Ecological site group DX035X01IESG19
Little Colorado River Basin-sandstone or sandy loam moderately deep or deeper soils (low elevation)

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Key Characteristics

- Little Colorado River Basin
- Sandstone or sandy loam
- Moderately deep and deeper soils
- Low elevation, MAST >54 degrees F

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

This ecological site occurs in an upland position on gently sloping plains or alluvial fans. It neither benefits significantly from run-in nor experiences excessive runoff of moisture.

Climate

50-60% of moisture falls as rain from July through September and is the most effective moisture for plant growth. The remaining moisture comes as snow during the winter.

Mean temperatures for the hottest month (July) is 72 degrees F; for the coldest month (January) is 32 degrees F. Extreme temperatures of 105 degrees F and -26 degrees F have been recorded. Long periods with little or no effective moisture are relatively common.

Cool season plants begin growth in early spring and mature in the early summer. Warm season plants take advantage of summer rains and grow from July through September.

Soil features

These soils are moderately deep to deep with no plant root restricting layers. Surface horizons have textures of sandy loam to fine sandy loam about 4 to 10 inches thick. Subsurface horizons have textures ranging from clay to sandy loam. There may be thin strata of finer and/or coarser textures. The pH ranges from neutral to moderately alkaline (pH 6.6 to 8.4). Water erosion hazard is moderate and the wind erosion hazard is severe.

Vegetation dynamics

The reference state plant community is composed primarily of warm season mid-grasses and short grasses with a small percentage of cool season grasses and half-shrubs. Dominant grasses include blue grama, black grama, sand dropseed and galleta. Dominant shrubs include fourwing saltbush and Greene's rabbitbrush. Natural climatic variation result in changes in the amount of and ratio of both individual plants and warm season versus cool season plants, especially grasses.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

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

Correlated Map Unit Components

22396653, 22396649, 22999839, 22999846, 22999851

Stage

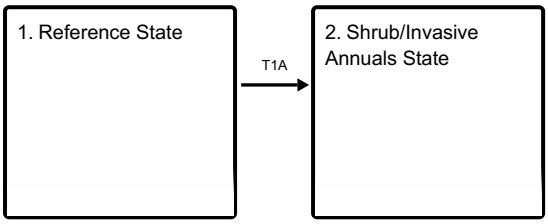
Provisional

Contributors

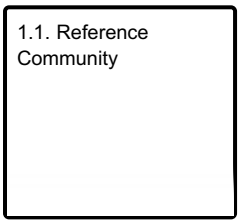
Curtis Talbot

State and transition model

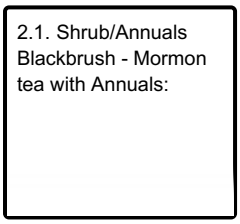
Ecosystem states



State 1 submodel, plant communities



State 2 submodel, plant communities



State 1
Reference State

The reference state plant community is composed primarily of warm season mid-grasses and short grasses with a small percentage of cool season grasses and half-shrubs.

Community 1.1
Reference Community

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
Shrub/Invasive Annuals State

Bare ground, shrub, and introduced annuals make up most of the area.

Community 2.1
Shrub/Annuals 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

A loss of soil health and site stability coupled with invasion of introduced species. Once introduced species have invaded it is unlikely the site can be restored to reference.

Citations