

Ecological site group DX035X03CESG07

Defiance Plateau - Shale or Clayey

Last updated: 10/31/2022
Accessed: 04/19/2024

Key Characteristics

- Defiance Plateau
- Soils not sodic
- Soils not saline
- Soils not limy
- Soils not silty
- Soils not sandy
- Parent Material is Shale or soil is Clayey

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

This site is located on summits, footslopes, shoulders and fan terraces of hills, mesas and plateaus. It also occurs on on alluvial fans on valley sides and stream terraces on valley floors.

Climate

The climate of this Common Resource Area is semiarid with warm summers and cool winters. The mean annual precipitation ranges from 13 – 17 inches, but it is very erratic, often varying substantially from year to year. The majority of the precipitation comes from October through April. This precipitation comes as gentle rain or snow from frontal storms coming out of the Pacific Ocean. Snow is common from November through February. Generally no more than a few inches of snow accumulates, melting within a few days, but may last a week or more. The remaining precipitation comes from July through September as spotty, unreliable and sometimes violent thunderstorms. The moisture for this precipitation originates in the Gulf of Mexico (and the Pacific Ocean in the fall) and flows into the area on the north end of the Mexican monsoon. Late May through late June is generally a dry period. The mean annual air temperature ranges from 47 to 49 degrees Fahrenheit (F). The frost-free period (air temperature > 32 degrees F) ranges from 113 to 144 days (@ 50 percent probability). Strong winds are common, especially in the spring.

Soil features

These soils have clay loam surface textures. Subsoil textures are clay loam and clay. Parent materials derive mainly from shale alluvium, but also colluvium and residuum from shale, siltstone and sandstone.

Vegetation dynamics

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

These are forest sites dominated by juniper and pinyon trees with a canopy of 30 to 50 percent. The plant community composition for production is mostly trees (40%), grasses (30%), shrubs (25%) and forbs (5%). Unmanaged grazing, drought and lack of fire/exclusion can result in a pinon juniper state with a sparse understory. These plant communities are characterized by an eroded surface with a woodland overstory of pinyon and juniper and a sparse understory of shrubs, very few grasses and forbs. There is high bare ground in this plant community due to a loss of perennial and shrub cover. The soil surface is eroded and increased rills and sheet flow on steeper

slopes. This has potential for compacted soils due to low rock fragments and trailing/h hoof actions for continuous livestock use.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- DX035X01I104–Clay Loam Wash 10-14" p.z.
- DX035X03B630–Clay Loam Upland 13-17" p.z. (PIED)
- DX035X03G602–Clay Loam Upland 13-17" p.z. (PIED, JUOS)
- R035XB220AZ–Shale Upland 6-10" p.z.
- R035XC306AZ–Clayey Upland 10-14" p.z.
- R035XC307AZ–Clay Loam Upland 10-14" p.z.
- R035XC320AZ–Shale Hills 10-14" p.z.
- R035XF603AZ–Clay Loam Upland 13-17" p.z.
- R035XF604AZ–Clayey Upland 13-17" p.z.

Correlated Map Unit Components

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Stage

Provisional

Contributors

Curtis Talbot

State and transition model

Citations