

Coconino National Forest Plan Revision

Interior Chaparral

General description

- The fire-dependent interior chaparral varies from widely scattered pockets within grasslands and woodlands to more extensive areas on steep slopes.
- Species composition and dominance varies across the broad range of soils and topography, but are dominated by shrubs.
- Soil productivity is naturally low and soils are mostly inherently unstable due to the steep slopes.

Desired Conditions (landscape scale: 10,000 + acres)

- During young stages, chaparral contains a grass and forb component in the understory. The mid to late development stages are dense, nearly impenetrable thickets with considerable shrub litter (e.g., small stems, leaves) (about 35 to 45 percent of soil surface). Standing dead material may accumulate in areas that have not burned for several decades. Greater than 70 percent of chaparral is closed canopy with some openings of grasses and forbs. Canopy ranges from 40 percent at dry sites to 80 percent at wetter sites.
- Chaparral is in a constant state of transition from young to older stages and back again, with fire being the major disturbance factor. Natural high severity fires (75+ percent mortality or top kill) occur with a frequency of once every 35 to 100 years. Long fire return intervals allow for re-establishment of seed bank and development of fuel loads and spatial continuity of fuels necessary for fire.
- Although soil productivity is naturally generally low and soil condition is mostly inherently unstable on steep slopes, there is sufficient vegetation and litter cover to protect soil from accelerated erosion.

Desired Conditions (mid-scale: 100 to 1,000 acres)

- Fire hazard and severity is reduced in the Wildland Urban Interface (WUI) and human life and property is protected. Vegetation conditions within the wildland urban interface are composed of younger and more widely-spaced shrub patches and tree groups. *[Will add statement about age classes.]*
- The frequency of disturbance (e.g. fire, vegetation treatments) within the WUI may be higher than the natural disturbance regime.

Desired Conditions (fine-scale: ≤ 10 acres)

- Soil condition indicators of 35 to 45 percent of total ground cover by litter and plant basal area and no signs of compaction or accelerated erosion signify that soil function is being sustained and soil is functioning properly and normally. The ability of soil to maintain resource values and sustain outputs is high.

Objectives

- During the 10 years following plan approval, use 50,000 to 100,000 acres of fire and mechanical treatments to maintain current conditions in the interior chaparral Potential Natural Vegetation Type (PNVT).

Guidelines

- Prescribed fire treatments within the Interior Chaparral PNVT should provide diversity of burn intensity within burn units. At the landscape scale, burn unit locations should be rotated to provide habitat diversity.

Objectives

- Treat at least [*number to be determined*] acres over the 10 years following plan approval using [*methods to be determined*] and unplanned natural ignitions.

Guidelines

- Surface disturbing activities, including fires, should be avoided in chaparral locations where fire is carried by invasive plants and vegetation and fire regime attributes are significantly altered. These activities should be avoided until native species have been re-established and invasive nonnative grasses have been controlled.
- Intent: surface disturbing activities will promote and perpetuate invasive nonnative grasses which in turn will facilitate more frequent fires than should naturally occur and will not sustain the native shrub community.

Management Approach

- Emphasize coordination with local partners and stakeholders