Ecological site group DX035X02AESG01
North Slope of the Mogollon Rim - Ustic Aridic - Limestone or Loamy Bottoms

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Key Characteristics

- North Slope of the Mogollon Rim (A)
- Site parent material is limestone or dolomite, or soil is loamy.
- Site soils are ustic aridic or within a 10-14" precipitation zone.
- Site is and/or located in a wash.

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 bottoms with slopes <3%. Aspects tend toward northeast.

Climate

Site soils are ustic aridic or within a 10-14" precipitation zone. Precipitation comes predominantly from monsoonal patterns during months of July, August, and September.

Soil features

Parent Material Limestone or Dolomite, or Soil is Loamy. Site consists of broad alluvial deposits in washes, streams or fans, often deep.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

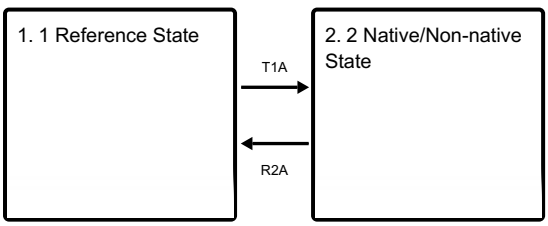
- DX035X01I112–Loamy Wash 10-14" p.z.

Stage

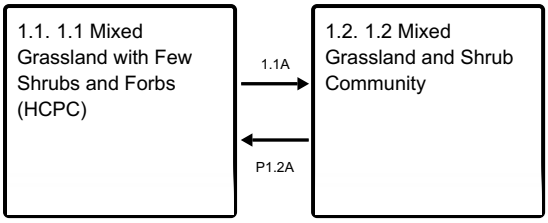
Provisional

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1
1 Reference State

The reference state and the reference (climax) plant community has been determined by study of relict areas or areas protected from excessive disturbances. Trends in plant communities going from unmanaged grazed areas to managed grazed areas, seasonal use pastures and historical accounts have also been used. This reference state is characterized as a native mixed grassland dominated by western wheatgrass and blue grama.

Community 1.1
1.1 Mixed Grassland with Few Shrubs and Forbs (HCPC)

This plant community is made up primarily of mid and short grasses with a relatively small percentage of forbs and shrubs. Western wheatgrass and blue grama are the dominant grasses with fourwing saltbush and winterfat as the common shrubs. Plant species most likely to invade or increase on this site when it deteriorates are rabbitbrush, broom snakeweed, annuals, cacti, and wooly groundsel. Unmanaged grazing during the winter and spring periods will decrease the cool season grasses, which are replaced by warm season, lower forage value grasses and shrubs.

Community 1.2
1.2 Mixed Grassland and Shrub Community

As disturbances increase, shrub species increase. This creates a mixed grassland/shrub community with galleta and blue grama as the dominant grasses. There may be scattered non-native species, but they do not alter the function and processes of this phase.

Pathway 1.1A
Community 1.1 to 1.2

A decrease in grass species and increases in shrubs due to long-term selective grazing.

Pathway P1.2A
Community 1.2 to 1.1

Long term grazing management that helps soil and plants recover shifting composition to greater grasses.

State 2
2 Native/Non-native State

This state is characterized by a decline in the site's ability to benefit from run-in moisture and/or flooding events. Active channels and gullies have changed the sites hydrologic function. Non-native species may occur along channels and drainageways, especially woody species such as tamarisk and Russian olive.

Transition T1A
State 1 to 2

Decreased plant production and composition with colonization of introduced invasive species. Once introduced species have invaded it is unlikely the site will be restored to reference.

Restoration pathway R2A
State 2 to 1

Mechanical, chemical, biological treatment of invasive species.Long term grazing management for improved palatable species production and cover. This may restore the site to reference.

Citations