

Ecological site group DX035X02EESG14

Arizona Strip - Aridic Ustic - Basalt Slopes

Last updated: 09/02/2021
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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 13 to 17 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 aridic ustic or within a 14-18" 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 gently dipping shallow residuum weathered from sedimentary rocks eroded into hills, steep cliff faces and canyons.

Vegetation dynamics

In the absence of regular disturbance, this site has a dominant overstory of pinyon and juniper (rarely exceeds 50%) with a scattered understory of shrubs and sparse grasses and forbs. Typical perennial plant spacing is 1.5-2 ft.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

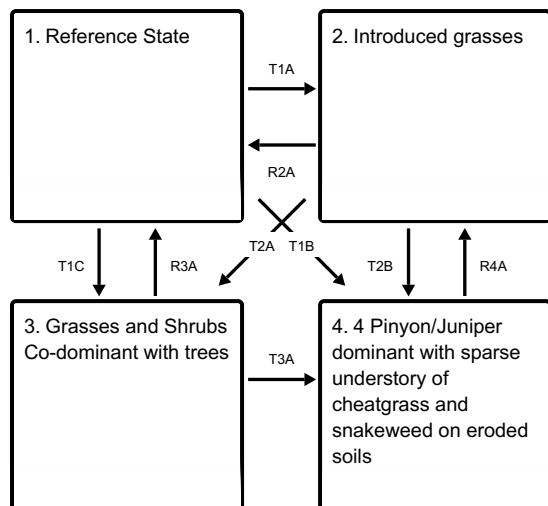
- F035XF624AZ–Basalt Slopes 13-17" p.z. (JUOS, PIED)

Stage

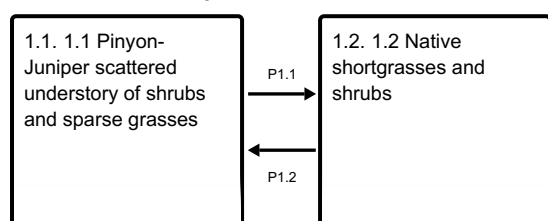
Provisional

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1

Reference State

Community 1.1

1.1 Pinyon-Juniper scattered understory of shrubs and sparse grasses

In the absence of regular disturbance, this site has a dominant overstory of pinyon and juniper (rarely exceeds 50%) with a scattered understory of shrubs and sparse grasses and forbs. Typical perennial plant spacing is 1.5-2 ft.

Community 1.2

1.2 Native shortgrasses and shrubs

Pathway P1.1

Community 1.1 to 1.2

A disturbance of fire to set back the P-J.

Pathway P1.2

Community 1.2 to 1.1

Over time pinyon and juniper gain a competitive advantage.

State 2

Introduced grasses

State 3

Grasses and Shrubs Co-dominant with trees

State 4

4 Pinyon/Juniper dominant with sparse understory of cheatgrass and snakeweed on eroded

soils

Transition T1A

State 1 to 2

Invasion of introduced species.

Transition T1C

State 1 to 3

Increased encroachment and cover of pinyon-juniper.

Transition T1B

State 1 to 4

Greater encroachment of pinyon and juniper.

Restoration pathway R2A

State 2 to 1

Once introduced species are integrated it will be difficult to return to reference.

Transition T2A

State 2 to 3

A decrease in introduced annuals due to management.

Transition T2B

State 2 to 4

Increased encroachment of pinyon and juniper.

Restoration pathway R3A

State 3 to 1

Fire, mechanical treatment of pinyon-juniper along with management to improve palatable grass cover.

Transition T3A

State 3 to 4

Invasion of cheatgrass

Restoration pathway R4A

State 4 to 2

A set-back to Pinyon and Juniper.

Citations