



Antelope Valley Groundwater Adjudication Area of Adjudication

The Area of Adjudication for the Antelope Valley Groundwater Adjudication is illustrated in Figure 2-1. This area is approximately 901,360 Acres (1,408 Sq Miles). The illustrated area is generally described as follows:

Beginning in the southeast corner of the basin (where “basin” is intended to mean adjudication area for purposes of this report), and proceeding clockwise around the area, the southerly boundary is largely comprised of the mapped extent of bedrock contact to the north of, and generally parallel to the San Andreas Fault. Along the entire southerly boundary, it cuts across two locations, at the mouth of Soledad Canyon and the mouth of Leona Valley, where surface drainage occurs above alluvium that is narrowly connected to the main Antelope Valley and/or is known or thought to be very thin or limited in extent. Thus, that alluvium is neither significantly productive nor conducive of significant groundwater flow into the main valley.

From the southwesterly corner of the basin, the westerly boundary is entirely comprised of the mapped extent of bedrock contact to the southeast of, and roughly parallel to the Garlock Fault complex. The northwesterly corner of the basin is along that bedrock contact near the mouth of Oak Creek Canyon. From that northwesterly corner, the basin is bounded on the north by a southeasterly trending line to Middle Butte; the basin boundary follows the westerly side of that bedrock contact and then crosses an alluvial gap to bedrock outcrop of Gem Hill and the Rosamond Hills, which it then follows to the northwest corner of the dry Rosamond Lake bed.

From the northwest corner of Rosamond Lake (dry), the basin predominately follows bedrock contact along the Rosamond and Bissell Hills, generally on the west side of Edwards Air Force Base, to the Muroc Fault where it follows the Fault/bedrock contact.

The boundary arbitrarily crosses some narrow gaps between rock outcrops in the Rosamond and Bissell Hills, where the gaps represent small connections with the Fremont Valley Groundwater Basin to the west. Similarly, to the north of Edwards AFB and on the east side of Rogers Dry Lake, the boundary arbitrarily crosses some narrow gaps between rock outcrops, the most notable of which is a narrow neck that isolates the Peerless Valley to the north.

On the east side of the Antelope Valley, the basin is bounded by bedrock contacts along the entire so-called Hi-Vista area of bedrock outcrops. Where that contact reaches the Los Angeles-San Bernardino County line along the southeast side of the basin, the groundwater basin is arbitrarily bounded by the County line, which is recognized to be the western boundary of the adjudicated Mojave Water Agency area in San Bernardino County.

(Summary Expert Report, Phase 3 – Basin Yield and Overdraft, July 2010)