## 14. Annual Forb - Mixed Bouteloua spp. Herbaceous Association (PS)

Annual Forb - Mixed grama Grass Herbaceous Association (PS)

This herbaceous community is primarily composed of annual forbs, with an estimated 35–45% cover. During 2012 surveys (one year after the Miller Fire), pitseed goosefoot (*Chenopodium berlandieri*) was clearly dominant. During 2013 surveys, it was all but absent, replaced by flatspine burr ragweed (*Ambrosia acanthicarpa*). Other commonly occurring, low-cover annuals include

## **Common species**

- Annual forbs
- Ambrosia acanthicarpa
- Bouteloua gracilis
- Bouteloua curtipendula

carelessweed (*Amaranthus palmeri*), golden crownbeard (*Verbesina encelioides*), prickly Russian thistle (*Salsola tragus*), and melonleaf nightshade (*Solanum heterodoxum*). Blue grama (*Bouteloua gracilis*) is the second-most consistently distributed species, averaging 7% cover but occurring more or less in patches, due to its sodforming nature. Hairy grama (*Bouteloua hirsuta*), sideoats grama (*Bouteloua curtipendula*), and sand dropseed (*Sporobolus cryptandrus*) are also common and may be locally dominant, but not consistently so. Due to its position in the riparian corridor, occasional trees are seen along the edges of this type, including but not limited to narrowleaf cottonwood (*Populus angustifolia*), Arizona walnut (*Juglans major*), and boxelder (*Acer negundo*). These average 6–7 m tall with trace amounts of cover and are considered accidental inclusions.

This herbaceous community encompasses a stretch of flat, sandy floodplain at 1,697–1,706 meters (5,570–5,600 ft) that has clear evidence of historical use for agriculture and grazing. The surface cover is dominated by bare soil with noteworthy gravel, small rocks, and litter throughout. This association covers 2.0% (21.86 ha/54.02 ac) of the project area and does not occur within the monument.



