliffrose, turbinella oak and Utah serviceberry. Major understory species include muttongrass, blue grama, squirreltail, galleta, Wyoming big sagebrush, broom snakeweed, Mormon tea and yucca. Amounts and composition of understory species will vary depending on tree canopy, elevation, aspect, rock cover and drought.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- F035XF613AZ–Limestone Hills 13-17" p.z. (PIED, JUOS)

Correlated Map Unit Components

22338516, 22338515, 22338638, 22338662, 22338664

Stage

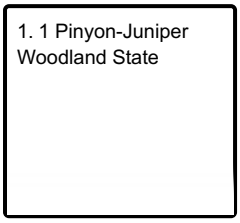
Provisional

Contributors

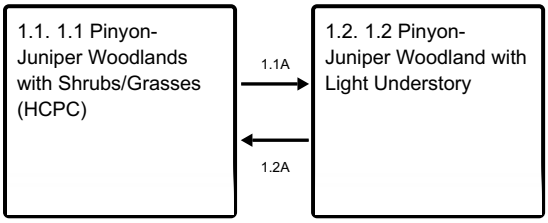
Curtis Talbot

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1
1 Pinyon-Juniper Woodland State

This state is characterized by an overstory dominance of trees with an understory of shrubs and herbaceous species. Tree canopy is typically 25-40% with a range of 15 to 55% depending on aspect, elevation, slopes, rock cover and soil depth. Major overstory species are pinyon and juniper with scattered large shrubs including Freemont barberry, Stansbury cliffrose, turbinella oak and Utah serviceberry. Major understory species include muttongrass, blue grama, squirreltail, galleta, Wyoming big sagebrush, broom snakeweed, Mormon tea and yucca. Amounts and composition of understory species will vary depending on tree canopy, elevation, aspect, rock cover and drought.

Community 1.1
1.1 Pinyon-Juniper Woodlands with Shrubs/Grasses (HCPC)

The Pinyon-Juniper Woodland with Shrubs/Grasses Plant Community(HCPC) has a tree canopy cover that typically ranges from 25% to 45% over grasses, forbs, shrubs and small trees. The dominate aspect of this plant community is a pinyon-juniper woodland with Wyoming big sagebrush, cliffrose, muttongrass and blue grama. On this site the herbaceous species and shrubs have developed in competition with tree species. Understory production potential varies with tree canopy density.

Community 1.2
1.2 Pinyon-Juniper Woodland with Light Understory

This plant community phase the tree canopy that is greater than 35 percent with a lighter understory of shrubs and grasses. Grass and shrub diversity has declined with tree canopy increase. Grasses that will most likely decline are squirreltail, blue grama, junegrass and galleta. Shrub species likely to decline are Wyoming sagebrush and cliffrose. Both perennial and annual forbs will also reduce.

Pathway 1.1A
Community 1.1 to 1.2

Grass and shrub density and diversity has declined with tree canopy increase.

Pathway 1.2A
Community 1.2 to 1.1

A disturbance for trees along with management to improve grass and shrub species.

Citations