Why Georgia Needs an Irrigation Research Park
Misconceptions:

• Sub Tropical Climate
Annual Precipitation in Georgia
Misconceptions:

• Sub Tropical Climate
• No Irrigation in Georgia
Agricultural Water Permits

Permitted Withdrawals for Irrigation within the State of Georgia
Source: Georgia DNR EPD

- Groundwater Sources
- Surface Water Sources
- River Basins
Misconceptions:

- Sub Tropical Climate
- No Irrigation in Georgia
- Research Already Done
Why Georgia Needs Irrigation Research
Increasing Demand:

- Municipal
Why Worry About Water?
Population Growth in Georgia

<table>
<thead>
<tr>
<th>Census year</th>
<th>Total population (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>3.9</td>
</tr>
<tr>
<td>1970</td>
<td>4.6</td>
</tr>
<tr>
<td>1980</td>
<td>5.5</td>
</tr>
<tr>
<td>1990</td>
<td>6.5</td>
</tr>
<tr>
<td>2000</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Source: US Census Bureau
Increasing Demand:

- Municipal
- Irrigation
Development of Irrigation in Georgia

- Pre-Irrigation
- No Irrigation
- No Agency Regulation
- Rapid Growth
- Agency Permitting
- Steady Growth
- Regulated/Restricted
- Declining Irrigation

Million Acres

Years

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

> 200 species

The southeast has a very high freshwater fish diversity.
High diversity of mussel species

4 endangered mussel species
## Georgia Water Use

**Year 2000**

<table>
<thead>
<tr>
<th></th>
<th>Surface Water, MGD</th>
<th>Ground Water, MGD</th>
<th>All Water</th>
<th>Percent of State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government*</td>
<td>914</td>
<td>283</td>
<td>1197</td>
<td>31.6</td>
</tr>
<tr>
<td>Self-Supplied Industries*</td>
<td>674</td>
<td>342</td>
<td>1016</td>
<td>26.8</td>
</tr>
<tr>
<td>Agriculture **</td>
<td>696</td>
<td>881</td>
<td>1577</td>
<td>41.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>3790</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* 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
Goal

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

- Agronomic
Project Areas

- Agronomic
- Engineering
Application Map Development
Project Areas

- Agronomic
- Engineering
- Automation
Project Areas

- Agronomic
- Engineering
- Automation
- Education