Ecological site group DX035X02GESG13 Marble Canyon - Typic Aridic - Limestone or Loamy Upland 7-11" p.z.

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Key Characteristics

- Marble Canyon (G)
- Soil at site is sedimentary or loamy.
- Site soils are within a 7-11" precipitation zone.
- 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 Marble Canyon, and more generally, the northeast.

Climate

Site soils are typic aridic or within a 6-10" precipitation zone and cold desert associated with blackbrush. No clear pattern exists in the seasonal timing of precipitation, generally driest in late spring.

Soil features

Parent material is limestone. Soils are loamy. Site consists of limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

Vegetation dynamics

This site is a grassland community of mid and short grasses with both cool and warm season species present. Shrubs are interspersed and can be sparse. In the potential plant community there may be a mixture of both cool and warm season grasses. Ground cover is good.

The plant species most likely to increase on this site when it is disturbed are; wolfberry, sand dropseed, burrograss, and threeawn. Russian thistle and cheatgrass are invaders on this site.

Major Land Resource Area

MLRA 035X Colorado Plateau

Subclasses

- R035XD409AZ–Loamy Upland 7-11" p.z.
- R035XD415AZ–Shallow Loamy 7-11" p.z.

Stage

Provisional

State and transition model

Ecosystem states



State 1 1 Reference State

This site is a grassland community of mid and short grasses with both cool and warm season species present. Shrubs are interspersed and can be sparse. In the potential plant community there may be a mixture of both cool and warm season grasses. Ground cover is good.

State 2 Degraded

The plant species most likely to increase on this site when it is disturbed are; wolfberry, sand dropseed, burrograss, and threeawn. Eventually with loss of plant cover and accelerated erosion the site becomes a home for invasive annuals such as Russian thistle and cheatgrass.

Transition T1A State 1 to 2

Slow drivers such as repetitive, high utilization of plant species, especially during drought, decreases cover, soil organic matter which eventually leads to accelerated erosion.

Restoration pathway R2A State 2 to 1

A long process of stabilizing soil, colonizing perennial plants, and improving moisture retention. This improves ecological processes and eventually the health of the site.

Citations