

ESTIMATED GROUND-WATER PUMPAGE
IN THE RANEGRAS PLAIN AREA

[Numbers rounded to nearest
thousand acre-feet]

Year	Pumpage, in thousands of acre-feet	Year	Pumpage, in thousands of acre-feet
1950	2	1964	7
1951	5	1965	6
1952	15	1966	7
1953	22	1967	12
1954	19	1968	15
1955	16	1969	16
1956	16	1970	15
1957	9	1971	15
1958	10	1972	19
1959	10	1973	19
1960	11	1974	22
1961	12		
1962	15		
1963	17	TOTAL:	332

NOTE: The estimated ground-water pumpage in the Butler Valley area was about 4,000 acre-feet in 1974. The amount of ground water pumped in previous years is not known.

EXPLANATION

DEPTH TO WATER, IN FEET BELOW LAND SURFACE



Less than 100



100 to 200



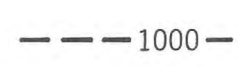
200 to 300



More than 300



No data



WATER-LEVEL CONTOUR—Shows approximate altitude of the water level. Contour interval 20 and 100 feet. Datum is mean sea level



WELL IN WHICH DEPTH TO WATER WAS MEASURED IN 1975—Upper number, 1242, is depth of well in feet; lower number, 131, is depth to water in feet below land surface (U, unable to measure depth to water at time of field inspection; D, well dry)



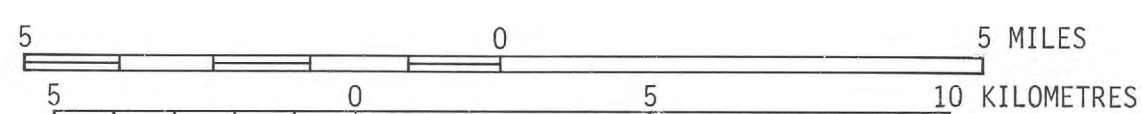
GENERALIZED DIRECTION OF GROUND-WATER FLOW



APPROXIMATE BOUNDARY BETWEEN SATURATED ROCKS OF HIGH PERMEABILITY AND STORAGE AND ROCKS OF LOW PERMEABILITY AND STORAGE—Rocks of high permeability are mainly silt, sand, and gravel; rocks of low permeability are mainly crystalline and well-cemented sedimentary rocks



ARBITRARY BOUNDARY OF GROUND-WATER AREA



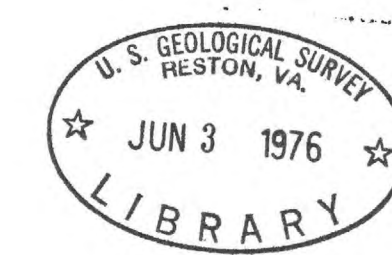
CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100-FOOT INTERVALS
DATUM IS MEAN SEA LEVEL

BASE FROM U.S. GEOLOGICAL SURVEY
PHOENIX 1:250,000, 1954 AND
SALTON SEA 1:250,000, 1959

DEPTH TO WATER, WELL DEPTH, AND ALTITUDE OF THE WATER LEVEL, 1975

MAPS SHOWING GROUND-WATER CONDITIONS IN THE RANEGRAS PLAIN AND BUTLER VALLEY AREAS,
YUMA COUNTY, ARIZONA—1975

By
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Signature (Ranegras Plain + Butler Valley), Howard water 1/20/000, 1976
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