



**PROTECTING ARIZONA'S  
WATER SUPPLIES  
for ITS NEXT CENTURY**

## **Mohave County Water Resources Investigation Fact Sheet Estimating Groundwater Availability in the Detrital Valley, Hualapai Valley, and Sacramento Valley Groundwater Basins in Mohave County**

The Arizona Department of Water Resources (ADWR) has performed a series of studies in Mohave County aimed at updating and improving estimates of the amount of groundwater available in three groundwater basins: the Detrital Valley, Sacramento Valley and Hualapai Valley. The studies are presented in three ADWR Open-File Reports: #9 – Detrital Valley, #10 – Sacramento Valley, and #11 – Hualapai Valley. Estimating the amount of groundwater in these groundwater basins is an important factor for evaluating the water resources available for the Assured and Adequate Water Supply Program (AWS). The results of these studies are summarized here.

The extent of the aquifer and the water level in a groundwater basin needs to be determined to calculate the amount of groundwater available in the basin aquifers. To determine the extent of the aquifers, ADWR collected over 1,100 gravity measurements throughout the three groundwater basins which were used in conjunction with other geologic data (i.e. well logs and geologic maps) to produce depth-to-bedrock maps. ADWR also collected over 300 water levels in the three groundwater basins to determine groundwater levels. These data were combined to calculate the volume of groundwater in the groundwater basins. However, it is important to note that not all of the estimated groundwater may be available for withdrawal, possibly due to localized geological conditions or due to poor water quality. The volumes of groundwater shown below are ranges which represent best estimates of groundwater available in each groundwater basin depending on a range of hydrogeologic conditions, which are described in the Open-File Reports, and to the AWS Program depth limit of 1,200 feet below the land surface.

Detrital Valley Groundwater Basin:	1.5 to 3.9 million acre-feet
Sacramento Valley Groundwater Basin:	3.6 to 9.5 million acre-feet
Hualapai Valley Groundwater Basin:	3.8 to 10.1 million acre-feet

[ADWR Open-File Report No. 9: Preliminary Estimate of Groundwater in Storage for the Detrital Valley Groundwater Basin, Mohave County, Arizona, 2007.](#)

[ADWR Open-File Report No. 10: Preliminary Estimate of Groundwater in Storage for the Sacramento Valley Groundwater Basin, Mohave County, Arizona, 2008.](#)

[ADWR Open-File Report No. 11: Preliminary Estimate of Groundwater in Storage for the Hualapai Valley Groundwater Basin, Mohave County, Arizona, 2009.](#)