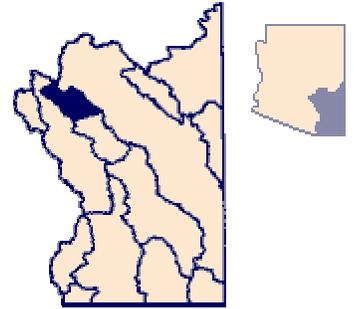


DRIPPING SPRINGS

The Dripping Springs Wash basin covers about 445 square miles and overlaps the Basin and Range and Central Highlands physiographic provinces in central Arizona (Figure 17). This mountainous region contains small sediment-filled valleys which store only minor amounts of groundwater. The largest of the valleys lies north of the Gila River and is drained by Dripping Springs Wash which is tributary to the Gila River. The basin is bounded by the Mescal and Pinal Mountains to the northeast and the Dripping Springs Mountains to the southwest. The Gila River dissects the basin cutting across the northwest- southeast-trending mountains. Elevation ranges from over 7,800 feet above mean sea level in the Pinal Mountains to around 2,000 feet above mean sea level along the Gila River.



Little specific hydrologic information exists for the area; however, Coates (1955) reported three hydrologic units along Dripping Springs Wash: the younger alluvium, the Gila Conglomerate or older alluvium, and the consolidated rocks. The younger alluvium makes up the major water-producing unit and is found along Dripping Springs Wash and its tributaries. These deposits consist of mostly sand and silt with a small amount of gravel. The unit is probably not more than 150 feet thick and is used mainly for domestic and stock purposes.

The older alluvium consists of stream and lake deposits. The stream deposits contain gravel and silty sand, and the lake deposits include clay, silt, tuff and gypsum. As with the younger alluvium, groundwater is pumped from this unit in sufficient quantity for domestic and stock use.

The consolidated rocks which make up the surrounding mountains contain only minor amounts of groundwater and issue less than two gallons per minute to springs in the basin.

Development in the basin has been very small, limited to mostly along Dripping Springs Wash. An estimated 620 acre-feet of groundwater were pumped and 100 acres irrigated in the basin in 1985 (Arizona Department of Water Resources, 1988). Water levels have changed little since the early 1950's when they ranged from about 10 to 300 feet below land surface (Arizona Department of Water Resources, 1988). Although data were scarce, Coates (1955) estimated recharge at 3,000 acre-feet per year from mountain front and streambed recharge. The Gila River dissects the basin roughly in half from northeast to southwest. In the northern half, groundwater moves south where outflow occurs along the Gila River. Likewise, in the southern half, groundwater moves north toward the Gila River. An estimated 0.15 million acre-feet of groundwater are in storage to a depth of 1,200 feet below land surface. Water quality throughout the basin is good with dissolved solids content less than 500 milligrams per liter (Coates, 1955).