

Ecological site group DX035X03BESG08

Chuska Mountains - Sandstone or Sandy Loam

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

Key Characteristics

- Chuska Mountains
- Soils not sodic
- Soils not saline
- Soils not limy
- Soils not silty
- Soils not sandy
- Parent Material is Sandstone or soil is Sandy Loam

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 sites are found on hills, plateaus and mesas of limestone and calcareous sandstone parent material, and structural benches and knolls of undulating plateaus. Slopes generally range from 0 to 15 percent, but there can be small areas with steeper slopes within the site. This site does not benefit significantly from run-on moisture.

Climate

The climate of this land resource unit is semiarid with warm summers and cool winters. Winter-Summer moisture ratios are typically 70:30 on the west side and shift to 60:40 on the east side. The mean annual precipitation ranges from 13 – 17 inches, but 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 (at 50 percent probability). Strong winds are common, especially in the spring.

Soil features

The soils are very shallow and shallow. The parent material is residuum from limestone and sandstone. Surface textures of the soils range from gravelly very fine sandy loam to very gravelly loam, and loam. Subsoil textures include horizons of gravelly to extremely cobbly sandy clay loam and sandy clay loam, and sandy loam to loam. There may be an argillic horizon that starts at 1 to 7 inches and descends to 6 to 12 inches. The available water holding capacity is very low. Wind erosion hazard is very slight and the water erosion hazard is slight to moderate. The soil is non-saline and non-sodic, with pH range of 6.6-8.4. If present, an indurated lime-cemented pan occurs from 16-22 inches. Sandstone bedrock occurs from 6 to 20 inches.

Vegetation dynamics

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

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- DX035X01I117–Sandy Loam Upland 10-14" p.z.
- DX035X03B628–Sandy Loam Upland (JUOS, PIED) 13-17" p.z.
- DX035X03B804–Shallow Sandy Loam 17-25" p.z. (PIPO)
- DX035X03B811–Sandy Loam Upland 17-25" p.z. (PIPO)
- DX035X03B818–Sandy Loam Slopes 17-25" p.z. Cobbly (PIPO, POTR5)
- DX035X03B826–Sandstone Upland 17-25" p.z. (PIPO)
- DX035X03B827–Sandstone Hills 17-25" p.z. (PIPO)
- DX035X04B204–Sandstone Upland 6-10" p.z.
- DX035X04B314–Sandstone Upland 10-14" p.z.
- F035XC322AZ–Sandstone Upland 10-14" p.z. (JUOS)
- F035XF627AZ–Sandstone Upland (JUOS, PIED) 13-17" p.z. (Provisional)
- F035XF629AZ–Sandstone Hills 13-17" p.z. (PIED)
- R035XB030NM–Sandy Loam Upland 6-10"
- R035XB219AZ–Sandy Loam Upland 6-10" p.z.
- R035XC317AZ–Sandy Loam Upland 10-14" p.z.
- R035XF606AZ–Sandy Loam Upland 13-17" p.z.
- R035XF608AZ–Limestone / Sandstone Upland 13-17" p.z.
- R035XH814AZ–Sandstone Upland 17-25" p.z. Cobbly
- R035XH823AZ–Sandstone Upland 17-25" p.z.

Correlated Map Unit Components

22529426, 22529427, 22529638, 22529432, 22529441, 22529765, 22529697, 22980618

Stage

Provisional

Contributors

Curtis Talbot

State and transition model

Citations