

Ecological site group DX035X03CESG04

Defiance Plateau - Silty

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Key Characteristics

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

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 ecological site occurs on level to nearly level plateaus, toeslopes and broad open valleys in forests. Soils are very deep. Surface textures range from silt to silt loam. Slopes range from 0 to 15 percent.

Climate

Winter-Summer moisture ratios typically range from 70:30 to 60:40. Late spring is usually the driest period and early fall moisture can be sporadic. Summer rains fall from June through September; moisture originates in the Gulf of Mexico and creates convective, usually brief, intense thunderstorms. Cool season moisture from October through May tends to be frontal; it originates in the Pacific and the Gulf of California and falls in widespread storms with longer duration and lower intensity. Precipitation generally comes as snow from October into April. Snowpack can persist for 3-4 months, although it may disappear in exposed areas during prolonged dry weather. Summer daytime temperatures are typically 80-90 F but can exceed 95 F. Winter temperatures around 0 F are common and can reach -25 F.

Soil features

The soils on this ecological site are very deep. Surface textures range from silt to silt loam. Subsurface texture is loam, stony sandy clay loam, and very gravelly fine sandy loam. Parent material is alluvium and eolian material derived from sandstone, siltstone and quartz. Soil formation is residuum and alluvium materials from sandstone and diorite. Water erosion hazard is severe; wind erosion hazard is slight. Soils are non-saline and non-sodic. pH range is 6.1-7.3. Soil temperature regime is mesic; moisture regime is typic ustic.

Vegetation dynamics

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

The reference plant community for these sites is a cool season grass and shrub community. The most prevalent cool season grasses are western wheatgrass, Arizona fescue, muttongrass and squirreltail. Black sagebrush and Wyoming sagebrush are the dominant shrub component. A variety of forbs are present on the site but they account for a small percentage of the plant community. Ongoing disturbance has changed much of this site to a black sagebrush dominated plant community. This state has loss of biotic function and integrity with an increase of black sagebrush with introduced annual grasses and forbs.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XH813AZ–Silty Upland 17-25" p.z.

Stage

Provisional

State and transition model

Citations