Ecological site group DX035X02GESG20 Marble Canyon - Typic Aridic - Sandstone or Sandy Loam Upland

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Key Characteristics

- Marble Canyon (G)
- Site parent material is sandstone or soil is a sandy loam.
- Site soils are typic aridic or within a 6-10" 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. No clear pattern exists in the seasonal timing of precipitation, generally driest in late spring.

Soil features

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

Vegetation dynamics

The dominant aspect of this site is a low shrub (blackbrush and fourwing saltbush), mixed with grasses (Indian ricegrass, galleta and sand dropseed).

Major Land Resource Area

MLRA 035X Colorado Plateau

Subclasses

- DX035X04B204–Sandstone Upland 6-10" p.z.
- R035XB234AZ–Sandstone Upland 6-10" p.z. Warm
- R035XB235AZ–Sandy Loam Upland 6-10" p.z. Warm

Correlated Map Unit Components

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Stage

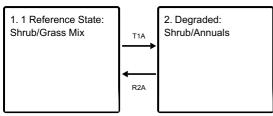
Provisional

Contributors

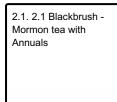
Curtis Talbot

State and transition model

Ecosystem states



State 2 submodel, plant communities



State 1 1 Reference State: Shrub/Grass Mix

The dominant aspect of this site is a low shrub (blackbrush and fourwing saltbush), mixed with grasses (Indian ricegrass, galleta and sand dropseed).

State 2 Degraded: Shrub/Annuals

This site is mostly and overstory of blackbrush with a sparse understory of introduced species and annuals.Bare ground and erosion is prevalent.

Community 2.1 2.1 Blackbrush - Mormon tea with Annuals

This plant community is dominated by blackbrush, mormon tea with rabbitbrush and/or snakeweed. Perennial grasses are sparse and only present in small amounts. Common grasses found are galleta, sand dropseed and Indian ricegrass. Annuals grasses and forbs, both native and non-native, are present in small to moderate amounts. There are moderate amounts of bare ground (60-85%) due to reduce perennial herbaceous cover. Annuals can make up to 25% of the the total plant communities composition.

Transition T1A State 1 to 2

Slow drivers such as repetitive, high utilization of palatable species, especially during drought decreases the health of soil and hydrology. This coupled with the loss of soil due to erosion and the proliferation of introduced annuals have degraded this site.

Restoration pathway R2A State 2 to 1

A slow process of opening the shrub canopy and managing for the stabilizing of soil and colonization of perennial grass species.

Citations