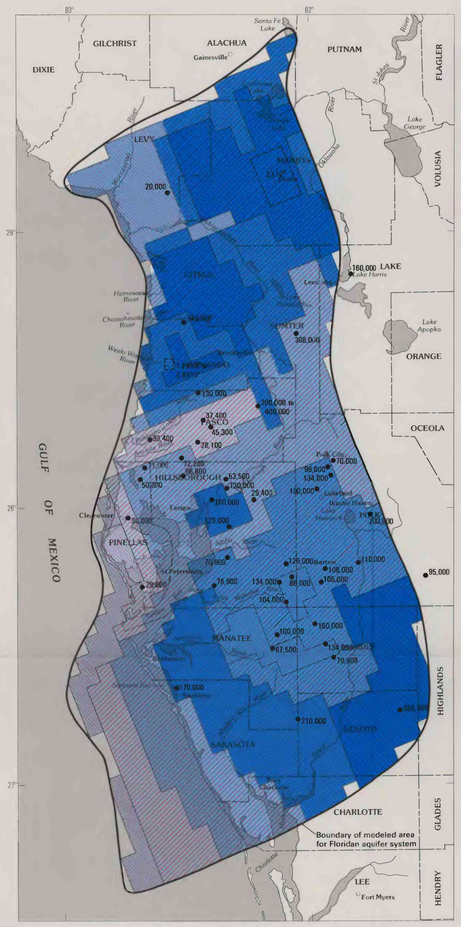


EXPLANATION

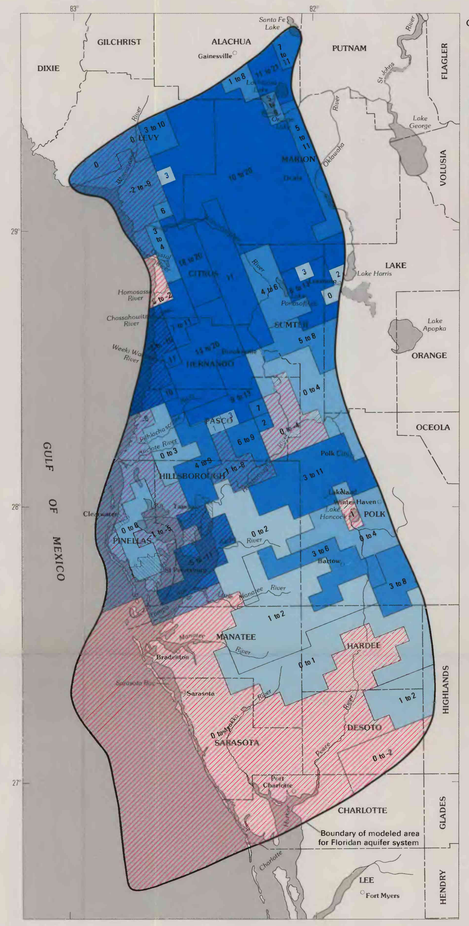
MODEL-DERIVED TRANSMISSIVITY, IN FEET SQUARED PER DAY

- >1,000,000
- 400,000
- 250,000-500,000
- 200,000
- 130,000
- 100,000
- 50,000-100,000
- 20,000-90,000
- 30,000-40,000
- 17,000

TRANSMISSIVITY — In feet squared per day

- 100,000 — Determined from aquifer tests and estimated from specific-capacity tests
- 2.1×10^9 — Determined from flow-net analyses

FIELD AND MODEL-DERIVED TRANSMISSIVITY



EXPLANATION

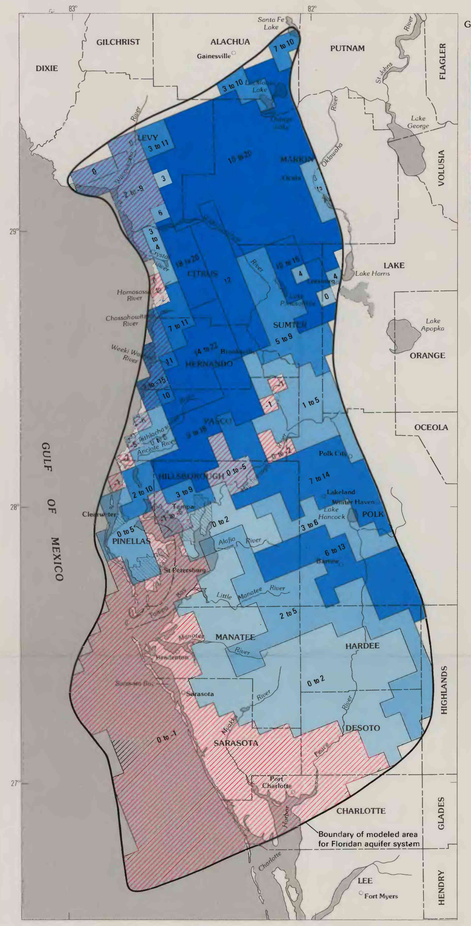
GENERALIZED RECHARGE AND DISCHARGE—Prior to development, in inches per year

- 10 to 20
- 4 to 11
- 3 to 8
- 0 to 4
- 0 to 2
- 0 to -1
- 0 to -4
- -1 to -5
- 0 to -8
- -5 to -10
- -3 to -15

7 — RECHARGE (POSITIVE VALUE)—In inches per year

-8 — DISCHARGE (NEGATIVE VALUE)—In inches per year

PREDEVELOPMENT RECHARGE AND DISCHARGE IN THE CALIBRATED MODEL, EXCLUDING SPRINGFLOW



EXPLANATION

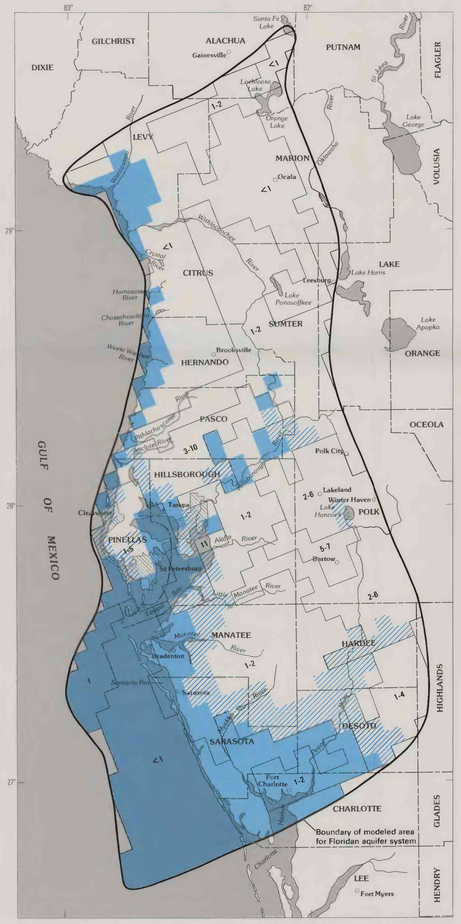
GENERALIZED RECHARGE AND DISCHARGE IN 1976—In inches per year

- 10 to 20
- 6 to 14
- 4 to 10
- 2 to 6
- 0 to 2
- 0 to -1
- 0 to -5
- 0 to -9
- -3 to -15

4 — RECHARGE (POSITIVE VALUE)—In inches per year

-5 — DISCHARGE (NEGATIVE VALUE)—In inches per year

RECHARGE AND DISCHARGE IN THE CALIBRATED MODEL, EXCLUDING SPRINGFLOW, 1976



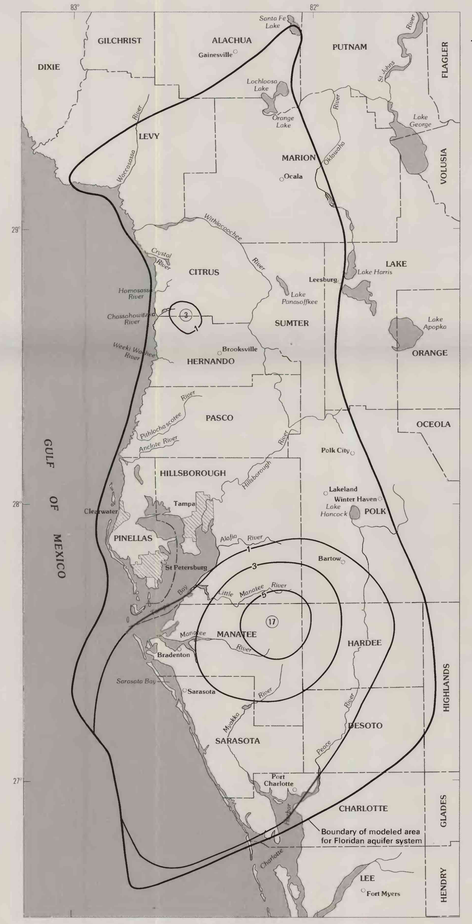
EXPLANATION

AREAS OF UPWARD DISCHARGE

AREAS THAT HAVE CHANGED FROM DISCHARGE TO RECHARGING CONDITIONS

1-2 — SIMULATED INCREASE IN RATE OF RECHARGE TO UPPER FLORIDAN AQUIFER—In inches per year. In solid blue area, number is decrease in rate discharge

SIMULATED CHANGE IN RATES OF RECHARGE, PREDEVELOPMENT TO 1976



EXPLANATION

3 — PUMPING CENTER—Number is feet of decline within grid block

—3— LINE OF EQUAL CHANGE IN POTENTIOMETRIC SURFACE—Shows amount of decline, in feet, of potentiometric surface of Upper Floridan aquifer. Interval is variable

0 10 20 30 40 50 60 MILES
0 10 20 30 40 50 60 70 80 90 KILOMETERS

SIMULATED CHANGE IN 1976 POTENTIOMETRIC SURFACE AFTER SUPERIMPOSING WITHDRAWALS OF 30 MILLION GALLONS PER DAY, HERNANDO AND MANATEE COUNTIES

TRANSMISSIVITY AND RECHARGE AND DISCHARGE RATES FOR THE UPPER FLORIDAN AQUIFER, AND CHANGE IN THE POTENTIOMETRIC SURFACE IN RESPONSE TO SIMULATED PUMPAGE IN WEST-CENTRAL FLORIDA