Ecological site group DX035X03CESG05 Defiance Plateau - Sandy

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Key Characteristics

- Defiance Plateau
- Soils not sodic
- Soils not saline
- Soils not limy
- Soils not silty
- Soils sandy

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

These occurs on floodplains and low floodplain terraces of perennial or intermittent streams with perennial or seasonal subsurface flows. The site receives additional moisture from occasional, very brief periods of flooding.

Climate

The soil temperature regime is mesic and the soil moisture regime is typic aridic. Annual precipitation usually ranges from 10 to 14 inches per year. Approximately 60 percent of the rainfall comes from October through May as gentle rain and snow from Pacific storms which may last for a couple of days. The rest of the rainfall comes during the summer monsoon season from June through September as spotty, brief, intense thunderstorms. The mean annual air temperature ranges from 50 to 55 degrees F.

Soil features

The soils are very deep and moderately well drained. They are formed in alluvium derived from sandstone, granite and quartzite. Surface textures normally range from sandy loam to very fine sandy loam, but can include coarser textures. Subsurface textures include loam, fine sandy loam, and loamy sand. Stratified layers below 40 inches may have greater then 35% rock fragments and more than 15% clay. Hazard of water erosion is moderate to high and hazard of wind erosion is moderate to high. Soil surface rock fragments are uncommon unless the surface has eroded to a coarse alluvial layer. Rock fragments are more common on surface of active stream channel.

Vegetation dynamics

Please see associated ecological sites under subclasses to view state and transition models.

Reference states for bottom land sites are dominated by a canopy of Rio Grande cottonwood (*Populus deltoides* ssp. wislizenii, with lesser amounts of red willow (*Salix laevigata*) and other native willows. The understory is a mix of shrubs such as redosier dogwood (*Cornus sericea*) and chokecherry (Prunus spp.) with cool-season and warm season grasses and forbs. Overstory canopy cover can come close to 90 percent, but will fluctuate with flood events under natural conditions. These fluctuations allow gaps in the canopy that are important for the recruitment of young cottonwoods and willows into the overstory. The introduction of invasive species can lead to states dominated by non-native trees such as salt cedar and/or Russian olive. The understory includes a mix of native herbaceous species with non-native grasses, including ripgut brome (*Bromus diandrus*), cheatgrass (*Bromus tectorum*) and Kentucky bluegrass (*Poa pratensis*).

Major Land Resource Area

MLRA 035X Colorado Plateau

Subclasses

- F035XC332AZ–Sandy Bottom 10-14" (PODEW, SAEX), Perennial (Provisional)
- R035XA118AZ-Sandy Upland 10-14" p.z.
- R035XB216AZ–Sandy Wash 6-10" p.z.
- R035XB217AZ-Sandy Upland 6-10" p.z.
- R035XC377AZ-Sandy Slopes 10-14" p.z.

Correlated Map Unit Components

22397181, 22397136, 22529497, 22529681, 22529686

Stage

Provisional

Contributors

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State and transition model

Citations