Ecological site group DX035X02GESG04
Marble Canyon - Typic Aridic - Gypsum Upland

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Key Characteristics

- Marble Canyon (G)
- site is gypsic
- site soils are typic aridic or within 6 to 10 inch precipitation range
- site slopes are upland, 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 gypsiferous sedimentary. 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

Grass-Shrubland

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

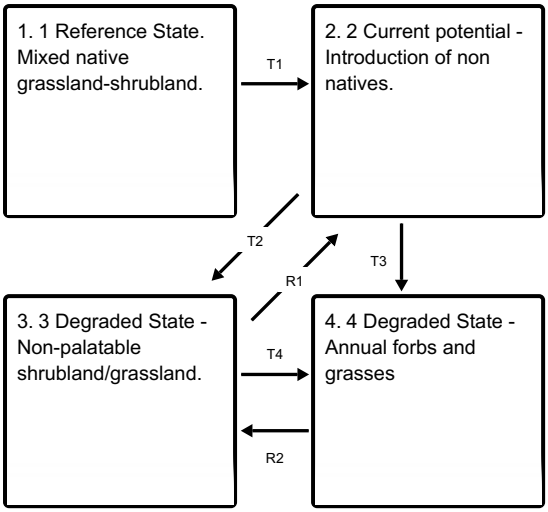
- R035XD405AZ–Gypsum Upland 7-11" p.z.

Stage

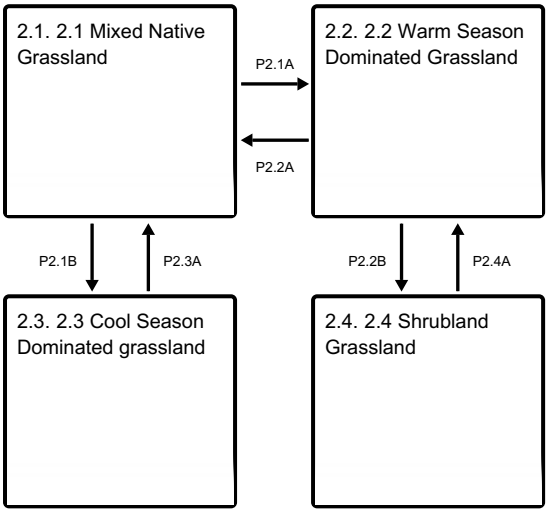
Provisional

State and transition model

Ecosystem states



State 2 submodel, plant communities



State 1
1 Reference State. Mixed native grassland-shrubland.

State 2
2 Current potential - Introduction of non natives.

This state is similar to reference but have introduced species.

Community 2.1
2.1 Mixed Native Grassland

Community 2.2
2.2 Warm Season Dominated Grassland

Community 2.3
2.3 Cool Season Dominated grassland

Community 2.4
2.4 Shrubland Grassland

Pathway P2.1A
Community 2.1 to 2.2

Repetitive high utilization of cool season species.

Pathway P2.1B
Community 2.1 to 2.3

Fire sets the shrubs back along with management to colonize cool season species.

Pathway P2.2A
Community 2.2 to 2.1

Grazing management to promote colonization of cool season species.

Pathway P2.2B
Community 2.2 to 2.4

Shrub encroachment over time.

Pathway P2.3A
Community 2.3 to 2.1

Encroachment of shrubs into burned areas along with management to promote a diversity of cool and warm season species.

Pathway P2.4A
Community 2.4 to 2.2

Fire to open the shrub canopy.

State 3
3 Degraded State - Non-palatable shrubland/grassland.

State 4
4 Degraded State - Annual forbs and grasses

Transition T1
State 1 to 2

Invasion of introduced species. Once the site has been invaded it is unlikely it will return to reference.

Transition T2
State 2 to 3

Repetitive, high utilization of grass species.

Transition T3
State 2 to 4

Restoration pathway R1
State 3 to 2

Management to colonize palatable grass species.

Transition T4
State 3 to 4

Further degredation of soil, plant, and hydrology.

Restoration pathway R2
State 4 to 3

Starting a slow restoration of soil, plant, and hydrologic health.

Citations