



**White Tank Mountains
Flood Hazard Map - SE Section**

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E X P L A N A T I O N

Map Unit Description

- H1 Flood Hazard:** Highest; high-velocity channelized flow and sheetflow
Distribution: Entrenched reaches of major drainages and distributary flow areas on middle and upper piedmont
Soil Group*: Torrifluvents
Channel Pattern: Braided (anastomosing) or distributary
Surface Relief: Less than 2 ft; bar and swale topography
Surface Texture: Silt to very gravelly sand
Surface Color: Dull yellow-orange (10YR 6/4)
Desert Varnish: Unvarnished gravel
Vegetation:** Brittle bush, rabbit bush, bunch grass, creosote
Estimated Surface Age: Historical to late Holocene (0 to 2,000 yrs old)
- H2 Flood Hazard:** Moderately high; dominantly sheetflow with minor channel flows
Distribution: Restricted to lower piedmont and small drainages heading on the piedmont
Soil Group: Torrifluvents
Channel Pattern: Distributary; incipient dendritic drainage in less active areas

- Surface Relief:** Less than 2 ft with uncommon, 4-ft arroyo cuts; smooth surface
Surface Texture: Sandy silt with 10% scattered gravel; less active areas have granule to pebble lag
Surface Color: Dull yellow-orange (10YR 6/4)
Desert Varnish: Unvarnished gravel
Vegetation: Creosote, brittle bush
Estimated Surface Age: Historical to late Holocene (0 to 2,000 yrs old)
- I Flood Hazard:** Intermediate; has not been subject to significant flooding for more than 1,000 yrs, but lack of topographic relief between these surfaces and active surfaces (H1 and H2) suggests that they could become flood prone with channel filling, avulsion, or human disturbance
Distribution: Adjacent to H1 and H2 in distributary flow areas and on lower piedmont
Soil Groups: Torrifluvents and Camborthids
Channel Pattern: Widely spaced, dendritic tributary drainages
Surface Relief: Less than 4 ft in distributary flow areas and less than 3 ft on lower piedmont; bar and swale topography well preserved in distributary flow areas
Surface Texture: Open desert pavement consisting of granules and small cobbles
Surface Color: Dull yellow-orange (10YR 6/4)
Desert Varnish: Unvarnished to weakly developed over 10% of the surface - brownish black (7.5YR 3/1) on top and orange (7.5YR 7/6) on undersides
Vegetation: Brittle bush, creosote, palo verde
Estimated Surface Age: Late Holocene to latest Pleistocene (1,000 to 15,000 yrs old)

- L1 Flood Hazard:** Low; localized sheetflooding possible; flooding might occur if channels are altered by human disturbance because of low relief downslope from major distributary flow areas
Distribution: Downslope from and adjacent to distributary flow areas on middle and lower piedmont
Soil Groups: Camborthids and Haplargids
Channel Pattern: Moderately spaced, dendritic tributary drainages
Surface Relief: 1 to 10 ft; fairly smooth subdued bar and swale topography
Surface Texture: Open to closed desert pavement consisting of granules and cobbles
Surface Color: Bright brown (7.5YR 5/6) to orange (7.5YR 6/6)
Desert Varnish: Weakly to moderately developed over 50% of surface - brownish black (7.5YR 2/2) to grayish brown (7.5YR 4/2) on top and dull orange (5YR 6/4) to reddish brown (2.5YR 4/6) on undersides
Vegetation: Brittle bush, creosote, cane cholla
Estimated Surface Age: Latest Pleistocene to middle Pleistocene (15,000 to 250,000 yrs old)
- L2 Flood Hazard:** Lowest; restricted to small channels and localized sheetflooding
Distribution: Upper and middle piedmont and adjacent to Hassayampa River
Soil Groups: Haplargids and Durorthids
Channel Pattern: Closely to widely spaced, dendritic tributary drainages; rounded interfluvies in areas of highest relief
Surface Relief: 5 to 40 ft; fairly smooth surface; uncommon bar and swale topography
Surface Texture: Closed desert pavement consisting of cobbles and pebbles; uncommon salt-shattered cobbles; in places, surface is denuded and covered by petrocalcic fragments

- Surface Color:** Dull orange (7.5YR 6/4 to 5YR 6/3)
Desert Varnish: Well developed over 50 to 100% of undenuded surfaces - black (5YR 1.7/1) on top and dark red (10R 3/6) to dull orange (7.5YR 7/4) on undersides
Vegetation: Jumping cholla, brittle bush, creosote
Estimated Surface Age: Late Pleistocene to Pliocene (50,000 to 1,000,000+ yrs old)
- M Flood Hazard:** Mechanized disturbance; flood hazard unknown
B Flood Hazard: Bedrock outcrops; flood hazard low, but localized slope wash and debris flows possible in steepest areas
- * Soil groups are taken from the Soil Conservation Service survey of the Agula-Carefree area
 - ** Only dominant plant types are listed
- Channel bottoms of larger drainages heading in the White Tank Mountains

