

Ecological site group DX035X01JESG12

Paria and Kaibito Plateaus Loamy Moderately Deep to Very Deep Benches, Terraces, and Mesas

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Key Characteristics

- Paria and Kaibito Plateaus
- Loamy
- Uplands
- Moderately deep to very deep
- Benches, terraces, mesas

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 is found on plateaus fan terraces, and valley floors, alluvial flats, dissected alluvial fans, alluvial fans and structural benches. The soil is deep to very deep to any plant root restricting layer. The soil surface texture ranges from very fine sandy loam to light sandy clay loam. Subsurface horizon textures are generally loam or clay loam, but range from sandy loam to clay. There is typically enough soil development to have accumulation of clays and/or carbonates (calcic or argillic) at shallow depths within the soil profile. The soil surface and subsurface horizons may be slightly effervescent. Slopes are predominantly 0 to 15 percent, but occasionally reach 20 percent.

(1) Residuum - calcareous sandstone

(2) Alluvium - limestone and sandstone

Climate

Winter to summer moisture ratios range from 70:30 to 60:40. Late spring is usually the driest period, and early fall moisture can be sporadic. Summer rains fall from June through September; moisture originates in the Gulf of Mexico and creates convective, usually brief, intense thunderstorms. Cool season moisture from October through May tends to be frontal; it originates in the Pacific and the Gulf of California and falls in widespread storms with longer duration and lower intensity. Precipitation generally comes as snow from December through February. Accumulations above 12 inches are not common but can occur. Snow usually lasts for 3-4 days, but can persist much longer. Summer daytime temperatures are commonly 95 - 100 F and on occasion exceed 105 F. Winter air temperatures can regularly go below 10 F and have been recorded below - 20 F.

Soil features

Soils grouped into this ecological site are generally deep to very deep, but may be moderately deep to any plant root restricting layer. The soil surface texture ranges from very fine sandy loam to light sandy clay loam. Subsurface horizon textures are generally loam or clay loam, but range from sandy loam to clay. The soil surface may be slightly effervescent. Subsurface horizons range from slightly to strongly effervescent. Soil reaction is neutral to moderately alkaline (pH 7.0-8.4). Water erosion hazard is moderate to severe.

Vegetation dynamics

This site has a plant community made up primarily of mid and short grasses with a moderate amount of shrubs. In the original plant community there is a mixture of both cool season and warm season plants.

Plants most likely to invade on this site are big sagebrush, snakeweed, rabbit-brush, juniper and annuals.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XB226AZ–Sandstone/Shale Upland 6-10" p.z. Warm
- R035XB232AZ–Limestone/Sandstone Upland 6-10" p.z.
- R035XD415AZ–Shallow Loamy 7-11" p.z.
- R035XY122UT–Desert Shallow Loam (Shadscale)
- R035XY221UT–Semidesert Shallow Loam (Utah Juniper-Pinyon)
- R035XY226UT–Semidesert Shallow Loam (Black Sagebrush/Indian Ricegrass)

Correlated Map Unit Components

22340798, 22340809, 22340812, 22340835, 22340834, 22340840, 22340857, 22340860, 22340862

Stage

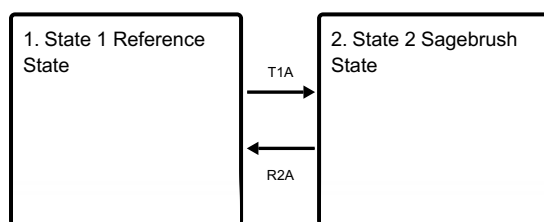
Provisional

Contributors

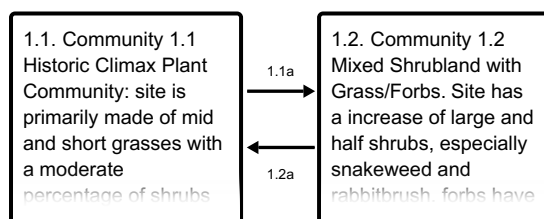
Curtis Talbot

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 2 submodel, plant communities

2.1. Community 2.1
Sagebrush
Dominated Overstory.
Site is dominated by a
canopy of Wyoming big
sagebrush along with
rabbitbrush and snake

State 1

State 1 Reference State

State 1 Reference State

Community 1.1

Community 1.1 Historic Climax Plant Community: site is primarily made of mid and short grasses with a moderate percentage of shrubs with lesser amounts of forbs. there is a mixture of both cool and warm season grasses and half shrubs.

Community 1.1 Historic Climax Plant Community This site has a plant community made up primarily of mid and short grasses with a moderate amount of shrubs. In the original plant community there is a mixture of both cool season and warm season plants. Plants most likely to invade on this site are big sagebrush, snakeweed, rabbitbrush, juniper and annuals.

Community 1.2

Community 1.2 Mixed Shrubland with Grass/Forbs. Site has a increase of large and half shrubs, especially snakeweed and rabbitbrush. forbs have also increased, especially annual forbs. There is a decline in perennial grasses.

Community 1.2 Mixed Shrubland with Grass/Forbs The plant community is mix of large and half shrubs and perennial grasses. There is decline of cool season grasses and a increase of warm season grasses and annual forbs. Common shrubs are Wyoming big sagebrush, snakeweed, rabbitbrush. Blue grama, galleta, Indian ricegrass, squirreltail, and sand dropseed are the common grasses and western wheatgrass/muttongrass may be present but is greatly reduced.

Pathway 1.1a

Community 1.1 to 1.2

Season-long grazing providing little rest and recovery for preferred grazed plants during critical growing periods, coupled with high utilization.

Pathway 1.2a

Community 1.2 to 1.1

Prescribed grazing or rest

State 2

State 2 Sagebrush State

State 2 Sagebrush State This state is characterized by a canopy dominated by sagebrush with a rabbitbrush and snakeweed. The understory is a mix of warm and cool season grasses along with annuals forbs.

Community 2.1

Community 2.1 Sagebrush Dominated Overstory. Site is dominated by a canopy of Wyoming big sagebrush along with rabbitbrush and snake weed. understory is a mix of perennial grasses with annual forbs. There few scattered trees at higher elevations.

Community 2.1 Sagebrush Dominated Overstory This plant community is characterized by a dominance of

Wyoming big sagebrush with scattered snakeweed/rabbitbrush. Understory is scattered with perennial snakeweed and annual forbs. This plant community has a small percentage of introduced exotics that are established in the understory. This plant community may also have scattered junipers.

Transition T1A

State 1 to 2

Season-long grazing providing little rest and recovery for preferred grazed plants during critical growing periods, coupled with high utilization. The introduction and establishment of invasive exotics is also a factor here.

Restoration pathway R2A

State 2 to 1

This transition is possible , but the treatments or practices necessary for this pathway may be a combination of prescribed grazing or rest with brush/herbicide treatments.

Citations