Ecological site group DX035X02GESG11
Marble Canyon - Typic Aridic - Limestone or Loamy Cliffs

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Key Characteristics

- Marble Canyon (G)
- Soil at site is sedimentary or loamy.
- Site soils are typic aridic or within a 6-10" precipitation zone.
- Site is and/or located on a hill 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 on a hill 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 limestone. Soils are loamy. Site consists of gently dipping shallow residuum weathered from sedimentary rocks eroded into steep cliff faces and canyons.

Vegetation dynamics

This plant community is a diverse shrubland with grasses and a few forbs. The dominant plants are: shadscale saltbush, black grama, Bigelow sagebrush, Torrey Mormon tea, and fourwing saltbush.

There is 2-10% plant basal cover and 10-45% plant canopy cover on the site. Cover is highly variable depending on amount of rock cover, slope and aspect.

The production amount varies depending upon how much rock outcrop and the aspect of the site. The maximum production amount of 350 pounds per acre may only occur in areas with the highest amount of soil and the least amount of rock outcrop.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

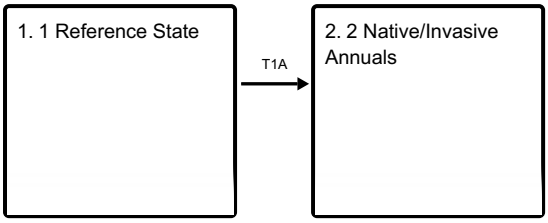
- R035XB240AZ–Limestone/Sandstone Cliffs 6-10" p.z.
- R035XE516AZ–Sedimentary Cliffs 6-10" p.z.

Stage

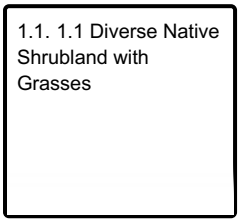
Provisional

State and transition model

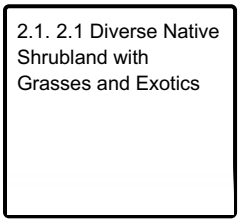
Ecosystem states



State 1 submodel, plant communities



State 2 submodel, plant communities



State 1
1 Reference State

This ecological site is characterized by steep slopes with a diverse shrubland dominated by shadscale saltbush, Bigelow sagebrush, Torrey Mormon tea, and fourwing saltbush.

Community 1.1
1.1 Diverse Native Shrubland with Grasses

This plant community is a diverse shrubland with grasses and a few forbs. The dominant plants are: shadscale saltbush, black grama, Bigelow sagebrush, Torrey Mormon tea, and fourwing saltbush. There is 2-10% plant basal cover and 10-45% plant canopy cover on the site. Cover is highly variable depending on amount of rock cover, slope and aspect. The production amount varies depending upon how much rock outcrop and the aspect of the site. The maximum production amount of 350 pounds per acre may only occur in areas with the highest amount of soil and the least amount of rock outcrop.

State 2
2 Native/Invasive Annuals

This state is characterized by the establishment of exotic annuals, such as red brome, cheatgrass and Russian thistle. Invasion of annuals can occur with or without disturbance, regardless of management.

Community 2.1
2.1 Diverse Native Shrubland with Grasses and Exotics

This community phase is very similar to the plant community in 1.1, but non-native species have established themselves. Non-native and native annuals composition ranges from 1 to 15 percents. Common exotics found on

this site include cheatgrass, red brome and Russian Thistle.

Transition T1A
State 1 to 2

This state is characterized by the establishment of exotic annuals, such as red brome, cheatgrass and Russian thistle. When this occurs it may not be possible to restore the site to reference.

Citations