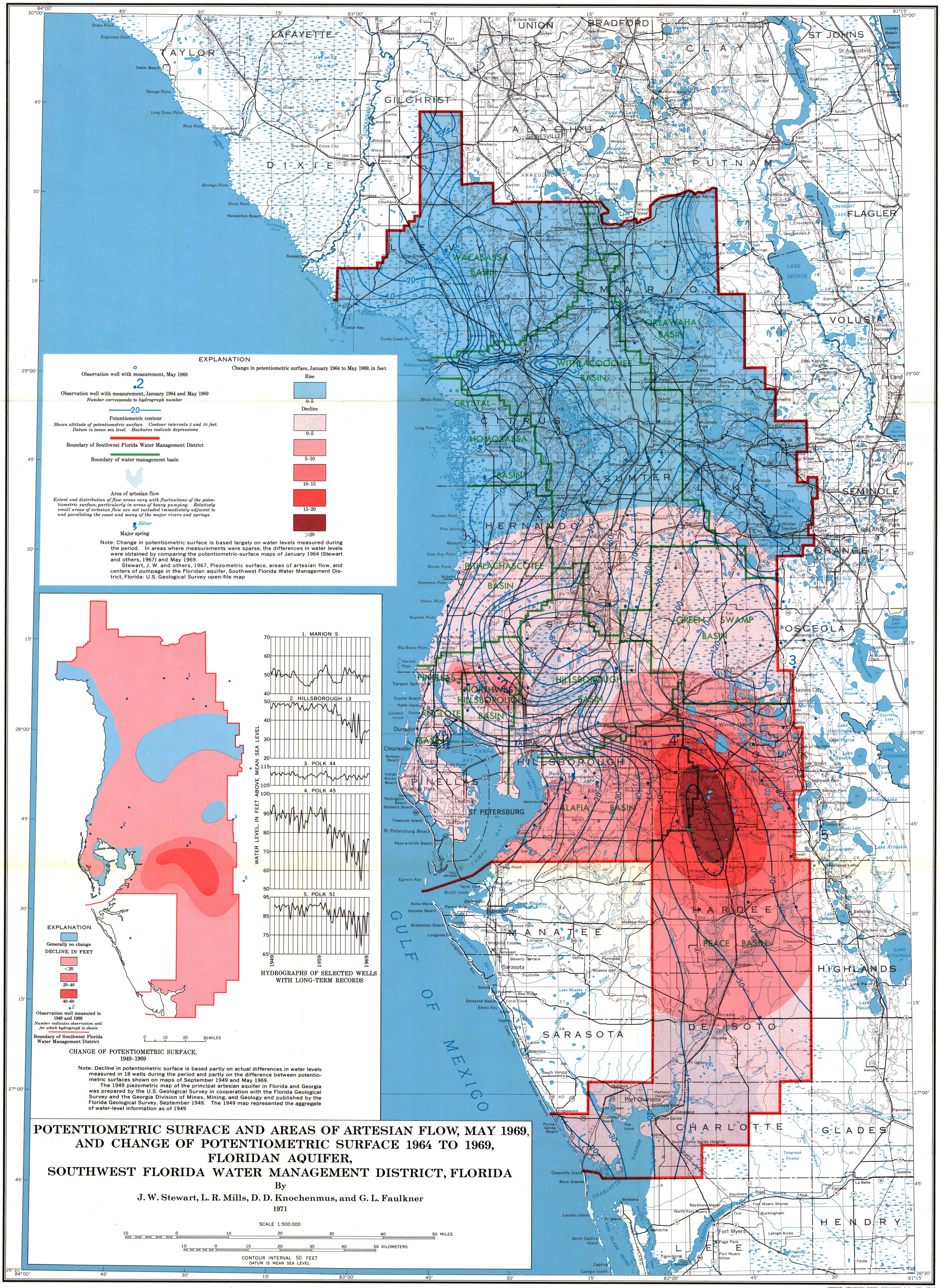
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH
THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
AND THE
BUREAU OF GEOLOGY
FLORIDA DEPARTMENT OF NATURAL RESOURCES

HYDROLOGIC INVESTIGATIONS
ATLAS HA-440


EXPLANATION
Observation well with measurement, May 1969
Observation well with measurement, January 1964 and May 1969
Number corresponds to hydrograph number
Potentiometric contour
Shows altitude of potentiometric surface. Contour intervals 5 and 10 feet. Datum is mean sea level. Hachures indicate depressions
Boundary of Southwest Florida Water Management District
Boundary of water management basin
Area of artesian flow
Extent and distribution of flow areas vary with fluctuations of the potentiometric surface, particularly in areas of heavy pumping. Relatively small areas of artesian flow are not included immediately adjacent to and paralleling the coast and many of the major rivers and springs
Silver
Major spring
Change in potentiometric surface, January 1964 to May 1969, in feet
Rise
0-5
Decline
0-5
5-10
10-15
15-20
>20
Note: Change in potentiometric surface is based largely on water levels measured during the period. In areas where measurements were sparse, the differences in water levels were obtained by comparing the potentiometric-surface maps of January 1964 (Stewart and others, 1967) and May 1969.
Stewart, J. W. and others, 1967, Piezometric surface, areas of artesian flow, and centers of pumpage in the Floridan aquifer, Southwest Florida Water Management District, Florida: U.S. Geological Survey open-file map
EXPLANATION
Generally no change
DECLINE, IN FEET
<20
20-40
40-60
Observation well measured in 1949 and 1969
Number indicates observation well for which hydrograph is shown
Boundary of Southwest Florida Water Management District
0 10 20 30 MILES
CHANGE OF POTENTIOMETRIC SURFACE, 1949-1969
Note: Decline in potentiometric surface is based partly on actual differences in water levels measured in 18 wells during the period and partly on the difference between potentiometric surfaces shown on maps of September 1949 and May 1969.
The 1949 piezometric map of the principal artesian aquifer in Florida and Georgia was prepared by the U.S. Geological Survey in cooperation with the Florida Geological Survey and the Georgia Division of Mines, Mining, and Geology and published by the Florida Geological Survey, September 1949. The 1949 map represented the aggregate of water-level information as of 1949
1. MARION 5
2. HILLSBOROUGH 13
3. POLK 44
4. POLK 45
5. POLK 51
WATER LEVEL, IN FEET ABOVE MEAN SEA LEVEL
1949
1959
1969
HYDROGRAPHS OF SELECTED WELLS WITH LONG-TERM RECORDS
SCALE 1:500 000
10 0 10 20 30 40 50 MILES
10 0 10 20 30 40 50 KILOMETERS
CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL
GULF OF MEXICO
TAYLOR
LAFAYETTE
UNION
BRADFORD
CLAY
ST JOHNS
GILCHRIST
ALACHUA
PUTNAM
DIXIE
LEVY
MARION
FLAGLER
VOLUSIA
CITRUS
SUMTER
LAKE
SEMINOLE
HERNANDO
ORANGE
PASCO
OSCEOLA
PINELLAS
HILLSBOROUGH
POLK
HARDEE
MANATEE
HIGHLANDS
SARASOTA
DE SOTO
CHARLOTTE
GLADES
LEE
HENDRY
WACASASSA BASIN
ORLANDO BASIN
WITHLACOOCHEE BASIN
CRYSTAL-HOMOSASSA BASIN
PITHLACHASCOTEE BASIN
GREEN SWAMP BASIN
NORTHWEST HILLSBOROUGH BASIN
ANCLOTE BASIN
HILLSBOROUGH BASIN
ALAFIA BASIN
PEACE BASIN
GAINESVILLE
TAMPA
ST PETERSBURG
Bradenton
Sarasota
Arcadia
Fort Myers
Port Charlotte
Venice
Punta Gorda
Cape Coral
Sebring
Lake Okeechobee
Lake Kissimmee
Lake Istokpoga
Lake Apopka
Lake George
Lake Tohopekaliga
Lake Weohyakapka
Lake Arbuckle
Lake Jackson
Lake Placid
Lake Okeechobee
Lake Monroe
Lake Harney
Lake Jesup
Lake Tarpon
Lake Myakka