

Ecological site group ESG048A22

Saline Hills

Last updated: 05/10/2022
Accessed: 05/10/2025

Key Characteristics

- Uplands
- <75% bedrock outcrop
- Surface SAR >8, or Subsurface EC >8, or Surface EC >4 - 93 soil components
- Uplands
- <75% bedrock outcrop
- Surface SAR >8, subsurface EC >8, or surface EC >4, and soil moisture regime udic or ustic - 64 soil components

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 ESG is located on mountain slopes and hills.

Soil features

This ESG is characterized by a surface SAR >8, subsurface EC >8, or surface EC >4.

Vegetation dynamics

The modal ecological site for this ESG is R048AY292CO - Deep Loam.

Major Land Resource Area

MLRA 048A
Southern Rocky Mountains

Subclasses

- F048AY439UT–Mountain Shallow Loam (Ponderosa pine)
- F048AY448CO–Mountain Pinyon
- F048AY475UT–Mountain Very Steep Stony Loam (Douglas Fir)
- F048AY530UT–High Mountain Very Steep Loam (Douglas Fir)
- R048AY004NM–Mountain Loam
- R048AY008NM–Mountain Brush
- R048AY235CO–Dry Exposure
- R048AY238CO–Brushy Loam
- R048AY241CO–Mountain Meadow
- R048AY244CO–Mountain Shale
- R048AY292CO–Deep Loam
- R048AY306UT–Upland Loam (Wyoming Big Sagebrush)
- R048AY320UT–Upland Shallow Loam (Black sagebrush)
- R048AY322UT–Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper)
- R048AY332UT–Upland Shallow Stony Loam (Bonneville Big Sagebrush)

- R048AY342UT–Upland Very Steep Shallow Loam (Pinyon-Utah Juniper)
- R048AY406UT–Mountain Loam (Shrub)

Correlated Map Unit Components

20995075, 21285253, 21285262, 21285319, 21285475, 21262215, 21262311, 21262347, 21262376, 21262378, 21262381, 21262393, 21262417, 21281964, 21256481, 21251843, 21251840, 21245790, 21245791, 21268204, 21244802, 21243273, 21243319, 21243343, 21269843, 21242872, 21242903, 21243086, 21242086, 21833061, 21842214, 21978824, 21979783, 21980745, 21841239, 21408192, 21407983, 21407985, 21407178, 21407760, 21421658, 21825427, 21825748, 21825716, 21825718, 21825720, 21826032, 21826076, 21820326, 21820385, 21820488, 21866162, 21865666, 21865902, 21866406, 21866413, 21865997, 21242895

Stage

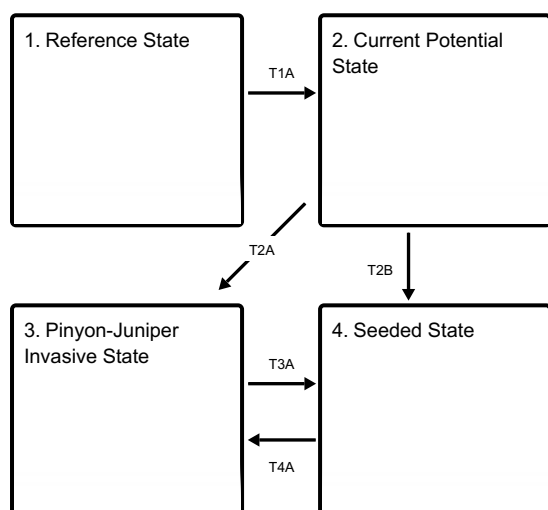
Provisional

Contributors

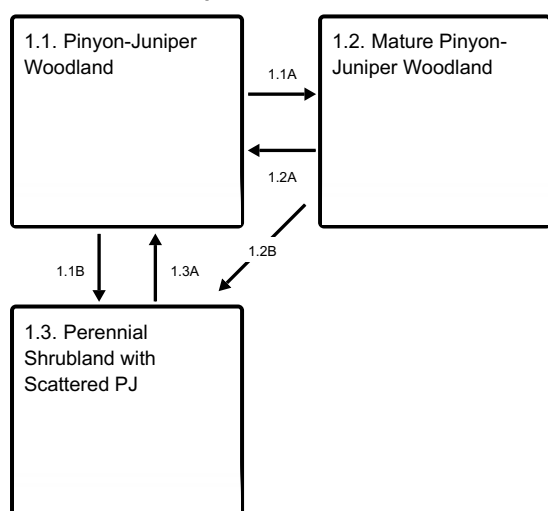
Travis Nauman

State and transition model

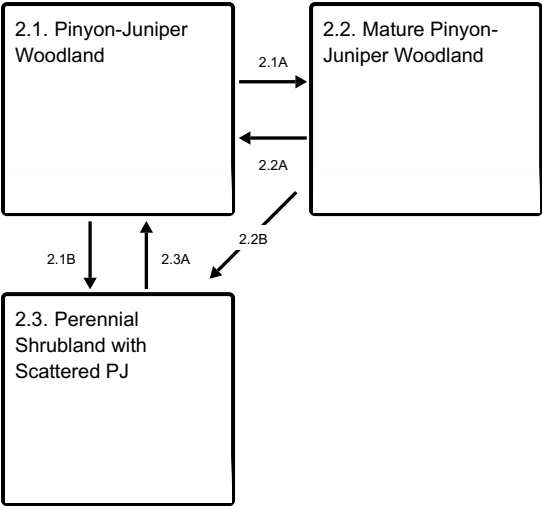
Ecosystem states



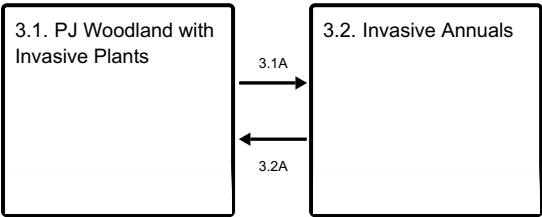
State 1 submodel, plant communities



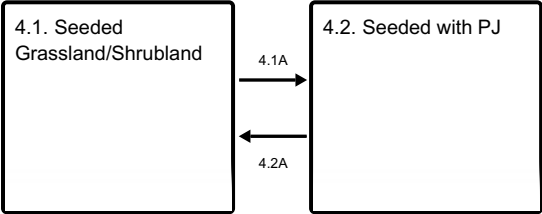
State 2 submodel, plant communities



State 3 submodel, plant communities



State 4 submodel, plant communities



State 1
Reference State

Community 1.1
Pinyon-Juniper Woodland

Utah juniper with scattered pinyon, grasses, forbs, and shrubs.

Community 1.2
Mature Pinyon-Juniper Woodland

Pinyon and Utah juniper co-dominant, grasses, forbs, and shrubs.

Community 1.3
Perennial Shrubland with Scattered PJ

Other grasses, shrubs, and forbs. Utah juniper and pinyon scattered and starting to re-establish.

Pathway 1.1A
Community 1.1 to 1.2

wetter climate period, time without disturbance

Pathway 1.1B

Community 1.1 to 1.3

fire

Pathway 1.2A

Community 1.2 to 1.1

insect and pathogen outbreaks, drought, small scale fires

Pathway 1.2B

Community 1.2 to 1.3

fire

Pathway 1.3A

Community 1.3 to 1.1

wetter climate period, time without disturbance

State 2

Current Potential State

Community 2.1

Pinyon-Juniper Woodland

Utah juniper with scattered pinyon, grasses, forbs, and shrubs. Invasive species are present.

Community 2.2

Mature Pinyon-Juniper Woodland

Pinyon and Utah juniper co-dominant, grasses, forbs, and shrubs. Invasive species are present.

Community 2.3

Perennial Shrubland with Scattered PJ

Other grasses, forbs, and other shrubs. Utah juniper and pinyon scattered and starting to re-establish. Invasive species are present.

Pathway 2.1A

Community 2.1 to 2.2

wetter climate period, time without disturbance

Pathway 2.1B

Community 2.1 to 2.3

fire

Pathway 2.2A

Community 2.2 to 2.1

insect and pathogen outbreaks, drought, small scale fires

Pathway 2.2B

Community 2.2 to 2.3

fire

Pathway 2.3A
Community 2.3 to 2.1

wetter climate period, time without disturbance

State 3
Pinyon-Juniper Invasive State

Community 3.1
PJ Woodland with Invasive Plants

PJ, cheatgrass, other grasses, forbs, and shrubs. Dense biological crust is possible.

Community 3.2
Invasive Annuals

PJ, cheatgrass, and shrubs. Perennial grasses and forbs are sparse or absent. Dense biological crust is possible.

Pathway 3.1A
Community 3.1 to 3.2

drought, reduced fire return interval

Pathway 3.2A
Community 3.2 to 3.1

time without disturbance

State 4
Seeded State

Community 4.1
Seeded Grassland/Shrubland

Seeded grass species, other grasses, shrubs, and forbs.

Community 4.2
Seeded with PJ

seeded grass species with scattered pinyon and juniper, other grasses, shrubs, and forbs.

Pathway 4.1A
Community 4.1 to 4.2

time without disturbance

Pathway 4.2A
Community 4.2 to 4.1

vegetation manipulation, insect or pathogen outbreaks, drought

Transition T1A
State 1 to 2

establishment of non-native invasive plants

Transition T2A

State 2 to 3

reduced fire return interval, increase in invasive plants in understory, extended drought

Transition T2B

State 2 to 4

vegetation manipulation

Transition T3A

State 3 to 4

vegetation manipulation

Transition T4A

State 4 to 3

reduced fire return interval, increase in invasive plants in understory, extended drought

Citations