## 12. *Quercus grisea / Sphaeralcea fendleri* Post-fire Shrubland and Herbaceous Association (P)

Gray oak / Fendler's globemallow Post-fire Shrubland and Herbaceous Association (P)

This community is in a seral stage of post-fire regeneration, occupying areas that were primarily pine woodlands and forests—specifically, ponderosa pine and pinyon-juniper types. Vegetation is somewhat variable in terms of cover and associated species, but has consistent presence and dominance of gray oak (*Quercus grisea*) in the subcanopy (0.5–2 m) and field (<0.5 m) layers, along with dominant Fendler's globemallow (*Sphaeralcea fendleri*), primarily in the field stra-

## **Common species**

- Quercus grisea
- Sphaeralcea fendleri
- Mirabilis multiflora
- Artemisia carruthii
- Bouteloua gracilis

tum. Cover of gray oak (*Q. grisea*) ranges from 1% to 3%, but can be higher (5–15%) in areas where pre-fire cover was elevated or fire intensity was less severe. This species typically exhibits a shrubby habit resprouting from the base of burned trunks. Fendler's globemallow (S. fendleri) is often, but not always, the dominant plant in the field (or subcanopy) layer, but can be absent or just an associate with cover values from ranging from <1% to 18%, with an average around 8%. Other species may have cover values approaching or exceeding that of Fendler's globemallow (S. fendleri), including Carruth's sagewort (Artemisia carruthii) and/or Colorado four o'clock (Mirabilis multiflora), usually with one or the other providing patchy, local dominance. These species might be replaced or found in lower abundance in later successional communities. In some map units, blue grama (Bouteloua gracilis) is a low-cover associate. Areas that did not burn completely have residual trees providing up to 2%cover; these can include ponderosa pine (Pinus ponderosa), two-needle pinyon (Pinus edulis), oneseed juniper (Juniperus monosperma), and alligator juniper (Juniperus *deppeana*). Depending on the pre-fire community, the regenerating oak species may be Gambel oak (*Quercus gambelii*), not gray oak (*Q. grisea*). This is typically only in drainages and on steep, north-facing slopes, where the pre-fire woodlands were more like the Pseudotsuga menziesii - Quercus gambelii Forest Association.

This type is found on north-facing backslopes and ridgelines above the Gila River floodplain, predominantly on the south side of the river from 1,828 to 1,920 meters (6,000–6,300 ft). This association covers 10.26 % (107.48 ha/265.61 ac) of the project area and 7.25% (15.5 ha/38.27 ac) of the monument, exclusively in the main unit.

