Pinyon-Juniper Desired Conditions

Operational Draft: This document is prepared to provide guidance to Forest Plan revision teams. As this guidance is implemented, we expect to learn improved ways to do this work. As we learn, this document will be updated. This document was reviewed and revised as appropriate in April 2010 to conform to the requirements of the 1982 Planning Rule provisions.

General Description

The Pinyon-Juniper (PJ) vegetation community is collectively composed of the Juniper Grassland, PJ Grassland, PJ Sagebrush, PJ Evergreen Shrub, and PJ Woodland (persistent) Potential Natural Vegetation Types. These generally occur at elevations between approximately 4500 and 7500 feet. They are dominated by one or more species of pinyon pine and/or juniper and can occur with a grass/forb dominated understory (PJ grassland), a shrub dominated understory (PJ sagebrush/evergreen shrub), or a sparse discontinuous understory of some grasses and/or shrubs (PJ persistent woodland). Two-needle, single-leaf, Mexican, and border pinyon pine are common; as well as one-seed, Utah, redberry, Rocky Mountain, and alligator junipers, and a lesser abundance of oaks. Species composition and stand structure vary by location primarily due to precipitation, elevation, temperature, and soil type.

Pinyon-Juniper Grassland / Juniper Grassland Desired Conditions

Pinyon-Juniper Grassland and Juniper Grassland are generally uneven aged and open in appearance. Trees occur as individuals, but occasionally in smaller groups, and range from young to old. Scattered shrubs and a dense herbaceous understory including native grasses, forbs and annuals are present to support frequent surface fires. Snags are scattered across the landscape. Old growth occurs throughout the landscape, generally in small areas as individual old growth components, or as clumps of old growth. Old growth components include old trees, dead trees (snags), downed wood (coarse woody debris) and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). The composition, structure, and function of vegetative conditions are resilient to the frequency, extent and severity of disturbances (e.g. insects, diseases, and fire) and climate variability. Fires are typically low-severity (Fire Regime I).

Pinyon-Juniper Sagebrush Desired Conditions

Pinyon-Juniper Sagebrush is a mix of trees and shrubs that occurs as a series of vegetation states that move from herbaceous-dominated to shrub-dominated to tree-dominated over time. Trees occur as individuals or in smaller groups ranging from young to old. Pinyon trees are occasionally absent but one or more juniper species is always present. Typically groups are even-aged in structure. The understory is dominated by moderate to high density shrubs depending on successional stage. The shrub component consists of one or a mix of sagebrush, evergreen shrub, oak, and other shrub species, which are well-distributed. Shrubs typically are in a closed canopy state during the later successional stages. Native perennial grasses and annual and perennial forbs are present as a sparse understory component. Snags and old trees with dead limbs/tops are scattered

across the landscape. Large dead wood is present. The composition, structure, and function of vegetative conditions are resilient to the frequency, extent and severity of disturbances (e.g. insects, diseases, and fire) and climate variability. Fires are typically infrequent high severity fires (Fire Regime IV)

Pinyon-Juniper Evergreen Shrub Desired Conditions

Pinyon-Juniper Evergreen Shrub is a mix of trees and shrubs that occurs as a series of vegetation states that move from herbaceous-dominated to shrub-dominated to tree-dominated over time. Trees occur as individuals or in smaller groups ranging from young to old. Pinyon trees are occasionally absent but one or more juniper species is always present. Typically groups are even-aged in structure with all ages represented across the landscape for an overall uneven-aged grouped appearance. The understory is dominated by low to moderate density shrubs depending on successional stage. The shrub component consists of one or a mix of evergreen shrub, oak, manzanita, mountain mahogony, sumac and other shrub species, which are well-distributed. Native perennial grasses and annual and perennial forbs are present in the interspaces. Snags and old trees with dead limbs/tops are scattered across the landscape. Large dead wood is present. Old growth occurs throughout the landscape, generally in small areas as individual old growth components, or as clumps of old growth. Old growth components include old trees, dead trees (snags), downed wood (coarse woody debris) and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). The composition, structure, and function of vegetative conditions are resilient to the frequency, extent and severity of disturbances (e.g. insects, diseases, and fire) and climate variability. Fires are typically mixed severity with a moderate frequency (Fire Regime III). Some evergreen shrub types exhibit occasional high severity fires (Fire Regime IV).

Pinyon-Juniper Woodland (persistent) Desired Conditions

Pinyon-Juniper Woodland (persistent) is characterized by even-aged patches of pinyons and junipers that at the landscape level form multi-aged woodlands. Very old trees (>300 years old) are present. Tree density and canopy cover are high, shrubs are sparse to moderate, and herbaceous cover is low and discontinuous. Snags and older trees with dead limbs and/or tops are scattered across the landscape. Old growth generally occurs over large areas as stands or forests where old growth is concentrated. Old growth includes old trees, dead trees (snags), downed wood (coarse woody debris) and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). The composition, structure, and function of vegetative conditions are resilient to the frequency, extent and severity of disturbances (e.g. insects, diseases, and fire) and climate variability. Insects and disease occur at endemic levels. Fire as a disturbance is less frequent and variable due to differences in ground cover. The fires that do occur are mixed to high severity (Fire Regime III, IV, & V).