Geochemistry of the Floridan Aquifer System in Florida and in Parts of Georgia, South Carolina, and Alabama

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REGIONAL AQUIFER-SYSTEM ANALYSIS—FLORIDAN AQUIFER SYSTEM

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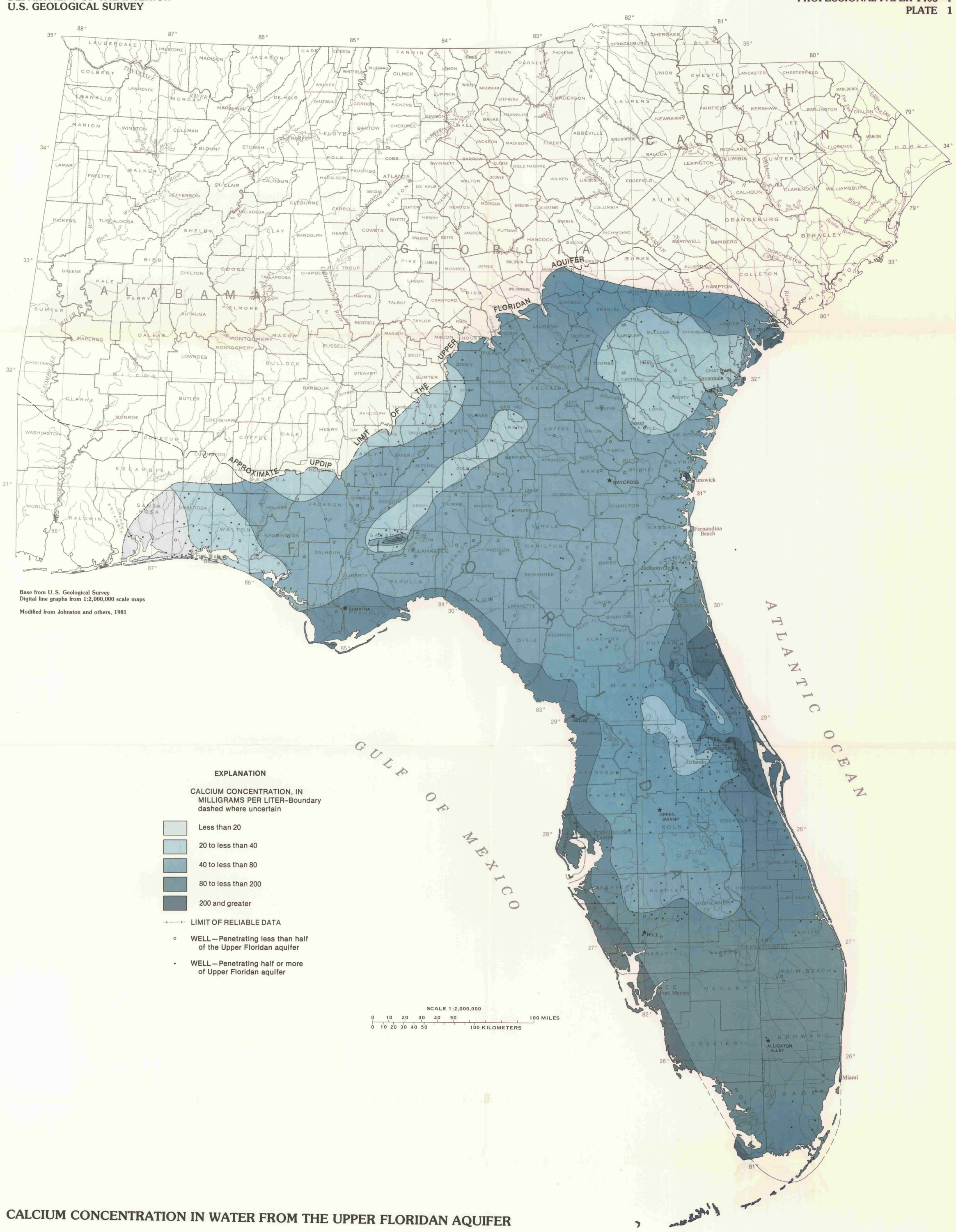
PLATE 1



Base from U.S. Geological Survey
Digital line graphs from 1:2,000,000 scale maps

Modified from Johnston and others, 1981

EXPLANATION

CALCIUM CONCENTRATION, IN MILLIGRAMS PER LITER–Boundary dashed where uncertain

- Less than 20
- 20 to less than 40
- 40 to less than 80
- 80 to less than 200
- 200 and greater
- LIMIT OF RELIABLE DATA
- WELL—Penetrating less than half of the Upper Floridan aquifer
- WELL—Penetrating half or more of Upper Floridan aquifer

SCALE 1:2,000,000
0 10 20 30 40 50 100 MILES
0 10 20 30 40 50 100 KILOMETERS

CALCIUM CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER

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PLATE 2

MAGNESIUM CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER

Base from U.S. Geological Survey
Digital line graphs from 1:2,000,000 scale maps

Modified from Johnston and others, 1981

EXPLANATION

MAGNESIUM CONCENTRATION, IN MILLIGRAMS PER LITER–Boundary dashed where uncertain

- Less than 12
- 12 to less than 24
- 24 to less than 49
- 49 to less than 122
- 122 and greater
- LIMIT OF RELIABLE DATA

NOTE: LOCATION OF CONTROL WELLS SHOWN ON PLATE 1

SCALE 1:2,000,000
0 10 20 30 40 50 100 MILES
0 10 20 30 40 50 100 KILOMETERS

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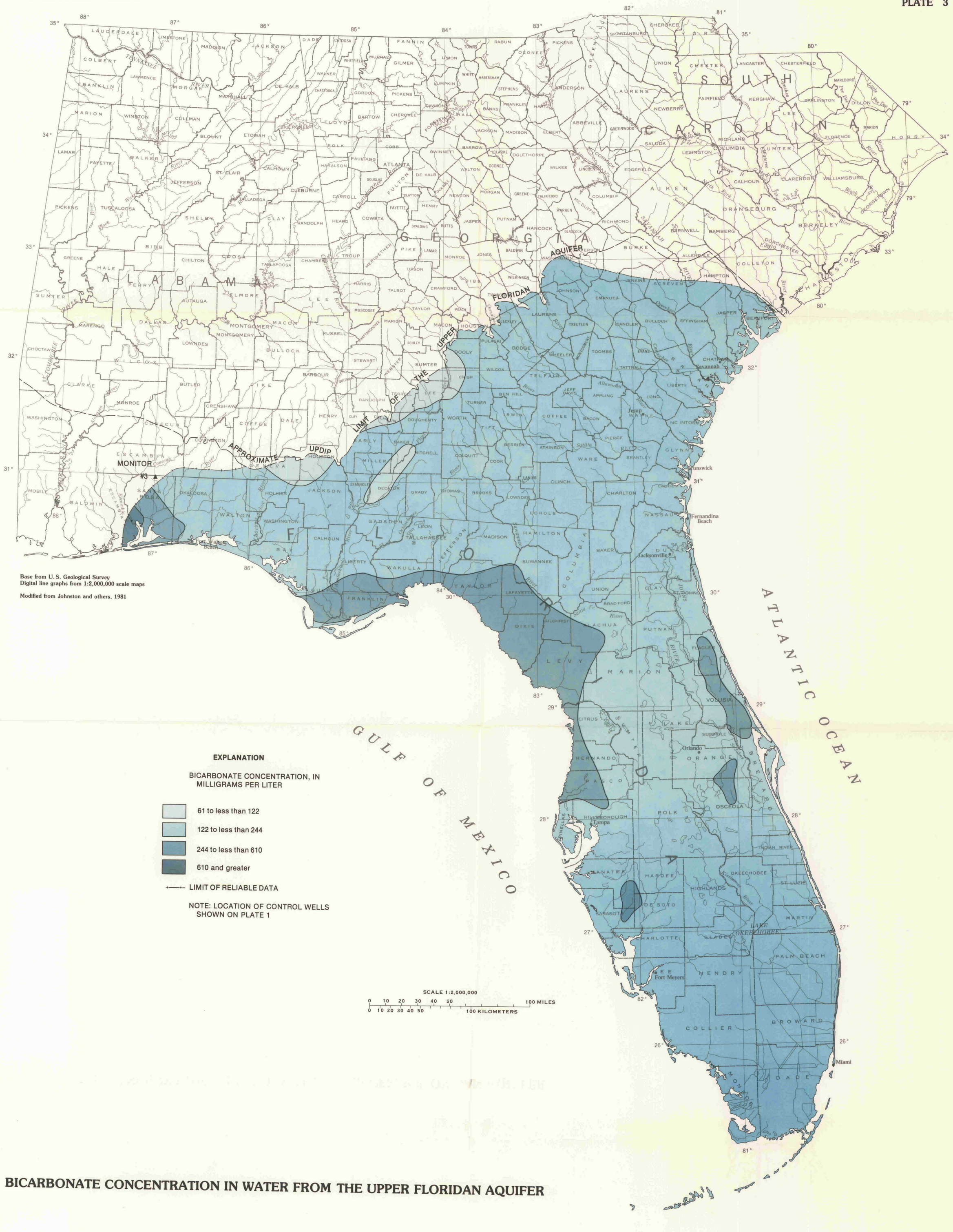
PLATE 3



BICARBONATE CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER

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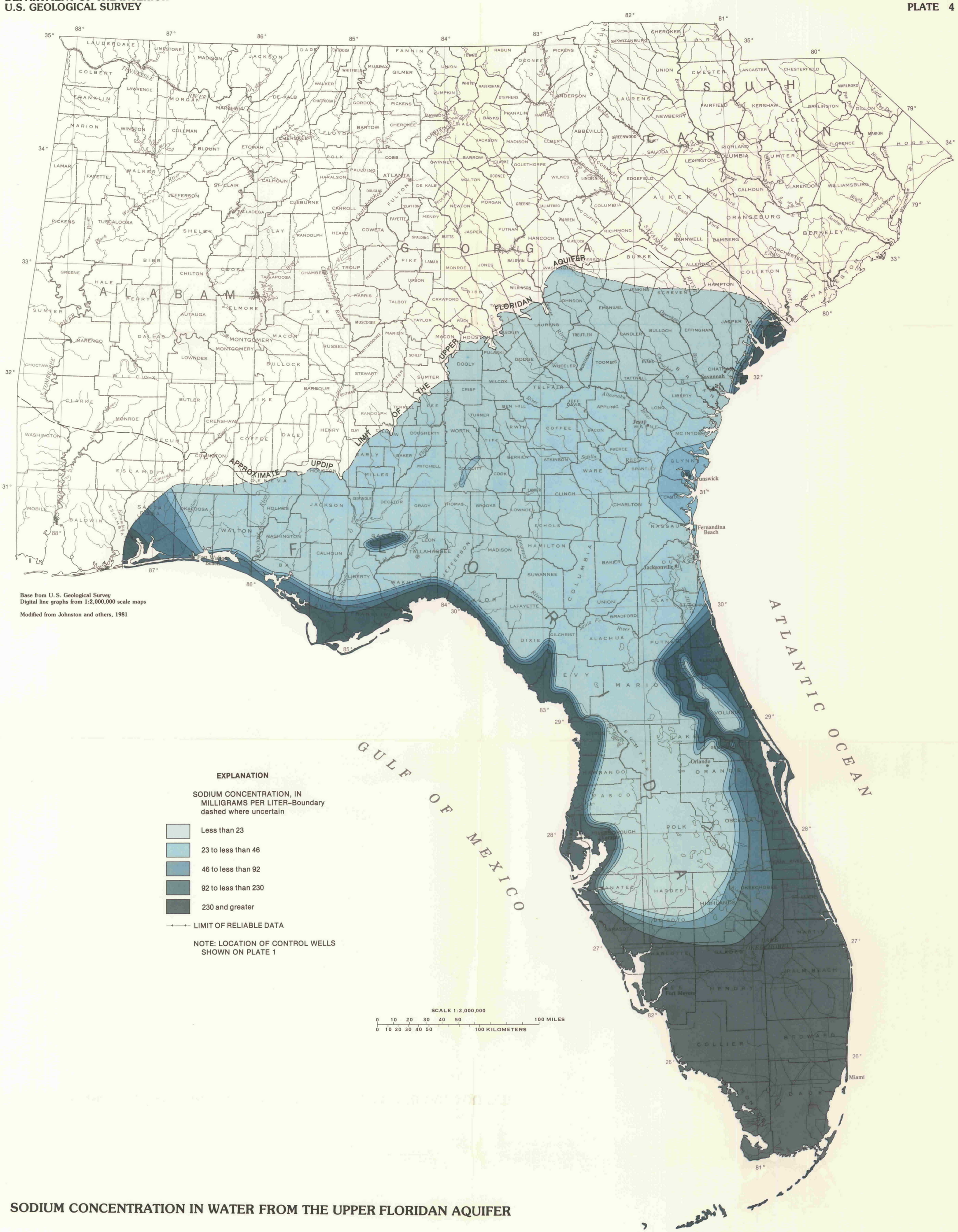
PLATE 4



Base from U.S. Geological Survey
Digital line graphs from 1:2,000,000 scale maps

Modified from Johnston and others, 1981

EXPLANATION

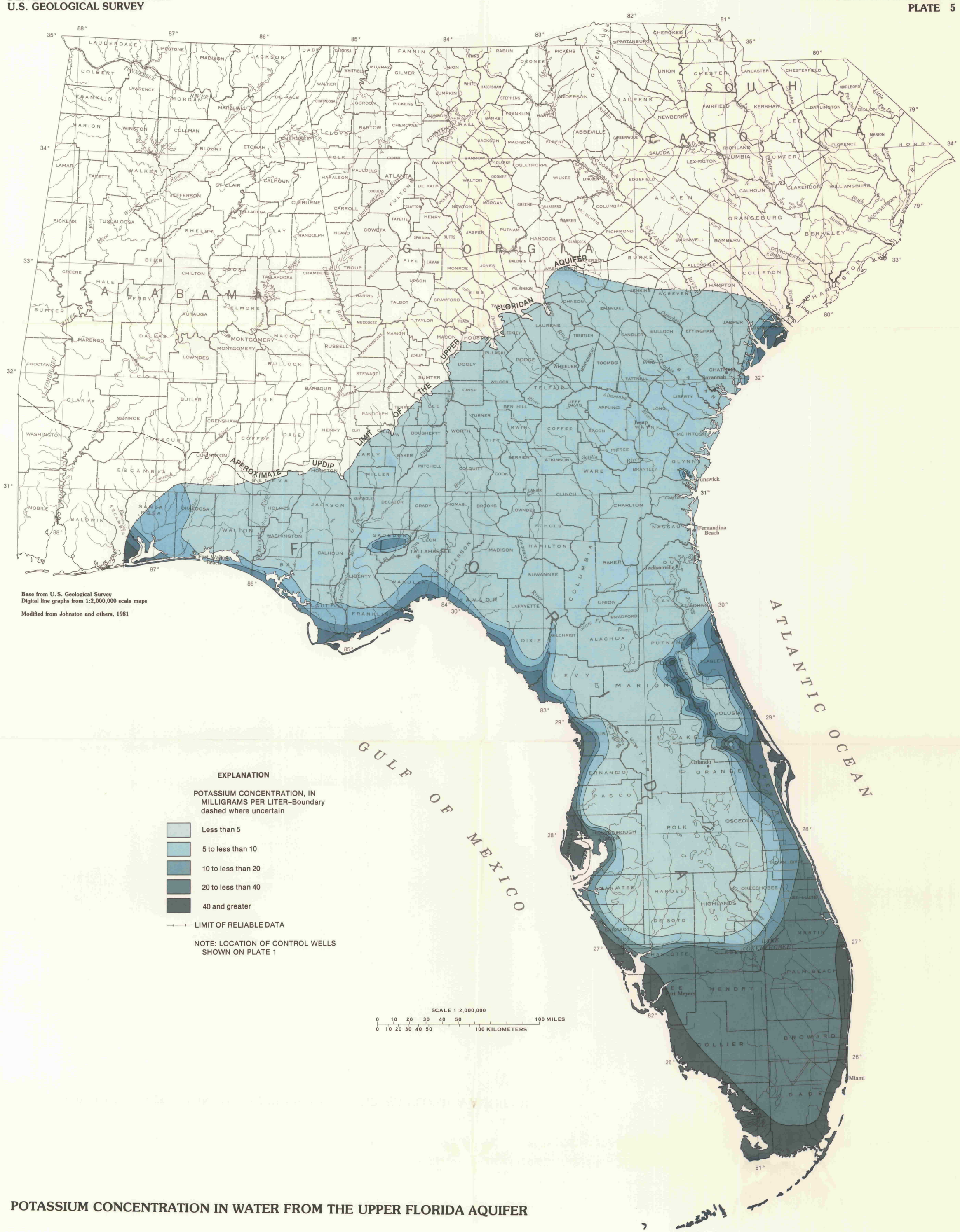
SODIUM CONCENTRATION, IN MILLIGRAMS PER LITER–Boundary dashed where uncertain

- Less than 23
- 23 to less than 46
- 46 to less than 92
- 92 to less than 230
- 230 and greater
- LIMIT OF RELIABLE DATA

NOTE: LOCATION OF CONTROL WELLS SHOWN ON PLATE 1

SCALE 1:2,000,000
0 10 20 30 40 50 100 MILES
0 10 20 30 40 50 100 KILOMETERS

SODIUM CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER



POTASSIUM CONCENTRATION IN WATER FROM THE UPPER FLORIDA AQUIFER

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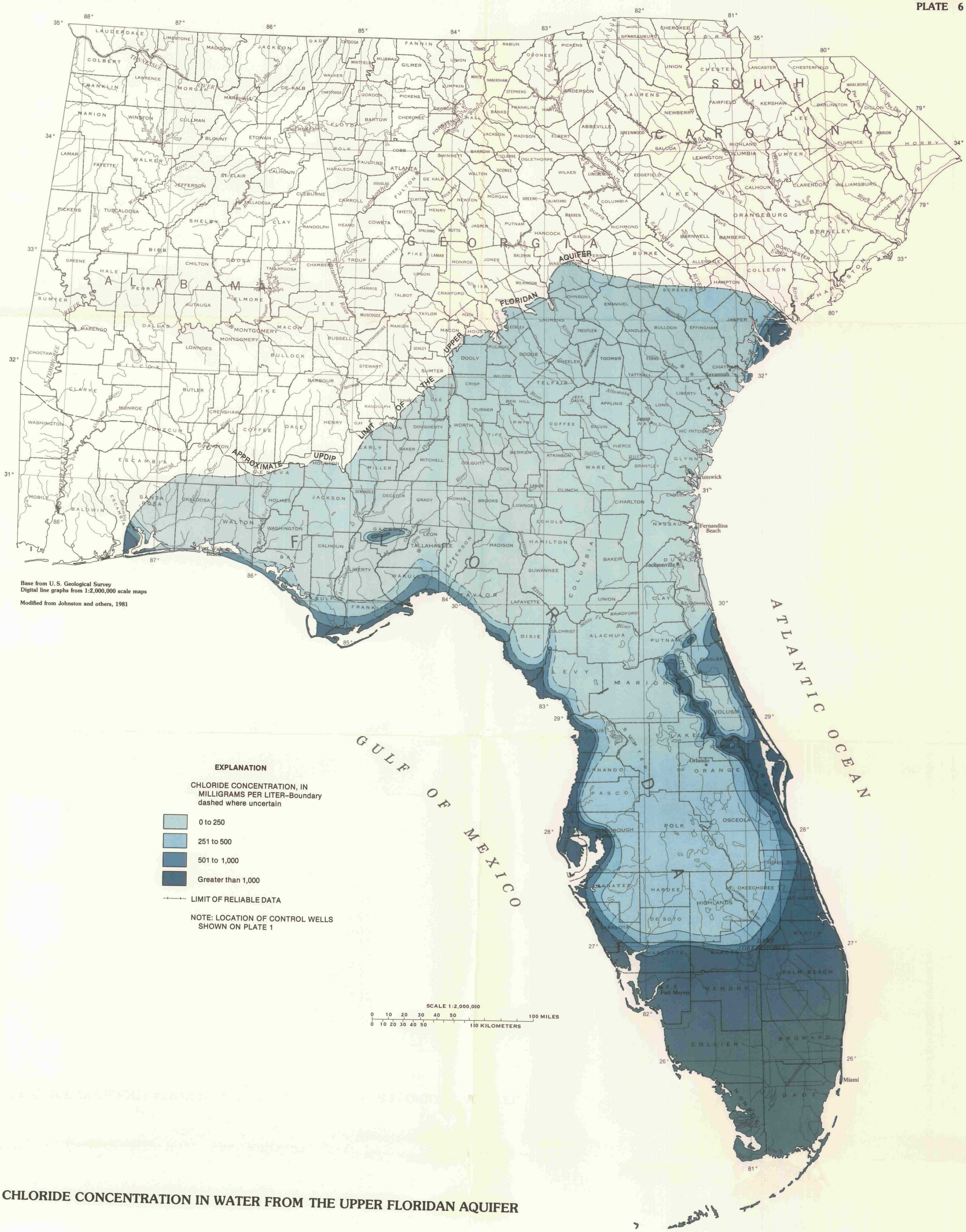

Base from U.S. Geological Survey
Digital line graphs from 1:2,000,000 scale maps

Modified from Johnston and others, 1981

CHLORIDE CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER

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Base from U.S. Geological Survey
Digital line graphs from 1:2,000,000 scale maps

Modified from Johnston and others, 1981

EXPLANATION

SULFATE CONCENTRATION, IN MILLIGRAMS PER LITER

- 0 to 50
- 51 to 100
- 101 to 250
- Greater than 250

LIMIT OF RELIABLE DATA

NOTE: LOCATION OF CONTROL WELLS SHOWN ON PLATE 1

SCALE 1:2,000,000

0 10 20 30 40 50 100 MILES
0 10 20 30 40 50 100 KILOMETERS

SULFATE CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER

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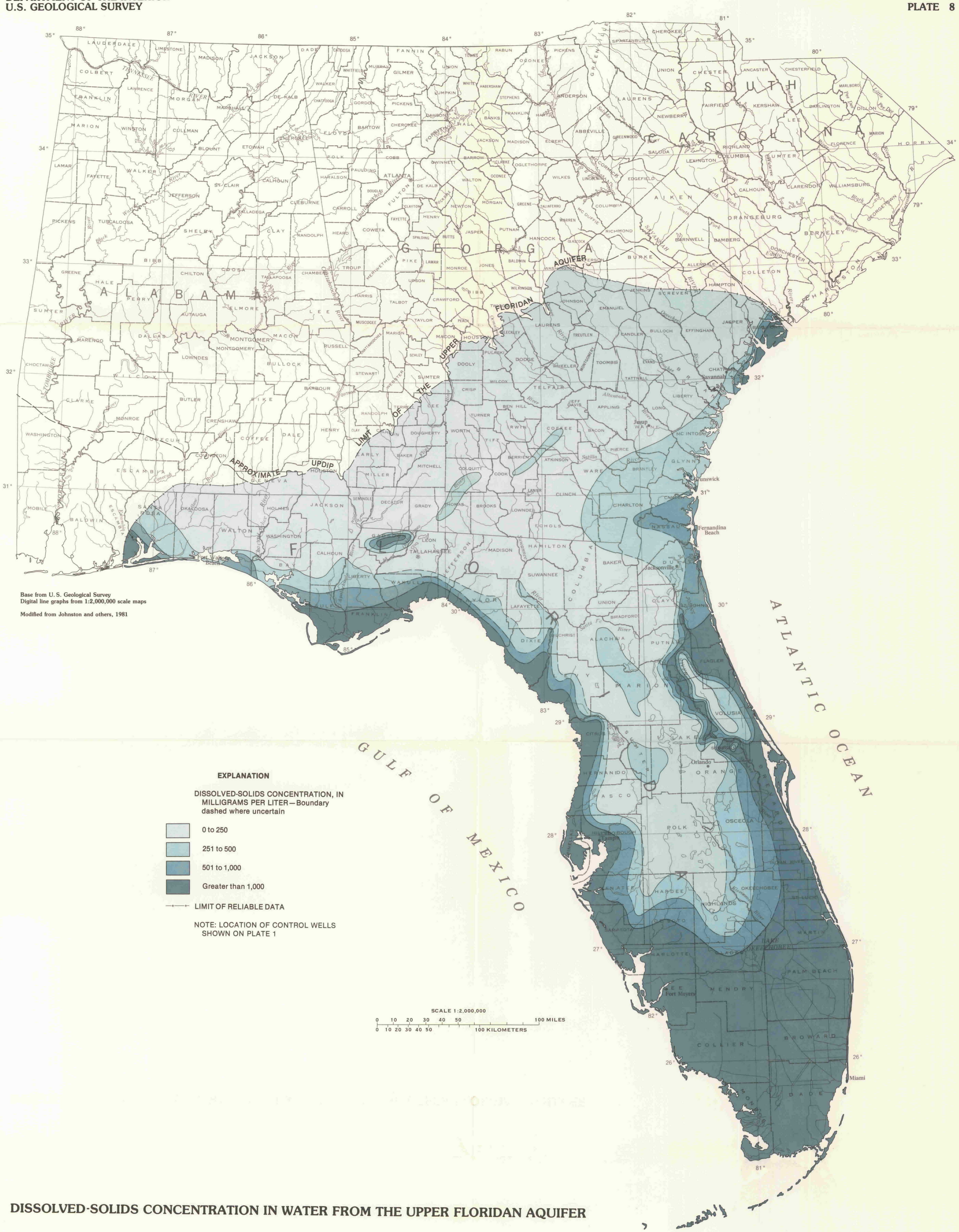
PLATE 8



DISSOLVED-SOLIDS CONCENTRATION IN WATER FROM THE UPPER FLORIDAN AQUIFER

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Base from U.S. Geological Survey
Digital line graphs from 1:2,000,000 scale maps

Modified from Johnston and others, 1981

EXPLANATION

- CALCIUM-BICARBONATE FACIES
- CALCIUM-MAGNESIUM-BICARBONATE FACIES
- CALCIUM-MAGNESIUM-BICARBONATE-SULFATE FACIES
- CALCIUM-MAGNESIUM-SULFATE FACIES
- MIXED FACIES
- MIXED-BICARBONATE FACIES
- SODIUM-CHLORIDE FACIES
- SODIUM-BICARBONATE FACIES
- LIMIT OF RELIABLE DATA

NOTE: LOCATION OF CONTROL WELLS SHOWN ON PLATE 1

SCALE 1:2,000,000
0 10 20 30 40 50 100 MILES
0 10 20 30 40 50 100 KILOMETERS

HYDROCHEMICAL FACIES IN WATER FROM THE UPPER FLORIDAN AQUIFER