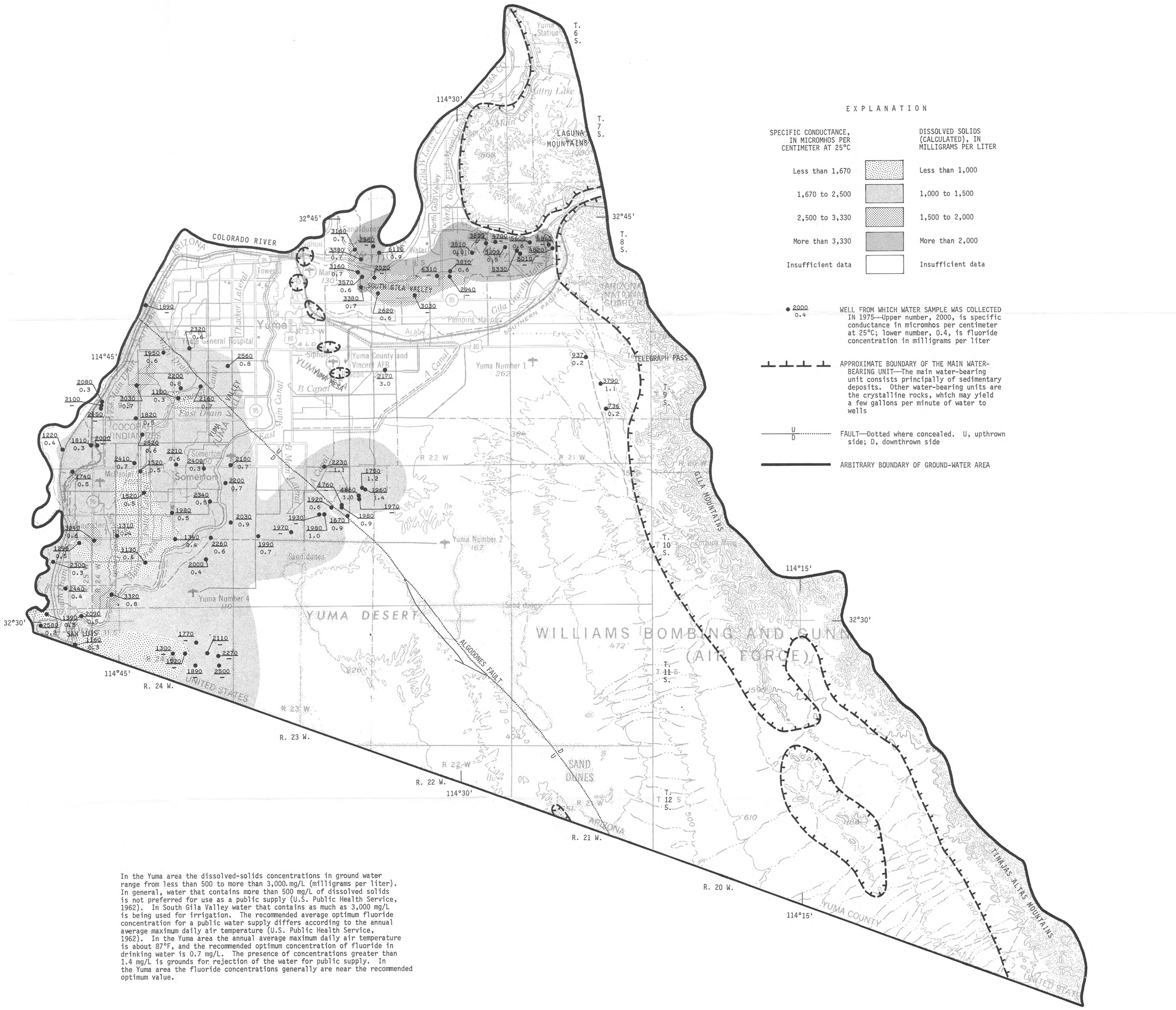
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
ARIZONA WATER COMMISSION

WATER-RESOURCES INVESTIGATIONS 78-62
OPEN-FILE REPORT (SHEET 3 OF 3)
SPECIFIC CONDUCTANCE AND FLUORIDE CONCENTRATION



EXPLANATION

SPECIFIC CONDUCTANCE, IN MICROMHOS PER CENTIMETER AT 25°C	DISSOLVED SOLIDS (CALCULATED), IN MILLIGRAMS PER LITER
Less than 1,670	Less than 1,000
1,670 to 2,500	1,000 to 1,500
2,500 to 3,330	1,500 to 2,000
More than 3,330	More than 2,000
Insufficient data	Insufficient data

In the Yuma area the dissolved-solids concentrations in ground water range from less than 500 to more than 3,000 mg/L (milligrams per liter). In general, water that contains more than 500 mg/L of dissolved solids is not preferred for use as a public supply (U.S. Public Health Service, 1962). In South Gila Valley water that contains as much as 3,000 mg/L is being used for irrigation. The recommended average optimum fluoride concentration for a public water supply differs according to the annual average maximum daily air temperature (U.S. Public Health Service, 1962). In the Yuma area the annual average maximum daily air temperature is about 87°F, and the recommended optimum concentration of fluoride in drinking water is 0.7 mg/L. The presence of concentrations greater than 1.4 mg/L is grounds for rejection of the water for public supply. In the Yuma area the fluoride concentrations generally are near the recommended optimum value.

BASE FROM U.S. GEOLOGICAL SURVEY
EL CENTRO 1:250,000, 1958

5 0 5 MILES
5 0 5 10 KILOMETERS

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

SPECIFIC CONDUCTANCE AND FLUORIDE CONCENTRATION

MAPS SHOWING GROUND-WATER CONDITIONS IN THE YUMA AREA, YUMA COUNTY, ARIZONA—1975

By

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