

EXPLANATION

- 10--- APPROXIMATE LINE OF EQUAL CHANGE IN WATER LEVEL—Interval 10 feet
- +12 WELL IN WHICH DEPTH TO WATER WAS MEASURED IN 1970 AND 1975—Number, +12, is the difference between the 1970 and 1975 measurements
- IRRIGATED AREA AS OF 1974—Based on data from the Arizona Crop and Livestock Reporting Service and field checked by personnel of the U.S. Geological Survey; land under cultivation or that prepared for cultivation was considered irrigated
- APPROXIMATE BOUNDARY OF THE MAIN WATER-BEARING UNIT—The main water-bearing unit consists principally of sedimentary deposits. Other water-bearing units are crystalline rocks that contain only small amounts of water except in the central and southeastern parts of T. 1 N., R. 6 W., where the rocks may contain moderate amounts of water
- ARBITRARY BOUNDARY OF GROUND-WATER AREA

In the lower Hassayampa area the sedimentary deposits form the main water-bearing unit and consist mainly of weakly consolidated gravel, sand, silt, and clay; locally, the deposits are capped by as much as 50 feet of caliche-cemented gravel. The unit ranges in thickness from a few tens of feet near the mountains to as much as 1,200 feet in the central part of the area. The unit may yield from several hundred to a few thousand gallons per minute of water to wells.

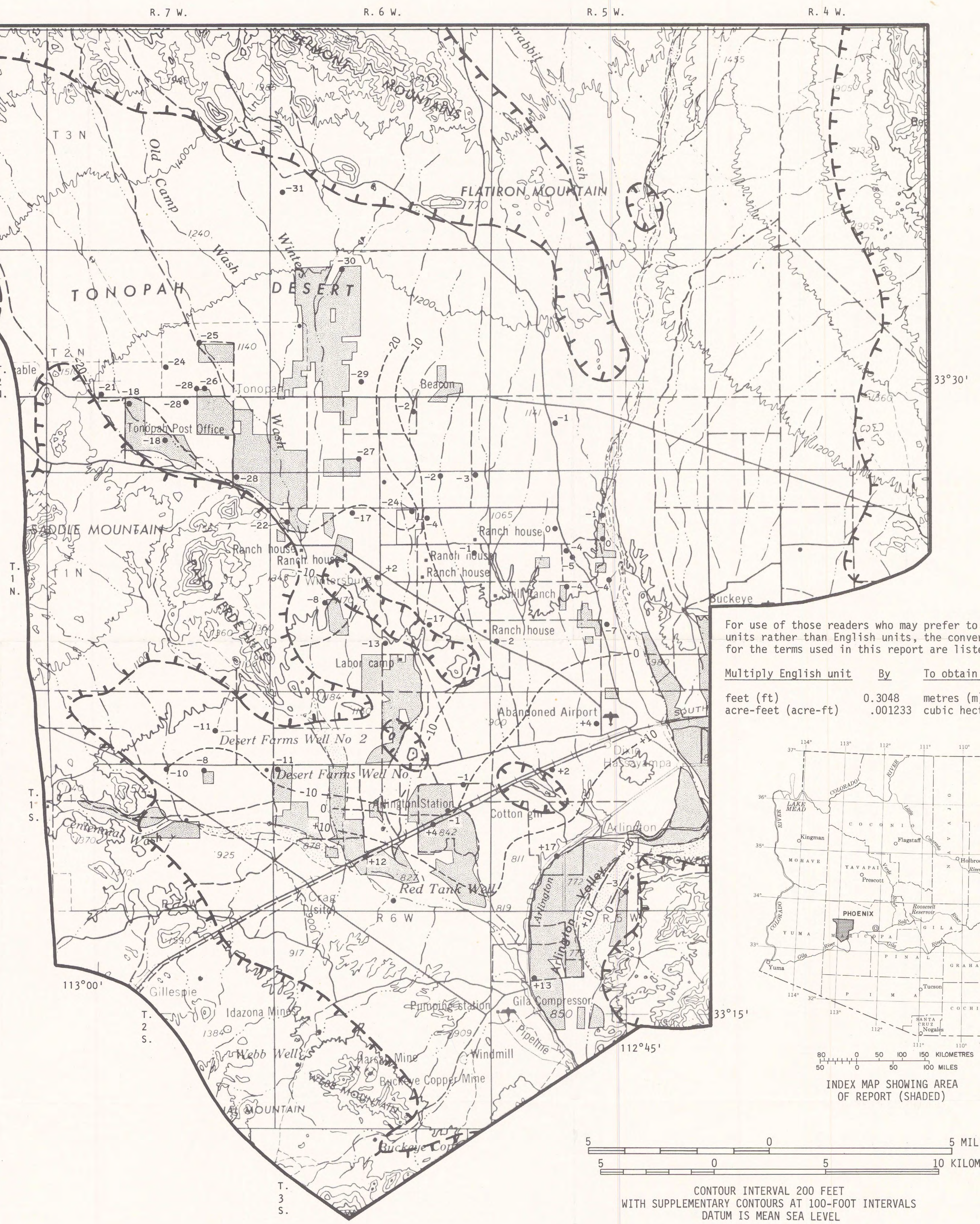
The long-term withdrawal of ground water has resulted in a general decline in water levels in most of the lower Hassayampa area; however, in the southern part of the area a few water-level rises have occurred. Water-level changes in measured wells for 1956-75 ranged from a decline of about 84 feet in a well in sec. 1, T. 1 N., R. 7 W., to a rise of about 2 feet in a well in sec. 4, T. 1 S., R. 5 W. The water level declined nearly 114 feet in a well in sec. 27, T. 1 N., R. 6 W., for 1953-75.

Water-level measurements are obtained during January and February when water use generally is at a minimum. In January and February 1975, however, many wells were being pumped for irrigation of winter grain. Thus, the data on sheets 1 and 2 are based on fewer water-level measurements than usually are available and may be slightly affected by pumping.

For the most part, the hydrologic data on which these maps are based are available in computer-printout form for consultation at the Arizona Water Commission, 222 North Central Avenue, Suite 800, Phoenix, and at U.S. Geological Survey offices in: Federal Building, 301 West Congress Street, Tucson, and Valley Center, Suite 1880, Phoenix. Material from which copies can be made at private expense is available at the Tucson and Phoenix offices of the U.S. Geological Survey.

SELECTED REFERENCES

- Arizona Crop and Livestock Reporting Service, 1974, Cropland atlas of Arizona: Phoenix, Arizona Crop and Livestock Reporting Service duplicated report, 68 p.
- Stulik, R. S., 1974, Ground-water conditions in the lower Hassayampa area, Maricopa County, Arizona: Arizona Water Comm. Bull. 8, 52 p.
- U.S. Public Health Service, 1962, Drinking water standards, 1962: U.S. Public Health Service Pub. 956, 61 p.

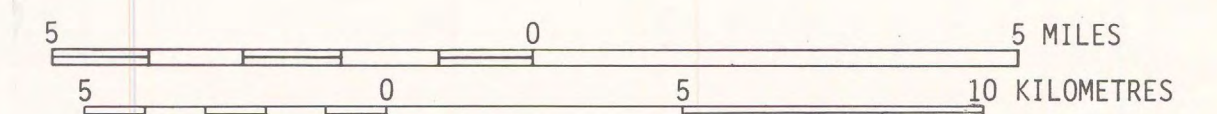


For use of those readers who may prefer to use metric units rather than English units, the conversion factors for the terms used in this report are listed below:

Multiply English unit	By	To obtain metric unit
feet (ft)	0.3048	metres (m)
acre-feet (acre-ft)	.001233	cubic hectometres (hm ³)



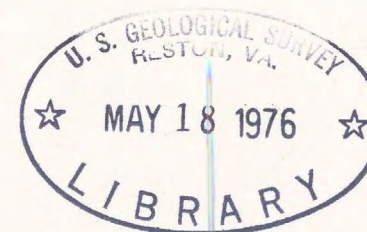
INDEX MAP SHOWING AREA OF REPORT (SHADED)



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

CHANGE IN WATER LEVEL, 1970-75, AND IRRIGATED AREA, 1974



MAPS SHOWING GROUND-WATER CONDITIONS IN THE LOWER HASSAYAMPA AREA,
MARICOPA COUNTY, ARIZONA—1975

By

R. S. Stulik and R. L. Laney

Arizona (Hassayampa area, lower). Ground water. 1:125,000.

Sheet 1

1976.

M(274)49

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Sheet 1

C.1

