Ecological site group DX035X02AESG10 North Slope of the Mogollon Rim - Ustic Aridic - Clayey Upland

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Key Characteristics

- North Slope of the Mogollon Rim (A)
- Soil is basalt, shale, or clayey.
- Site soils are ustic aridic or within a 10-14" 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 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

Basalt, shale or Clayey Subgroup. Site consists of limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

Vegetation dynamics

Site has a plant community made up primarily of mid and short grasses, forbs, small shrubs and scattered junipers. In the original plant community there is mixture of both cool and warm season grasses with a predominance of warm season.

Plant species most likely to invade or increase when this site starts to deteriorate are wooly groundsel, broom snakeweed, annuals and juniper. Continuous grazing use during the winter and spring periods will decrease the cool season grasses, which are replaced by warm season, lower forage value grasses and shrubs.

Major Land Resource Area

MLRA 035X Colorado Plateau

Subclasses

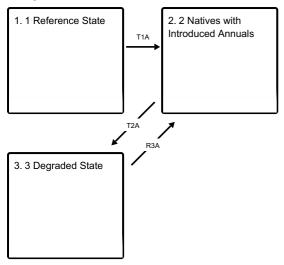
R035XA107AZ—Clay Loam Upland 10-14" p.z.

Stage

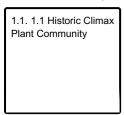
Provisional

State and transition model

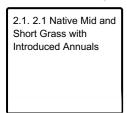
Ecosystem states



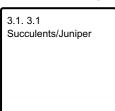
State 1 submodel, plant communities



State 2 submodel, plant communities



State 3 submodel, plant communities



State 1

1 Reference State

The reference state includes the Historic Climax Plant Community. The Historic Climax Plant Community is a perennial grassland with scattered shrubs and juniper.

Community 1.1

1.1 Historic Climax Plant Community

Site has a plant community made up primarily of mid and short grasses, forbs, small shrubs and scattered junipers. In the original plant community there is mixture of both cool and warm season grasses with a predominance of warm season. Plant species most likely to invade or increase when this site starts to deteriorate are wooly groundsel, broom snakeweed, annuals and juniper. Continuous grazing use during the winter and spring periods will decrease the cool season grasses, which are replaced by warm season, lower forage value grasses and shrubs.

State 2

2 Natives with Introduced Annuals

This plant community is similar to the Historic Climax Plant Community but non-native annuals such as cheatgrass and russin thistle are present in sufficient amounts to affect the biotic integrity of the site.

Community 2.1

2.1 Native Mid and Short Grass with Introduced Annuals

This community is similar to the Historic Climax Plant Community but includes non-native annual grasses and forbs such as cheatgrass and Russian thistle.

State 3

3 Degraded State

The biotic integrity of the site is changed due to the increase of cacti, shrubs and juniper.

Community 3.1

3.1 Succulents/Juniper

This community phase is dominated by Whipple cholla, prickly pear, Mormon tea, snakeweed, rabbitbrush and juniper.

Transition T1A State 1 to 2

Degradation along with appearance of introduced species. Once introduced species have invaded it is unlikely the site will be restored to reference.

Transition T2A State 2 to 3

Loss of plants, loss of soils, colonization of invasive species

Restoration pathway R3A State 3 to 2

Slow restoration of soil, plants, and site hydrology.

Citations