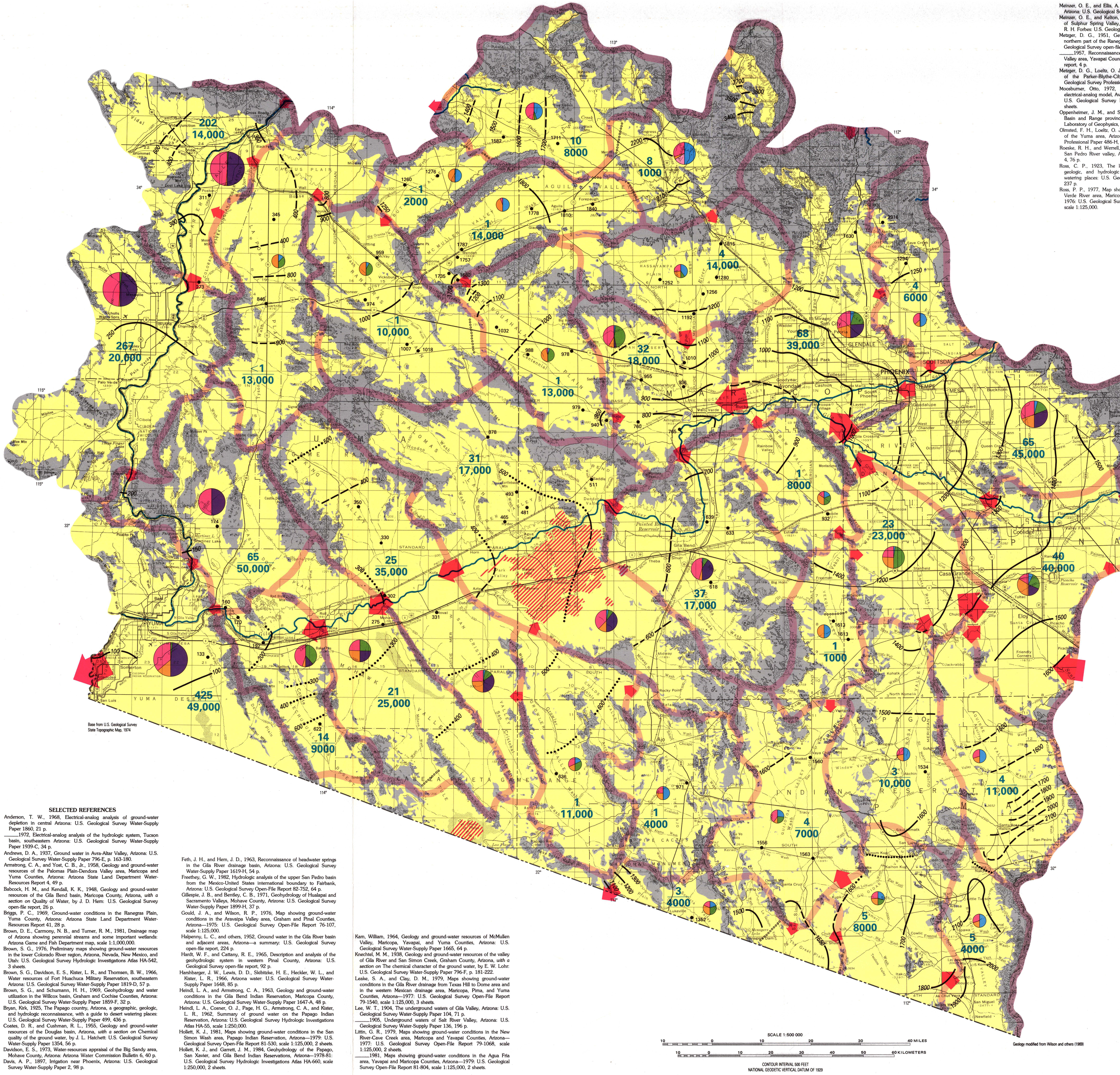

Base from U.S. Geological Survey State Topographic Map, 1974

Geology modified from Wilson and others (1969)

CONTOUR INTERVAL 500 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

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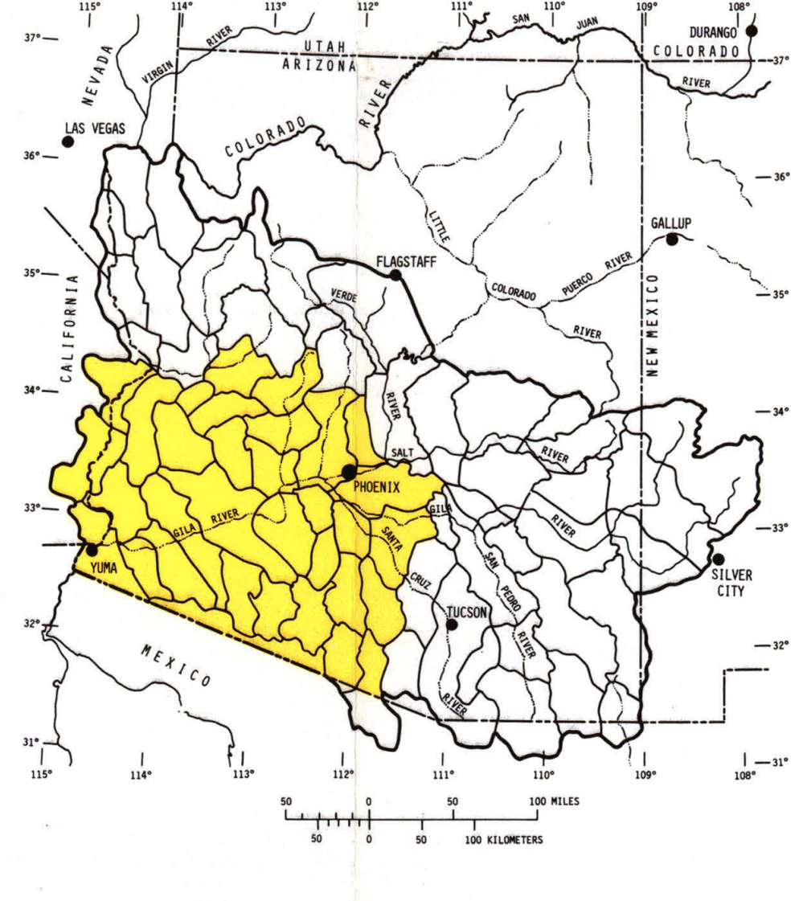
CONVERSION FACTORS

For readers who prefer to use metric units, the conversion factors for the terms used in this report are listed below:

Multiply	By	To obtain
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
square mile (mi^2)	2.590	square kilometer (km^2)
acre-foot (acre-ft)	0.001233	cubic hectometer (hm^3)



INDEX MAP SHOWING STUDY AREA AND BASINS

EXPLANATION

—500— WATER-LEVEL CONTOUR—Shows altitude of the water level prior to development. Dashed where based on meager data; dotted where approximately located. Contour interval, in feet, is variable. National Geodetic Vertical Datum of 1929

● 1680 SELECTED WELL—Number, 1680, is water-level altitude measured prior to extensive development

●●●●●●●○○○○○○ GROUND-WATER DIVIDE—Open circles where approximately located

GROUND-WATER UNDERFLOW—In acre-feet per year

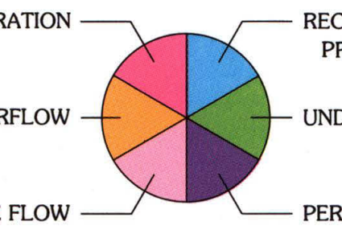
- More than 30,000
- 15,000-30,000
- 5,000-15,000
- 1,000-5,000
- Less than 1,000

🟨 BASIN-FILL DEPOSITS

⬜ BEDROCK OF THE MOUNTAINS

▨ BASALT FLOWS—Overlie basin-fill deposits and may act as a confining layer

GROUND-WATER BUDGET



GROUND-WATER OUTFLOW	GROUND-WATER INFLOW
EVAPOTRANSPIRATION	RECHARGE FROM INFILTRATING PRECIPITATION AND RUNOFF
UNDERFLOW	UNDERFLOW
STREAM BASE FLOW	PERENNIAL-STREAM LOSSES TO THE AQUIFER

RELATIVE MAGNITUDE OF OUTFLOW AND INFLOW—In acre-feet per year

- ○ More than 100,000
- ○ 50,000-100,000
- ○ 10,000-50,000
- ○ 5,000-10,000
- ○ Less than 5,000

4
11,000
RATIO OF ANNUAL INFLOW TO TOTAL VOLUME STORED IN THE GROUND-WATER SYSTEM—Upper number, 4, is the estimated average inflow and outflow to the aquifer of the basin, in thousands of acre-feet. Lower number, 11,000, is the estimated recoverable ground water in the basin-fill material to a depth of 1,200 feet below land surface, in thousands of acre-feet, rounded to the nearest million acre-feet

— PERENNIAL STREAM

▬ BOUNDARY OF GROUND-WATER BASIN

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—1986—W84364

PREDEVELOPMENT HYDROLOGIC CONDITIONS IN THE ALLUVIAL BASINS OF ARIZONA AND ADJACENT PARTS OF CALIFORNIA AND NEW MEXICO

By

Geoffrey W. Freethey and T. W. Anderson

1986

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