

Ecological site group DX035X02EESG11

Arizona Strip - Ustic Aridic - Basalt or Clay Loam Upland

Last updated: 10/26/2022
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Key Characteristics

- Arizona Strip (E)
- Site parent material is basalt or clayey
- Soils are ustic aridic or precipitation is within the range of 10 to 14 inches.
- 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 except along escarpments.

Climate

Site soils are ustic aridic or within a 10-14" precipitation zone. Precipitation comes monsoonal patterns during months of July, August, and September, and is supplemented by winter storm patterns from November through March.

Soil features

Parent material is basalt. Soils are clay loam or clayey. Site consists of limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

Vegetation dynamics

This site is a grassland community with scattered shrubs and a few forbs. The grasses are a mixture of cool and warm season grasses. The shrubs are fourwing saltbush at the lower elevation and precipitation areas and Wyoming big sagebrush at the higher elevation and precipitation areas.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- DX035X02E820–Basalt Upland 17-25" p.z. (PIPO, JUOS)
- R035XC301AZ–Basalt Upland 10-14" p.z.
- R035XC307AZ–Clay Loam Upland 10-14" p.z.

Correlated Map Unit Components

22338451, 22338572, 22338577, 22338597, 22340926, 22340927, 22340963, 22341004, 22341007, 22340829, 22340837, 22395037, 22394970

Stage

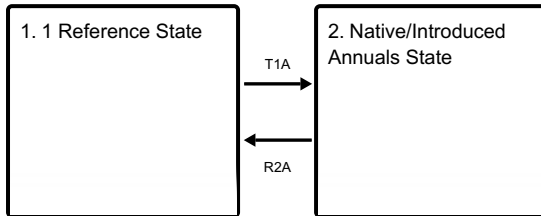
Provisional

Contributors

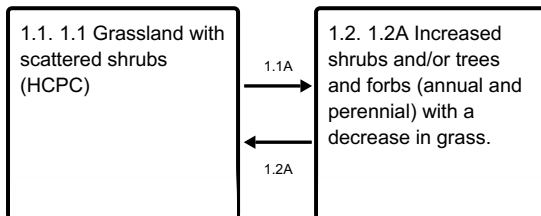
Curtis Talbot

State and transition model

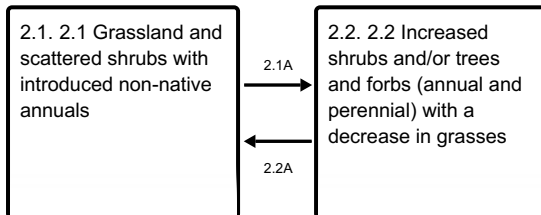
Ecosystem states



State 1 submodel, plant communities



State 2 submodel, plant communities



State 1

1 Reference State

This site is a grassland community with scattered shrubs and a few forbs. The grasses are a mixture of cool and warm season grasses. The shrubs are fourwing saltbush at the lower elevation and precipitation areas and Wyoming big sagebrush at the higher elevation and precipitation areas.

Community 1.1

1.1 Grassland with scattered shrubs (HCPC)

Common grasses: Blue grama, western wheatgrass, muttongrass, and needleandthread. Common shrubs: Fourwing saltbush, and Wyoming big sagebrush. The historic climax plant community consists of mid and short grasses with a small percentage of shrubs, half shrubs and forbs. Common plant species include: blue grama, needle and thread, western wheatgrass, muttongrass, fourwing saltbush and Wyoming big sagebrush.

Community 1.2

1.2A Increased shrubs and/or trees and forbs (annual and perennial) with a decrease in grass.

Shrubs that can increase: Wyoming big sagebrush, fourwing saltbush, broom snakeweed, and rabbitbrush. Juniper is the tree that increases on this site.

Pathway 1.1A

Community 1.1 to 1.2

Repetitive, high utilization on palatable grass species have given a competitive advantage to shrubs.

Pathway 1.2A

Community 1.2 to 1.1

Improved management where palatable grass species increase coupled with a disturbance such as fire to set back the shrubs.

State 2

Native/Introduced Annuals State

The plant communities in this state are similar to those in the reference state. Non-native annuals are now present in the plant communities and compete with the native species. Disturbances such as fire or drought may allow these non-native species to increase their dominance on the site.

Community 2.1

2.1 Grassland and scattered shrubs with introduced non-native annuals

Common grasses: blue grama, western wheatgrass, muttongrass, and needleandthread. Common shrubs: Fourwing saltbush and Wyoming big sagebrush. Minor to major component Russian thistle with the possibility of the presence of cheatgrass.

Community 2.2

2.2 Increased shrubs and/or trees and forbs (annual and perennial) with a decrease in grasses

Shrubs that can increase: Wyoming big sagebrush, fourwing saltbush, broom snakeweed, and rabbitbrush. Juniper is the tree that increases this site. Minor to major component of Russian Thistle with the possibility of cheatgrass.

Pathway 2.1A

Community 2.1 to 2.2

Repetitive, high utilization of palatable grass species giving shrubs a competitive advantage.

Pathway 2.2A

Community 2.2 to 2.1

A disturbance such as fire to set back the shrubs coupled with management to improve palatable grass species.

Transition T1A

State 1 to 2

Invasion of introduced species.

Restoration pathway R2A

State 2 to 1

Once introduced species have invaded it is highly unlikely to restore the reference state.

Citations