# Ecological site group 29-1 Ecological Site Group 1

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

#### **Key Characteristics**

None specified

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.

#### Climate

The group is characterized by a four-state STM with four community phases in the first state, four community phases in the second state, two community phases in the third state, and one community phase in the fourth state.

#### **Vegetation dynamics**

The group is characterized by a four-state STM with four community phases in the first state, four community phases in the second state, two community phases in the third state, and one community phase in the fourth state.

#### **Major Land Resource Area**

MLRA 029X Southern Nevada Basin and Range

#### Stage

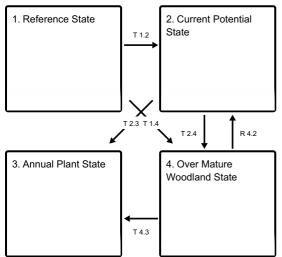
Provisional

#### Contributors

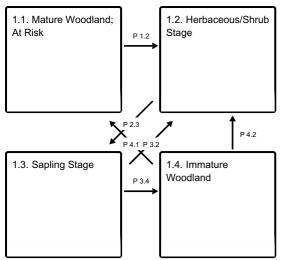
Curtis Talbot

#### State and transition model

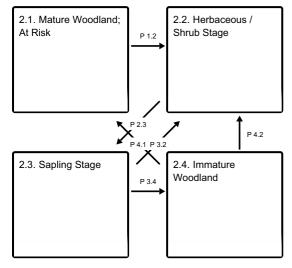
Ecosystem states



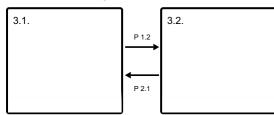
#### State 1 submodel, plant communities



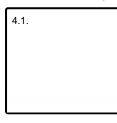
#### State 2 submodel, plant communities



#### State 3 submodel, plant communities



State 4 submodel, plant communities



State 1 Reference State

#### Community 1.1 Mature Woodland; At Risk

singleleaf pinyon - Utah juniper overstory shrub - perennial grass dominated understory few tree seedlings and saplings occur in understory

#### Community 1.2 Herbaceous/Shrub Stage

perennial bunchgrasses & sprouting shrubs dominant non-sprouting shrubs present tree seedlings (<20") are present burned tree skeletons may be present

#### Community 1.3 Sapling Stage

shrubs and perennial bunchgrasses dominant tree saplings (20"-4.5') present

#### Community 1.4 Immature Woodland

singleleaf peinyon & Utah juniper >4.5' tree seedlings and saplings present in the understory shrub-perennial grass dominated understory

#### Pathway P 1.2 Community 1.1 to 1.2

Fire

Pathway P 2.3 Community 1.2 to 1.3

time and lack of disturbance

#### Pathway P 3.2 Community 1.3 to 1.2 fire

Pathway P 3.4 Community 1.3 to 1.4

time and lack of disturbance

#### Pathway P 4.1 Community 1.4 to 1.1

time and lack of disturbance

# Pathway P 4.2 Community 1.4 to 1.2

fire

State 2 Current Potential State

#### Community 2.1 Mature Woodland; At Risk

singleleaf pinyon - Utah juniper overstory shrub - perennial grass dominated understory few tree seedlings and sapling occur in understory annual non-native species present

#### Community 2.2 Herbaceous / Shrub Stage

perennial bunchgrass & sprouting shrubs dominant non-sprouting shrubs present tree seedlings (<20") are present burned tree skeletons may be present annual non-native species present and may be increasing

#### Community 2.3 Sapling Stage

shrubs and perennail bunchgrasses dominant tree saplings (20"-4.5') present annual non-native species present and may be increasing

#### Community 2.4 Immature Woodland

singleleaf pinyon & Utah juniper >4.5' tree seedlings and saplings present in the understory shrub - perennial grass dominated understory annual non-native species present and may be increasing

# Pathway P 1.2 Community 2.1 to 2.2

fire

## Pathway P 2.3 Community 2.2 to 2.3

time and lack of disturbance

# Pathway P 3.2 Community 2.3 to 2.2

fire

## Pathway P 3.4 Community 2.3 to 2.4

time and lack of disturbance

#### Pathway P 4.1 Community 2.4 to 2.1

time and lack of disturbance

# Pathway P 4.2 Community 2.4 to 2.2

fire

State 3 Annual Plant State

## Community 3.1

Annual non-natives dominate site Trace amounts of perennial bunchgrasses

## Community 3.2

Sprouting shrub overstory Annual non-native understory

#### Pathway P 1.2 Community 3.1 to 3.2

Time allows for sprouting shrubs to recover

#### Pathway P 2.1 Community 3.2 to 3.1

Fire

State 4 Over Mature Woodland State

#### Community 4.1

Singleleaf pinyon - Utah juniper overstory, canopy closed Shrubs & deep-rooted perennial bunchgrasses declining Annual non-native species common in understory Soil erosion probable

Transition T 1.2 State 1 to 2 Introduction of non-native annual species

#### Transition T 1.4 State 1 to 4

Time and lack of disturbance

#### Transition T 2.3 State 2 to 3

Severe and Repeated Fire

#### Transition T 2.4 State 2 to 4

Time and lack of disturbance

# Restoration pathway R 4.2 State 4 to 2

Thinning of trees and seeding or recovery of understory species

Transition T 4.3 State 4 to 3

Severe and Repeated Fire

#### Citations