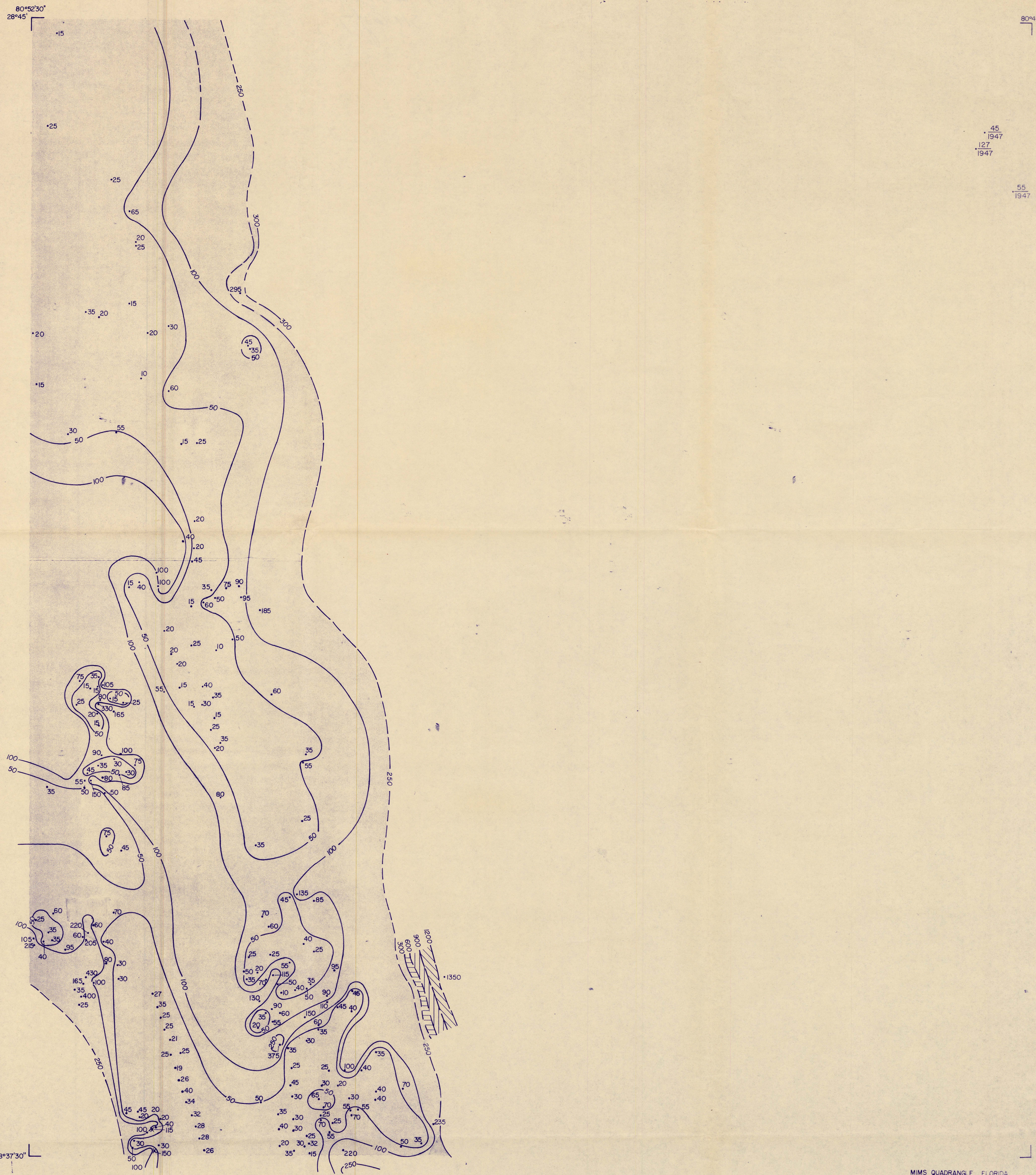
Prepared in cooperation with the
BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

Open-File Report
78-72
Sheet 6 of 7



MIMS QUADRANGLE, FLORIDA,
1949, PHOTOREVISED 1970,
7.5-minute series, 1:24000

EXPLANATION

——100- - - - LINE OF EQUAL CHLORIDE CONCENTRATION, January to March 1975. Dashed where approximately located. Some control data are on adjacent quadrangle. Contour interval 50, 150, and 300 milligrams per liter.

•45 WELL SAMPLED FOR CHLORIDE ANALYSIS. Number is chloride concentration, in milligrams per liter. Local well number is shown on sheet 1.

•55/1947 WELL SAMPLED FOR WHICH CHLORIDE CONCENTRATION, AS ANALYZED, DOES NOT FIT WITHIN THE GENERAL RANGE AS CONTOURED. This may result from localized conditions of recharge or discharge; from varying depths of sampled wells; or from error in reported depth of some wells.

x 115 WELL SAMPLED FOR CHLORIDE ANALYSIS IN PREVIOUS YEARS. Top number is chloride concentration, in milligrams per liter. Bottom number is year of sample collection.

AGRICULTURAL SIGNIFICANCE [1]

CHLORIDE CONCENTRATION, IN MILLIGRAMS PER LITER	TOTAL SALT (NaCl), IN PARTS PER MILLION [2]	
0	0	
50		
100		
180	300	Injures some orchids
250	410	Recommended limit for public supplies [3]
300		
550	900	Kills azaleas, causes injury to some tender plants, vegetables, flowers, and citrus foliage
600		
730	1200	Damages a number of succulent plants
900	1500	Damages bahiagrass, sweetgum, tibouchina, and many foliage plants
1100	1800	Injures many woody plants including citrus (root area)
1200	2000	Not recommended for plant use except St Augustine grass. Water may damage or kill plants when watering lawn.

Note: Well density is insufficient in some areas to allow contouring of chloride concentrations.

[1] Agricultural significance levels were derived from experimental greenhouse plots and field observations, as reported in a form letter distributed by Brevard County Cooperative Extension Service (Rose, 1977) (references, sheet 3).

[2] Total salt values represent sodium chloride (NaCl) and other chloride salts present in ground-water samples analyzed by the Brevard County Cooperative Extension Service (Rose, 1977) using the solu-bridge electrode method. Total salt values are listed to provide a comparison for agricultural interests and homeowners using data from both sources. Chloride concentrations, in milligrams per liter, are portrayed on this overlay.

[3] National Academy of Sciences and National Academy of Engineering, 1973 (references, sheet 3).

OVERLAY MAP OF THE MIMS QUADRANGLE, FLORIDA; CHLORIDE CONCENTRATION OF WATER IN THE SHALLOW AQUIFER, 1975

By
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1978