Ecological site group DX035X02EESG05
Arizona Strip - Typic Aridic - Sandy Upland

Last updated: 10/26/2022
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Key Characteristics

- Arizona Strip (E)
- Site is sandy.
- Soils are typic aridic, or precipitation is within the range of 6 to 10 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 to northeast except along escarpments.

Climate

Site soils are typic aridic or within a 6-10" 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 sandstone. Soils are sandy. Site consists of limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

Vegetation dynamics

Indian ricegrass, needleandthread, black grama and dropseeds. Other native grasses and forbs with scattered native shrubs.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XB217AZ–Sandy Upland 6-10" p.z.
- R035XD412AZ–Sandy Upland 7-11" p.z.

Correlated Map Unit Components

22341021, 22341023, 22340850, 22340880, 22340883

Stage

Provisional

Contributors

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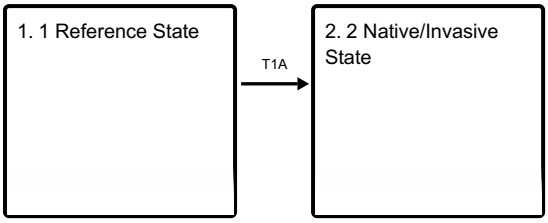
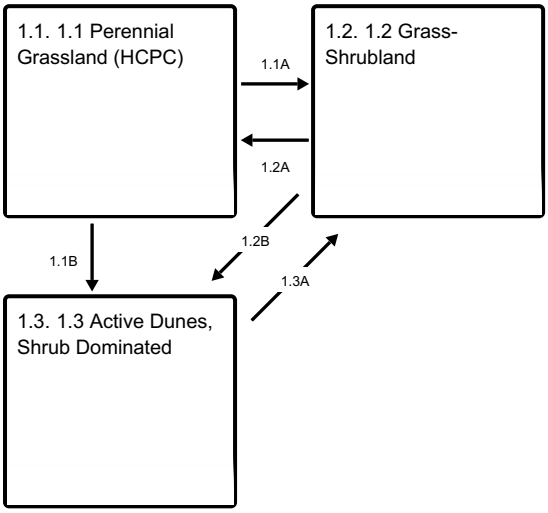
State and transition model

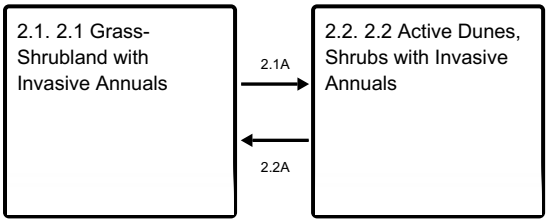
Ecosystem states



State 1 submodel, plant communities



State 2 submodel, plant communities



State 1
1 Reference State

Community 1.1
1.1 Perennial Grassland (HCPC)

Indian ricegrass, needleandthread, black grama and dropseeds. Other native grasses and forbs with scattered native shrubs.

Community 1.2
1.2 Grass-Shrubland

Indian ricegrass, needleandthread, dropseeds, Mormon tea, sand sagebrush, and broom snakeweed. Other native shrubs, grasses and forbs.

Community 1.3
1.3 Active Dunes, Shrub Dominated

Mormon tea and/or Sand sagebrush, and sandhill muhly dominate along with an increase of rubber rabbitbrush,

frosted mint, broom snakeweed, and false pillar gumweed. Active soil erosion and deposition are occurring.

Pathway 1.1A
Community 1.1 to 1.2

Repetitive high utilization on palatable grass species give shrubs a competitive advantage.

Pathway 1.1B
Community 1.1 to 1.3

Degradation through mismanagement of resources especially during drought.

Pathway 1.2A
Community 1.2 to 1.1

Management to improve palatable grasses and a disturbance such as fire to set shrubs back.

Pathway 1.2B
Community 1.2 to 1.3

Continued degredation due to long-term repetitive utilization of plants species, drought, or disease. This causes bare soil and accelerated erosion.

Pathway 1.3A
Community 1.3 to 1.2

Stabilizing soil through increased plant colonization.

State 2
2 Native/Invasive State

Community 2.1
2.1 Grass-Shrubland with Invasive Annuals

Indian ricegrass, dropseeds and galleta, Mormon tea, sand sagebrush, broom snakeweed and rabbitbrush dominate along with Cheatgrass, Russian Thistle and/or other introduced annuals. Annuals are well established and can make up to 20% of the plant composition by weight.

Community 2.2
2.2 Active Dunes, Shrubs with Invasive Annuals

Mormon tea and/or Sand sagebrush dominate along with an increase of rubber rabbitbrush frosted mint, broom snakeweed and false pillar gumweed Perennial grass cover has decline while annual grasses and forbs increase. Annual forbs along with grasses are well established and can make up to 30% of the plant composition by weight.

Pathway 2.1A
Community 2.1 to 2.2

Loss of plant cover and increased soil erosion.

Pathway 2.2A
Community 2.2 to 2.1

Improving soil stabilizing properties such as plant colonization and organic matter.

Transition T1A

State 1 to 2

Invasion on introduced species.

Citations