Why Georgia Needs an Irrigation Research Park

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Superintendent
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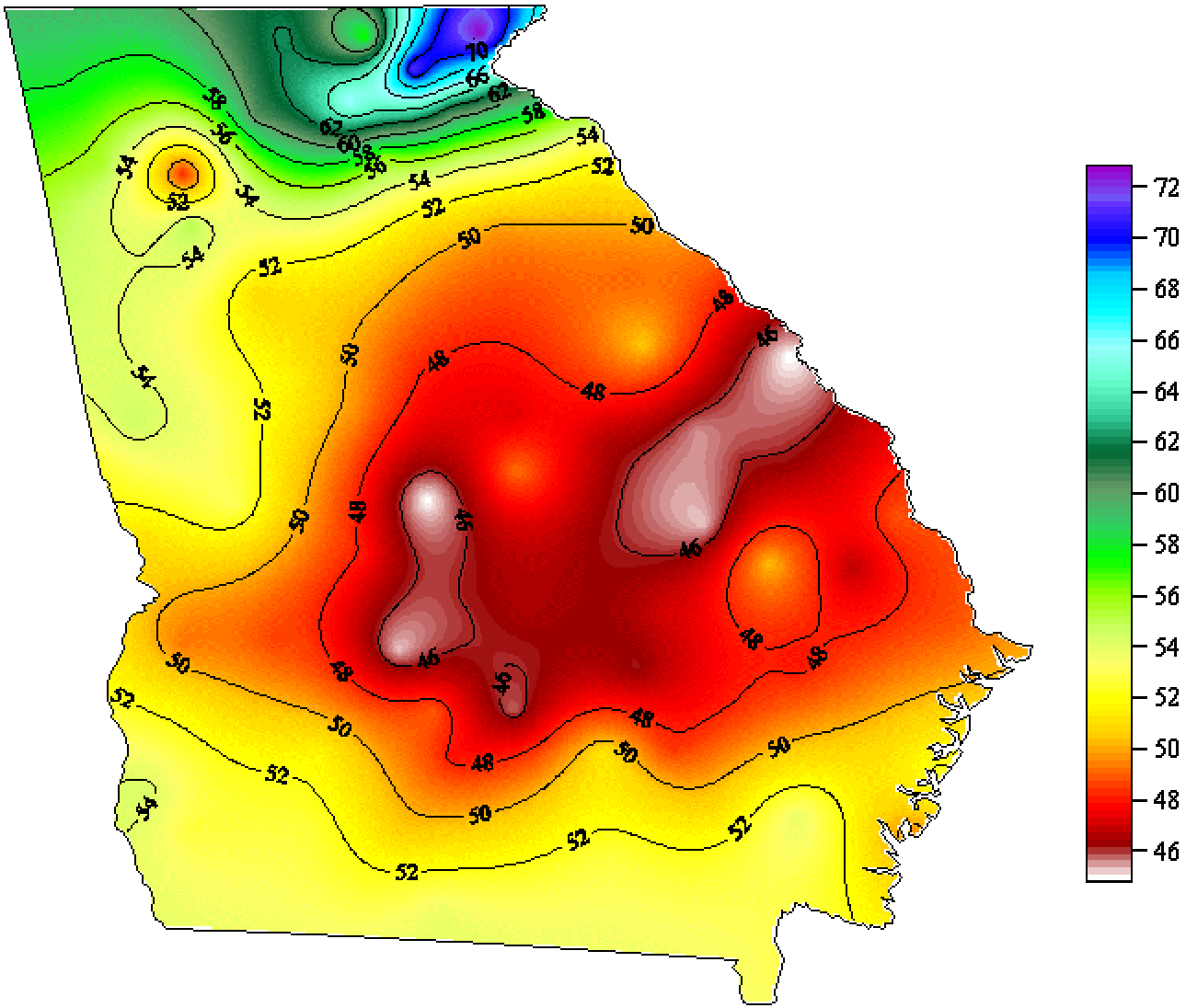
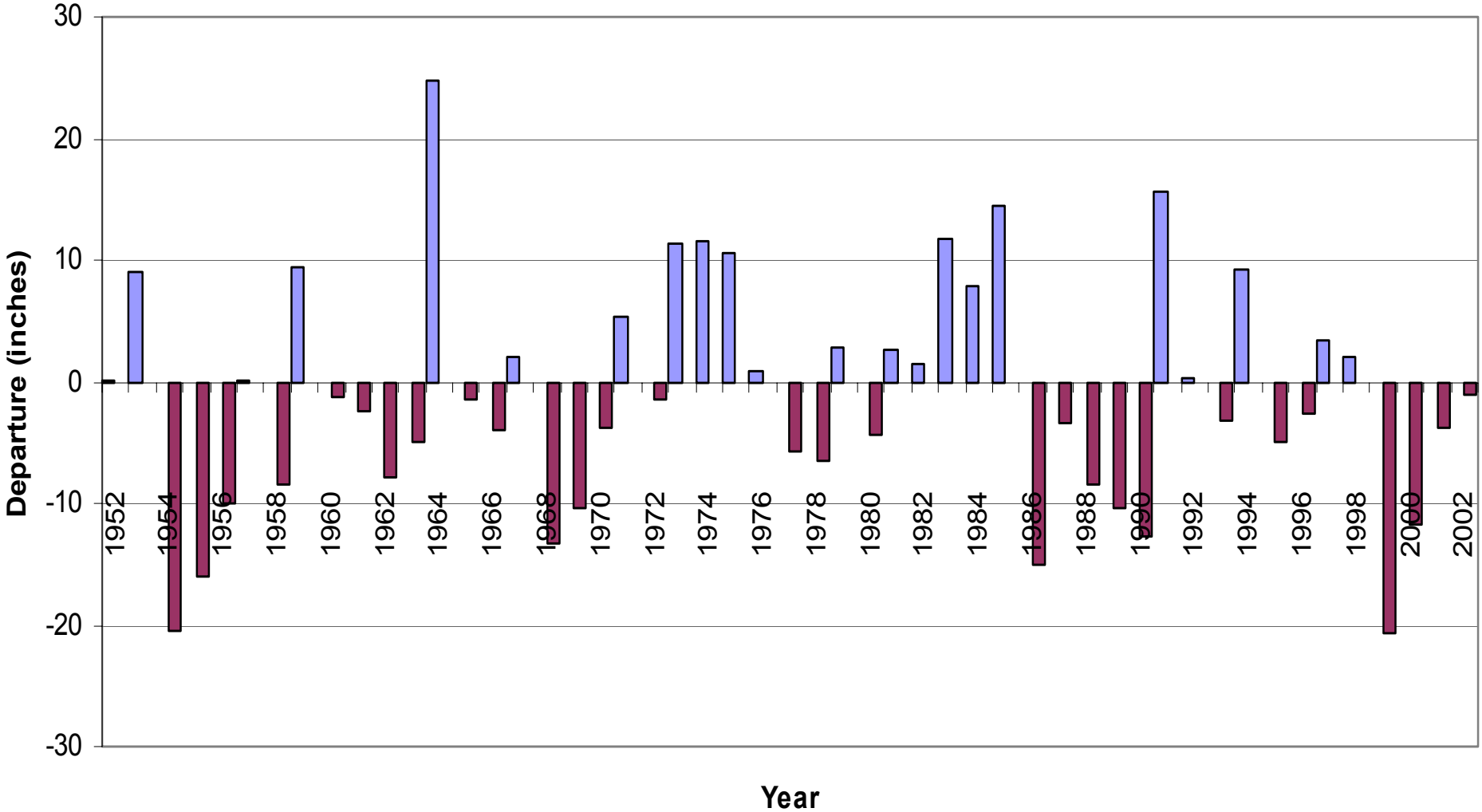
Misconceptions:

- Sub Tropical Climate

Annual Precipitation in Georgia

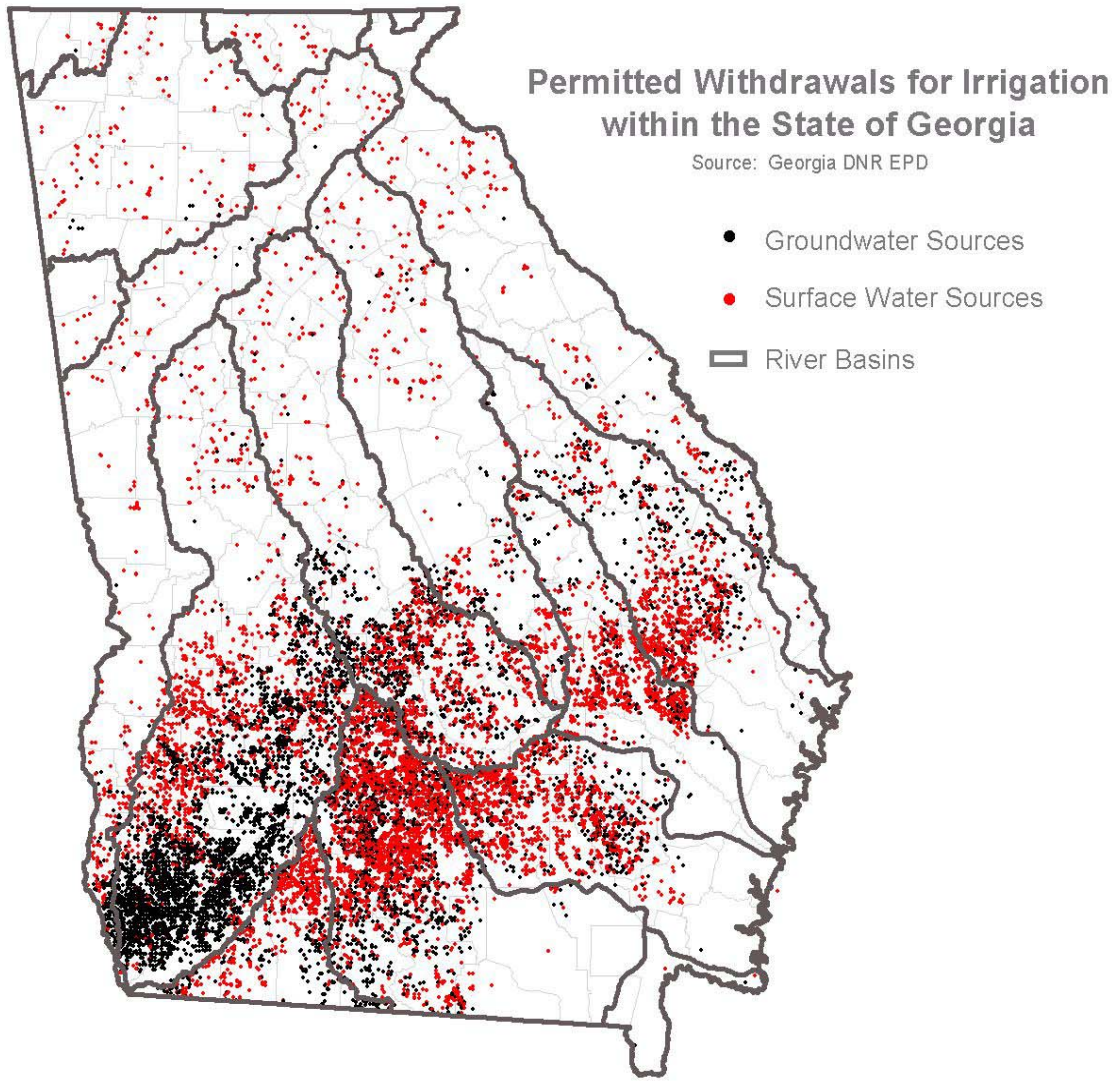



Camilla Annual Precipitation
Departure from Normal (52.81 inches)
Departure (inches)
30
20
10
0
-10
-20
-30
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
Year

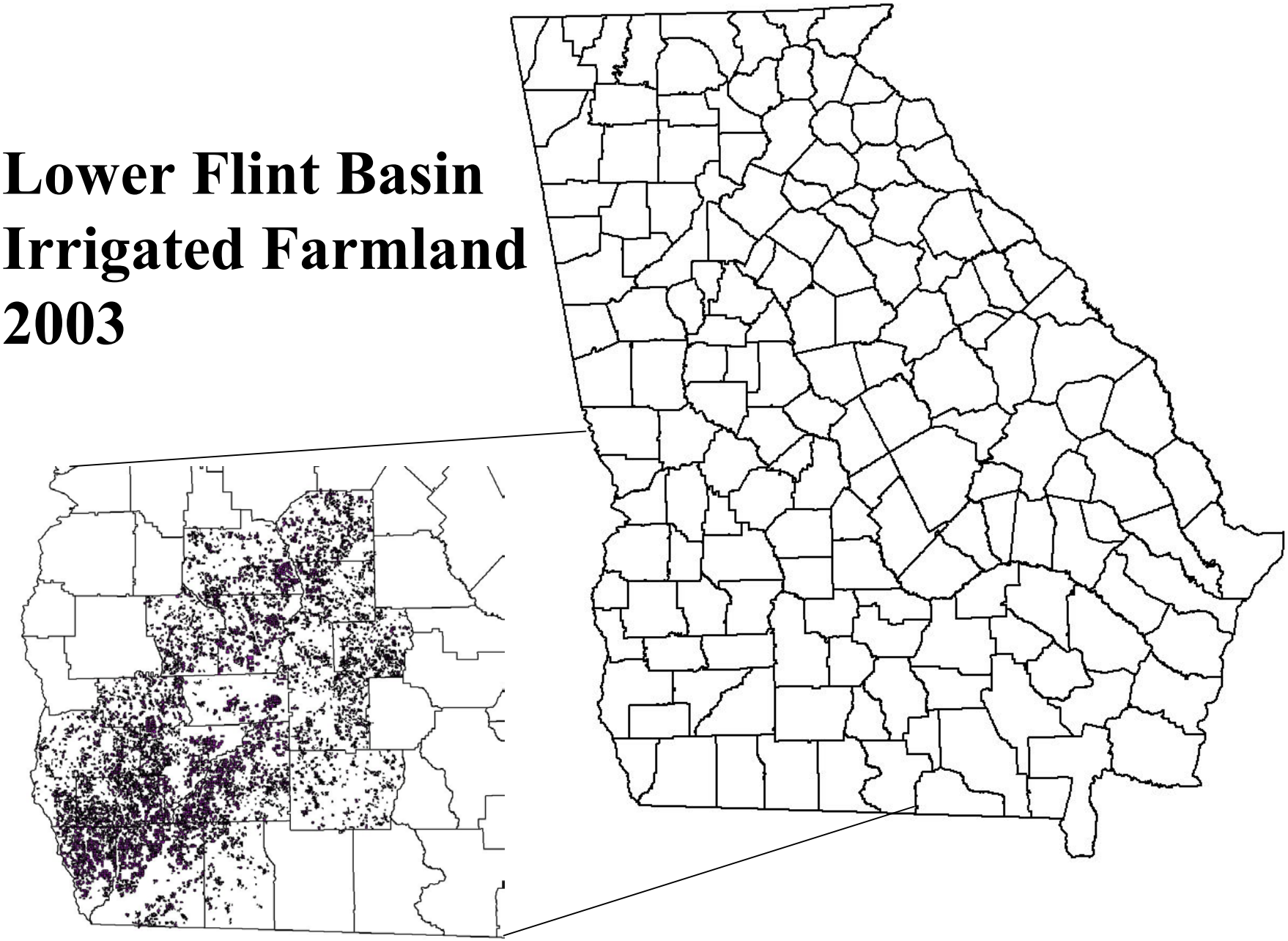
Misconceptions:

- Sub Tropical Climate
- No Irrigation in Georgia

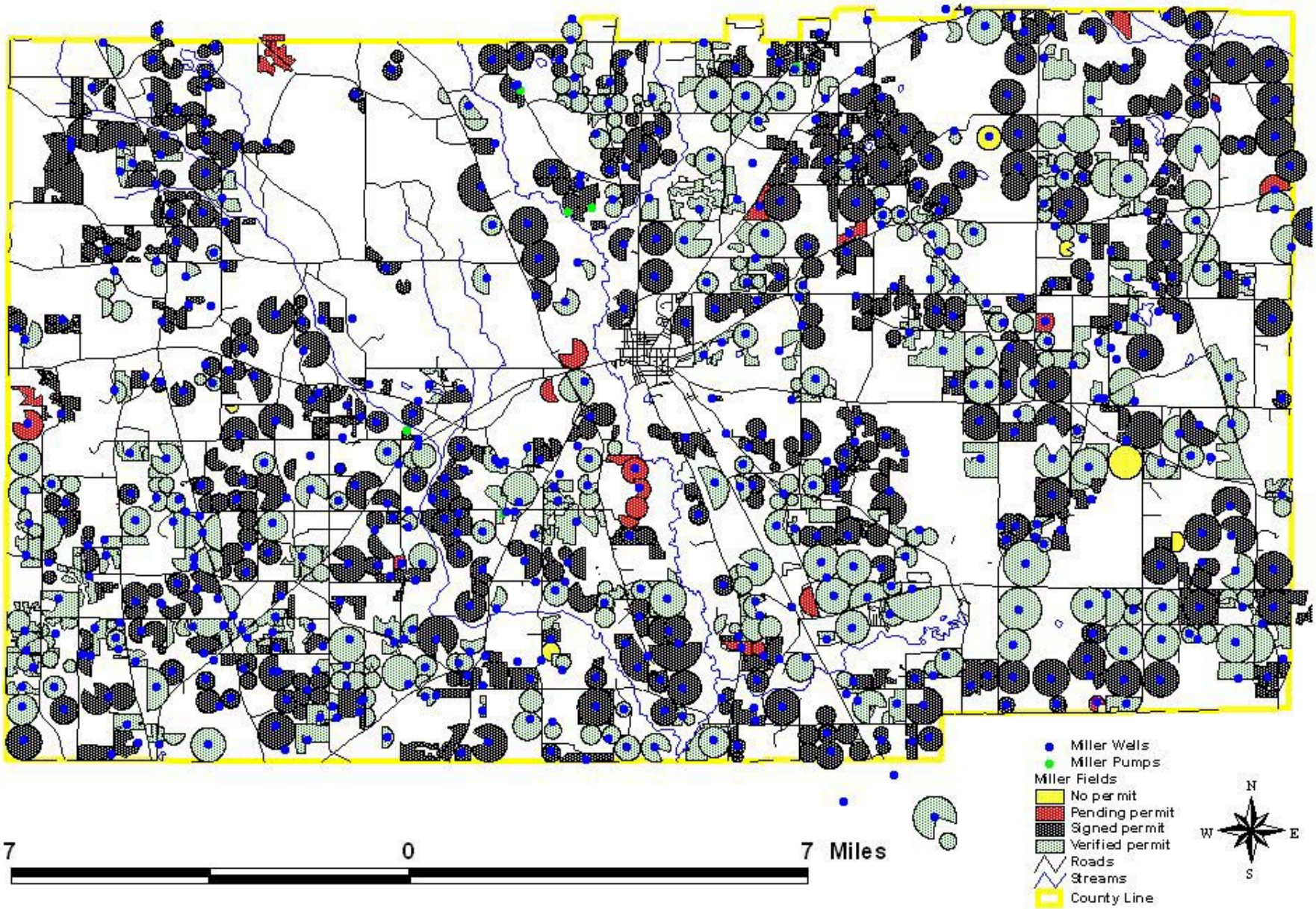
Agricultural Water Permits



Lower Flint Basin Irrigated Farmland 2003

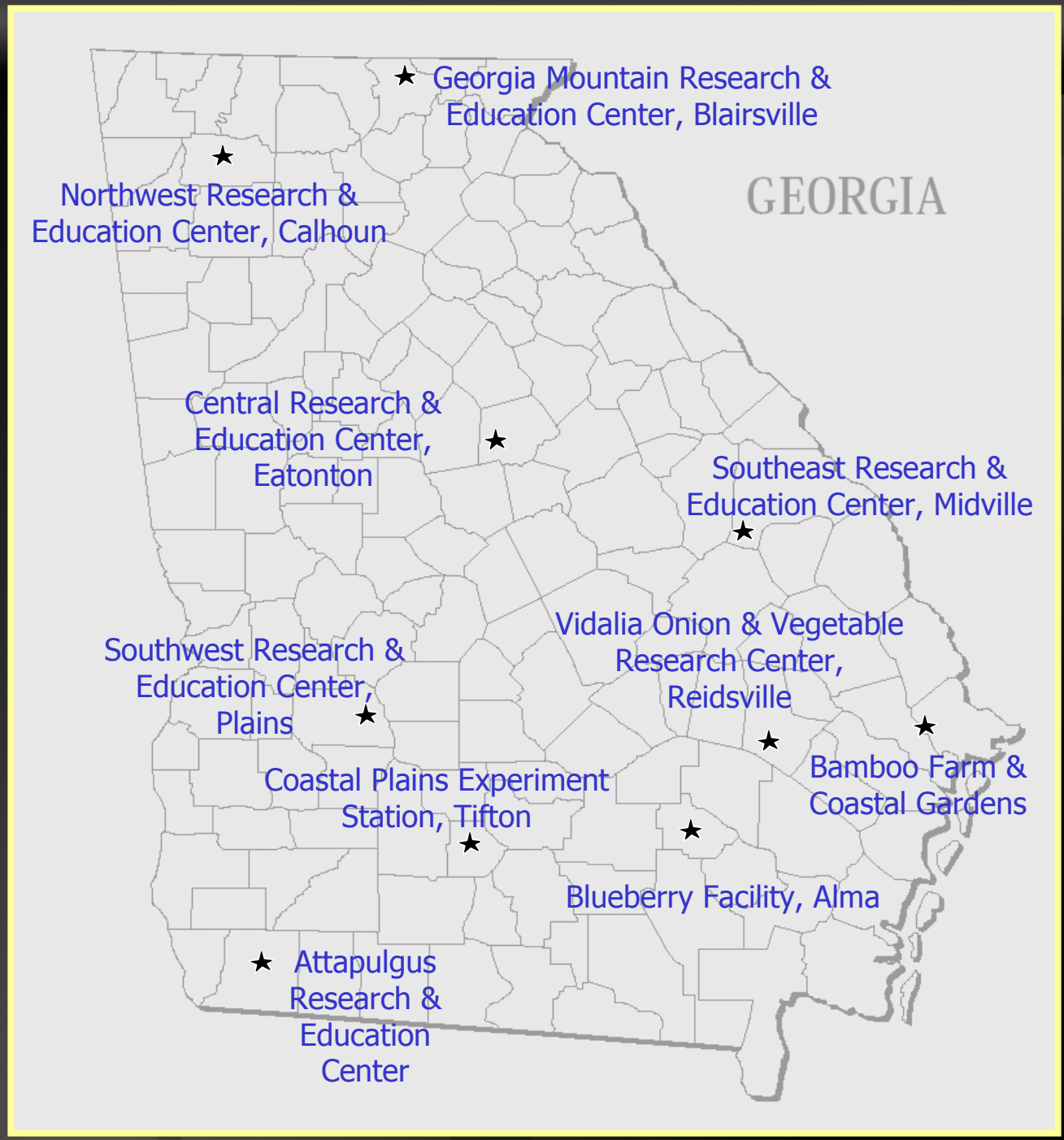


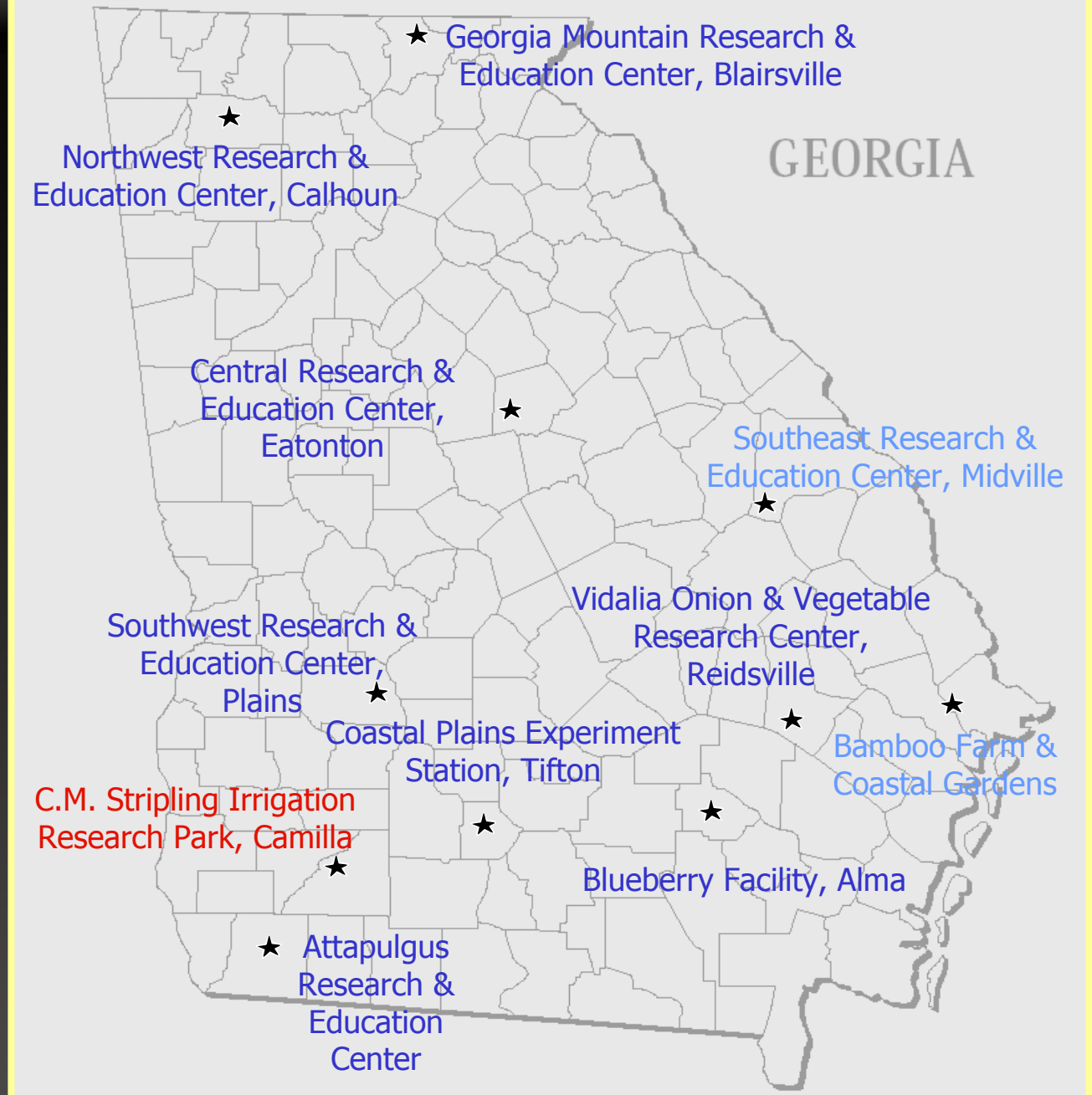
Miller County 10/14/03



Misconceptions:

- Sub Tropical Climate
- No Irrigation in Georgia
- Research Already Done


Georgia Mountain Research & Education Center, Blairsville
GEORGIA
Northwest Research & Education Center, Calhoun
Central Research & Education Center, Eatonton
Southeast Research & Education Center, Midville
Vidalia Onion & Vegetable Research Center, Reidsville
Southwest Research & Education Center, Plains
Bamboo Farm & Coastal Gardens
Coastal Plains Experiment Station, Tifton
Blueberry Facility, Alma
Attapulgus Research & Education Center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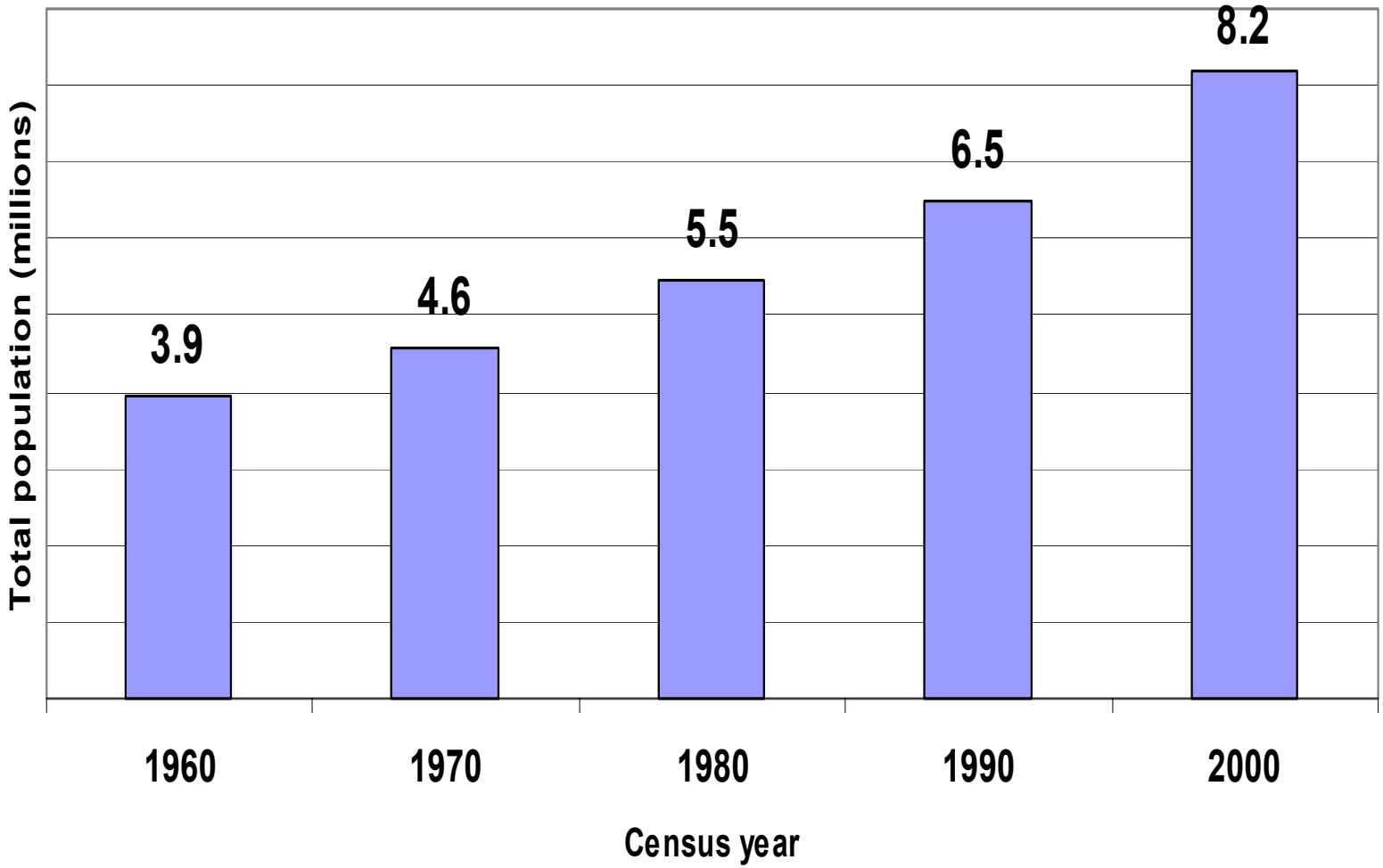
Southwest Research & Education Center, Plains
Coastal Plains Experiment Station, Tifton
Bamboo Farm & Coastal Gardens
C.M. Stripling Irrigation Research Park, Camilla
Blueberry Facility, Alma
Attapulgus Research & Education Center

Why Georgia Needs Irrigation Research

Increasing Demand:

- Municipal

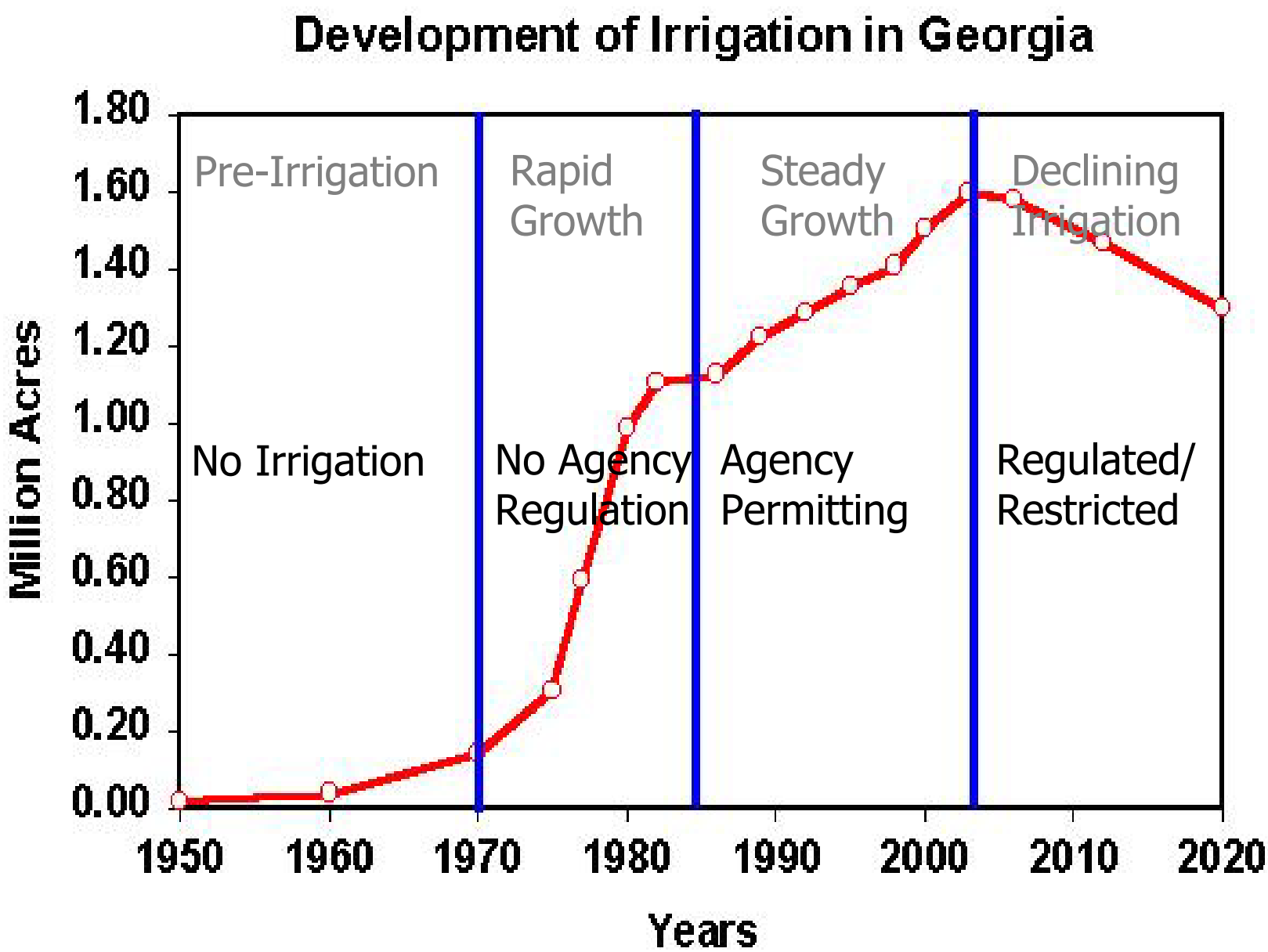
Why Worry About Water?
Population Growth in Georgia



Source: US Census Bureau

Increasing Demand:

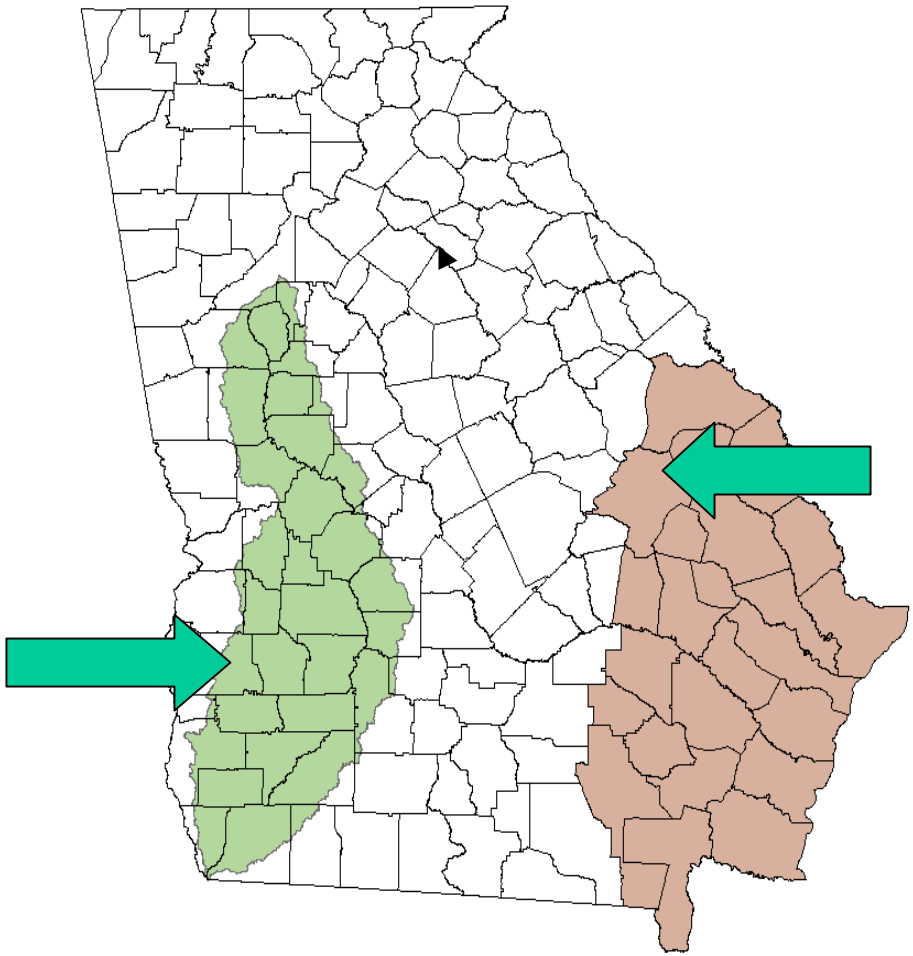
- Municipal
- Irrigation


Development of Irrigation in Georgia
Million Acres
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
1950
1960
1970
1980
1990
2000
2010
2020
Years
Pre-Irrigation
Rapid Growth
Steady Growth
Declining Irrigation
No Irrigation
No Agency Regulation
Agency Permitting
Regulated/ Restricted

No Irrigation Well Permits

In Flint River Basin, from Floridan Aquifer or flowing streams, until Sound Science is done.

Runoff ponds are OK.



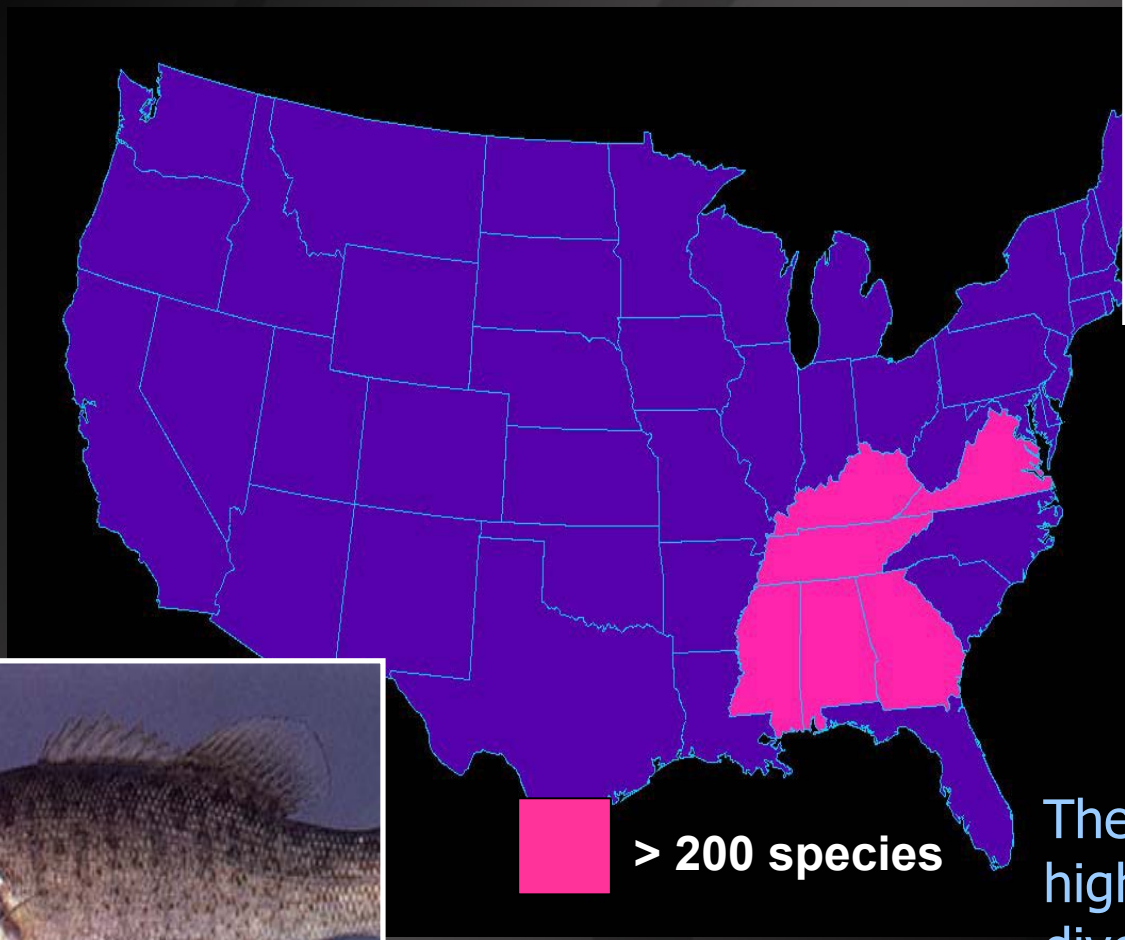
In 24 coastal counties, from Floridan Aquifer until Sound Science is done.

Other sources are ok.

Increasing Demand:

- Municipal
- Irrigation
- Environmental

The value of streamside forests to freshwater fishes



The southeast has a very high freshwater fish diversity.

High diversity of mussel species

4 endangered mussel species


TENNESSEE
NORTH CAROLINA
ALABAMA
GEORGIA
SOUTH CAROLINA
MISSISSIPPI
Coosa River
Tallapoosa R
Chattahoochee R
Flint R
Alabama River
Apalachicola R
1
2
3
4
5
6
7
8
ALABAMA
FLORIDA
GEORGIA
FLORIDA
Gulf of Mexico
0 40 80 MILES

Georgia Water Use
Year 2000

	Surface Water, MGD	Ground Water, MGD	All Water	Percent of State Total
Local Government*	914	283	1197	31.6
Self-Supplied Industries*	674	342	1016	26.8
Agriculture **	696	881	1577	41.6
Total			3790	100.0

* Actual metered withdrawals in 2000.

** Estimated based on UGA monitoring on 1.9 % of irrigated fields.
Average was 10 inches per acre in 2000.
928,000 acres irrigated by surface water; 1,175,000 acres by ground water.

C. M. Stripling Irrigation Research Park

May 11, 2002

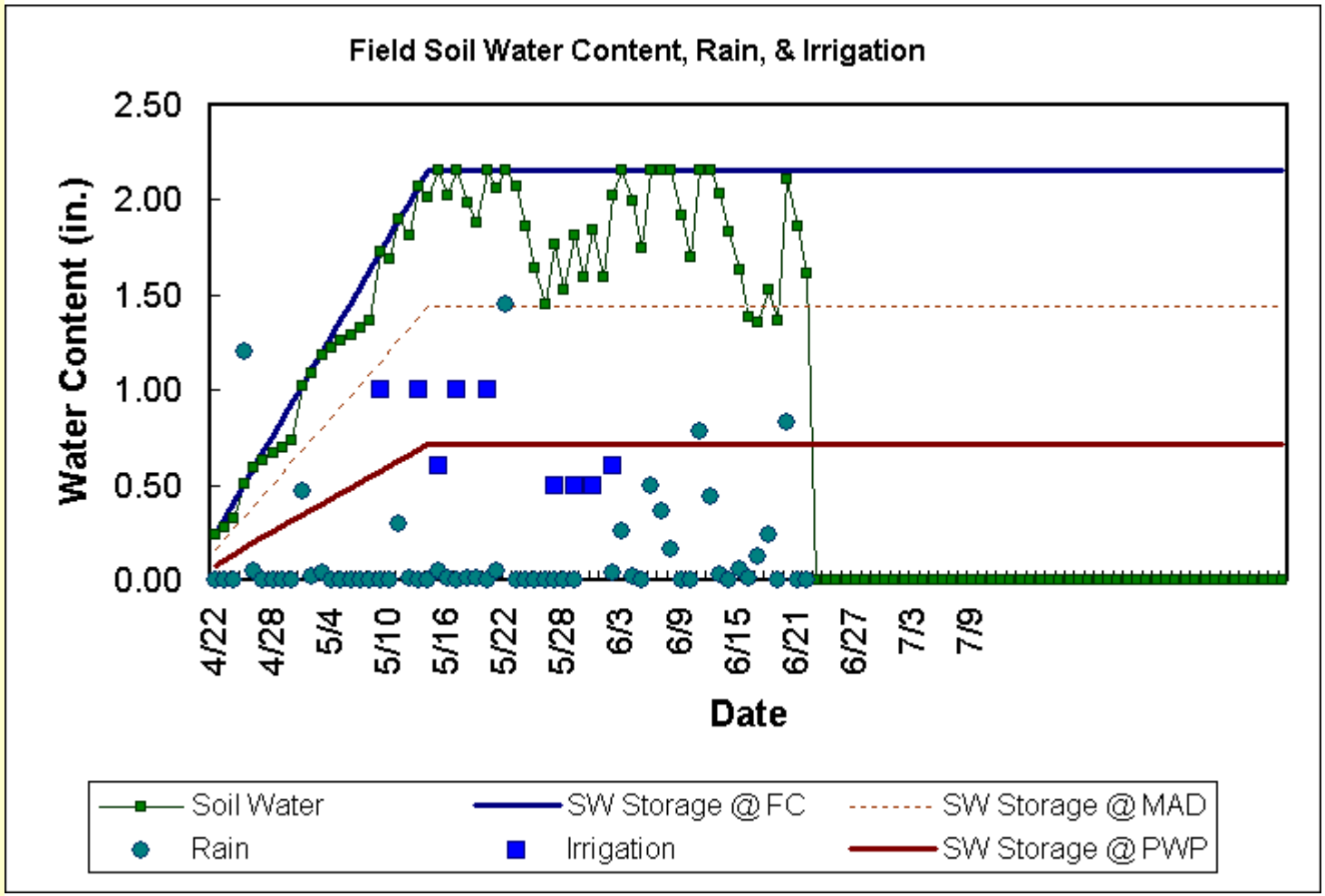

PEPSI
Vanilla

Goal

To help farmers use their irrigation water in the most efficient way possible

Project Areas

- Agronomic

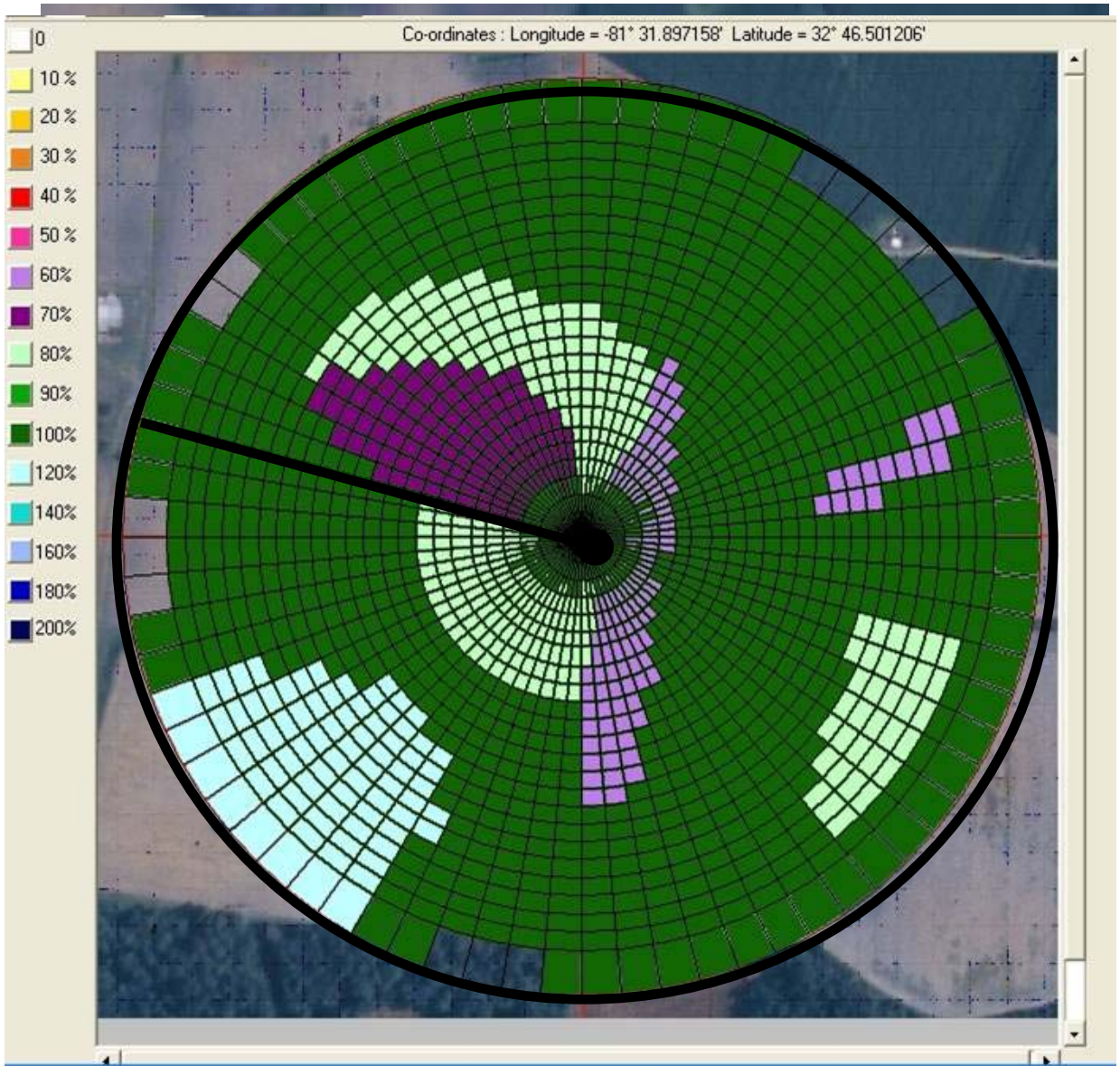

Field Soil Water Content, Rain, & Irrigation
Water Content (in.)
2.50
2.00
1.50
1.00
0.50
0.00
4/22
4/28
5/4
5/10
5/16
5/22
5/28
6/3
6/9
6/15
6/21
6/27
7/3
7/9
Date
Soil Water
SW Storage @ FC
SW Storage @ MAD
Rain
Irrigation
SW Storage @ PWP


ALLIS-CHALMERS
GLEANER
GLEANER

Project Areas

- Agronomic
- Engineering

Application Map Development



Project Areas

- Agronomic
- Engineering
- Automation

Project Areas

- Agronomic
- Engineering
- Automation
- Education


EXIT
C.M. STRIPLIN IRRIGATION RESEARCH PARK
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