1. *Pinus ponderosa* **Woodland and Tree Savanna Association (P)** Ponderosa pine Woodland and Tree Savanna Association (P)

This community is characterized by an uppercanopy stratum (>5 m) dominated by ponderosa pine (*Pinus ponderosa*), with cover values from 15 to 28%. Tree height for this species is variable, ranging from 12 to 24 meters tall and averaging to 15.5 meters. On toeslopes and footslopes, this woodland is predominantly a pure stand of ponderosa pine (*P. ponderosa*), with scattered, tree-like gray oak (*Quercus grisea*) or, in areas disturbed by the Miller Fire, regenerating in the

Common species

- Pinus ponderosa
- Quercus grisea
- Bouteloua gracilis
- Juniperus scopulorum
- Poa fendleriana

understory layers as a shrub. When restricted to drainages and their adjacent slopes, Rocky Mountain juniper (*Juniperus scopulorum*) can be a common associate, ranging in cover from 5% to 11% and occasionally becoming a second dominant. Douglas fir (*Pseudotsuga menziesii*) may also infrequently appear, standing 9–12 m tall with only 1–2% cover, mainly occupying secondary drainages and concave inclusions. Common but sparse understory species include common hoptree (*Ptelea trifoliata*), Carruth's artemisia (*Artemisia carruthii*), and New Mexico locust (*Robinia neomexicana*). The field stratum (<0.5) provides variable cover, ranging from 10–30%, that consists of blue grama (*Bouteloua gracilis*), sideoats grama (*Bouteloua curtipendula*), muttongrass (*Poa fendleriana*), sand dropseed (*Sporobolus cryptandrus*), dwarf stickpea (*Calliandra humilis*), Wright's deervetch (*Lotus wrightii*), and tarragon (*Artemisia dracunculus*).

This woodland community occurs on steep- to moderate-gradient, generally northto northwest-facing backslopes and toeslopes, and along steep-walled drainages from 1,676 to 1,828 meters (5,500–6,000 ft). Overall, this community covers 14.16% (148.21 ha/366.25 ac) of the project area and 25.0% (53.37 ha/131.87 ac) of the monument, exclusively in the main unit.

