

Georgia Conservation Tillage Efforts

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Benefits of Conservation Tillage

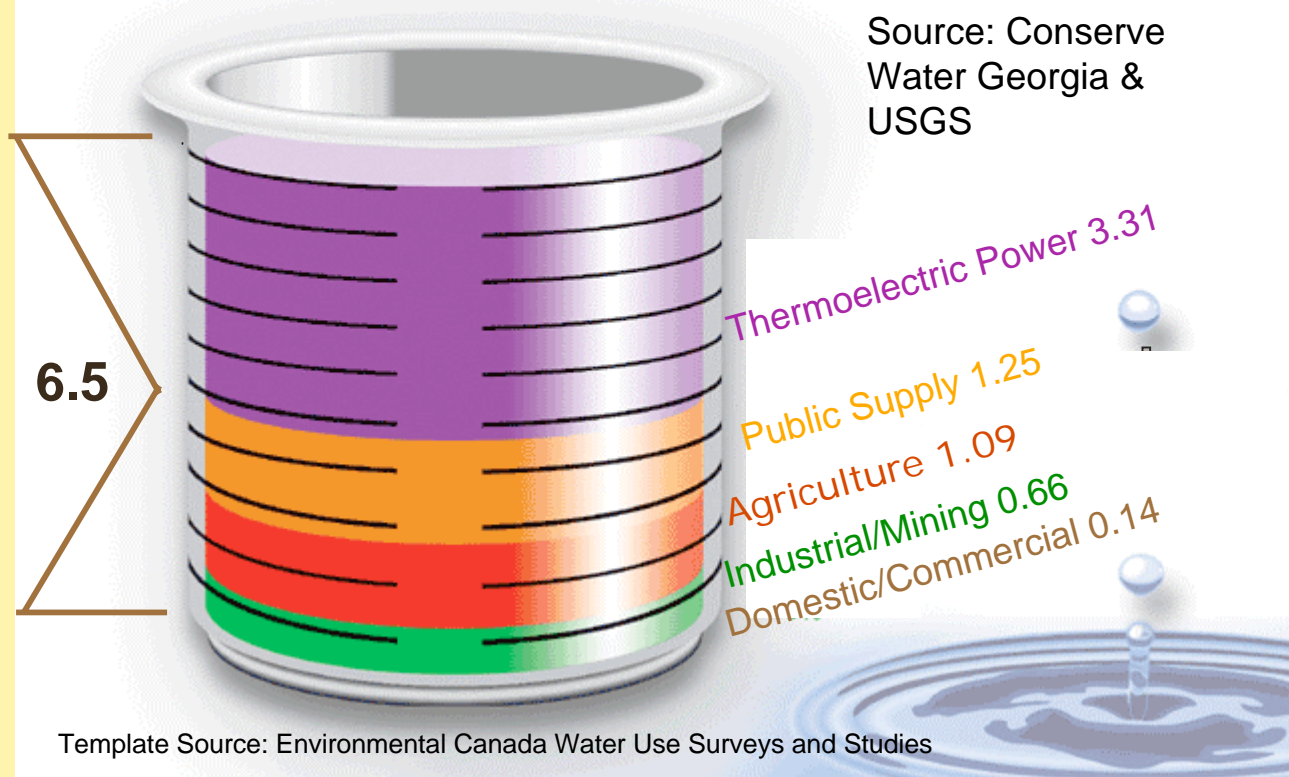
- Yields are as good
- Saves time
- Reduces fuel consumption
- Reduces Machinery wear
- Increases organic matter
- Improves wildlife habitat

- Optimizes soil moisture
- Reduces soil erosion
- Improves water quality



Water Usage in Georgia

Georgia Water Withdrawal – billion gallons per day

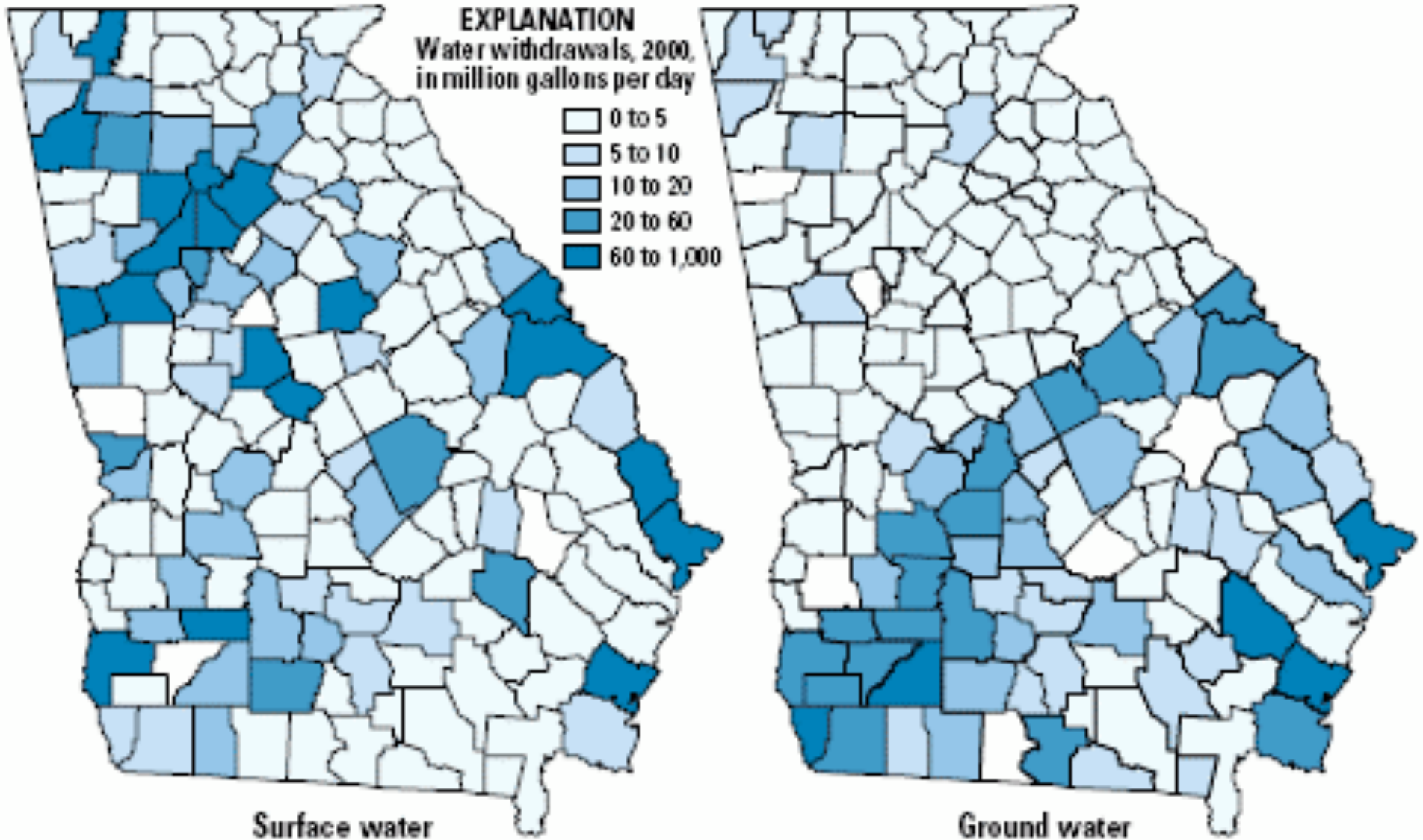


Source: Conserve Water Georgia & USGS

Template Source: Environmental Canada Water Use Surveys and Studies



Water Withdrawals





- **GA Statewide Water Management Planning**
 - 2004 Comprehensive Statewide Water Management Planning Act
 - GA EPD developing plan with oversight from the Water Council
 - Plan to be provided to
 - The Water Council in July 2007
 - The General Assembly during the 2008 session



How does agriculture fit?

- **GA Statewide Water Management Planning**
 - Water conservation in agriculture**
 - Grouped under objective to minimize withdrawals
 - Metering, On-site auditing, Use of reclaim water
 - Use of assessment of new technology
 - BMP to reduce evaporative water loss
 - Irrigation scheduling, low drift nozzle retrofit, micro irrigation
 - drip irrigation, timers, automatic shutoff valves,
 - mulches and cover crops



Cover Crops:

- Used in fallow times of year
- Both legumes and non-legumes
- Large biomass contribution
- Reduces erosion
- Forms mat prior to and during planting
- Breaks down to increase soil organic matter
- Reduces erosion
- Increases infiltration



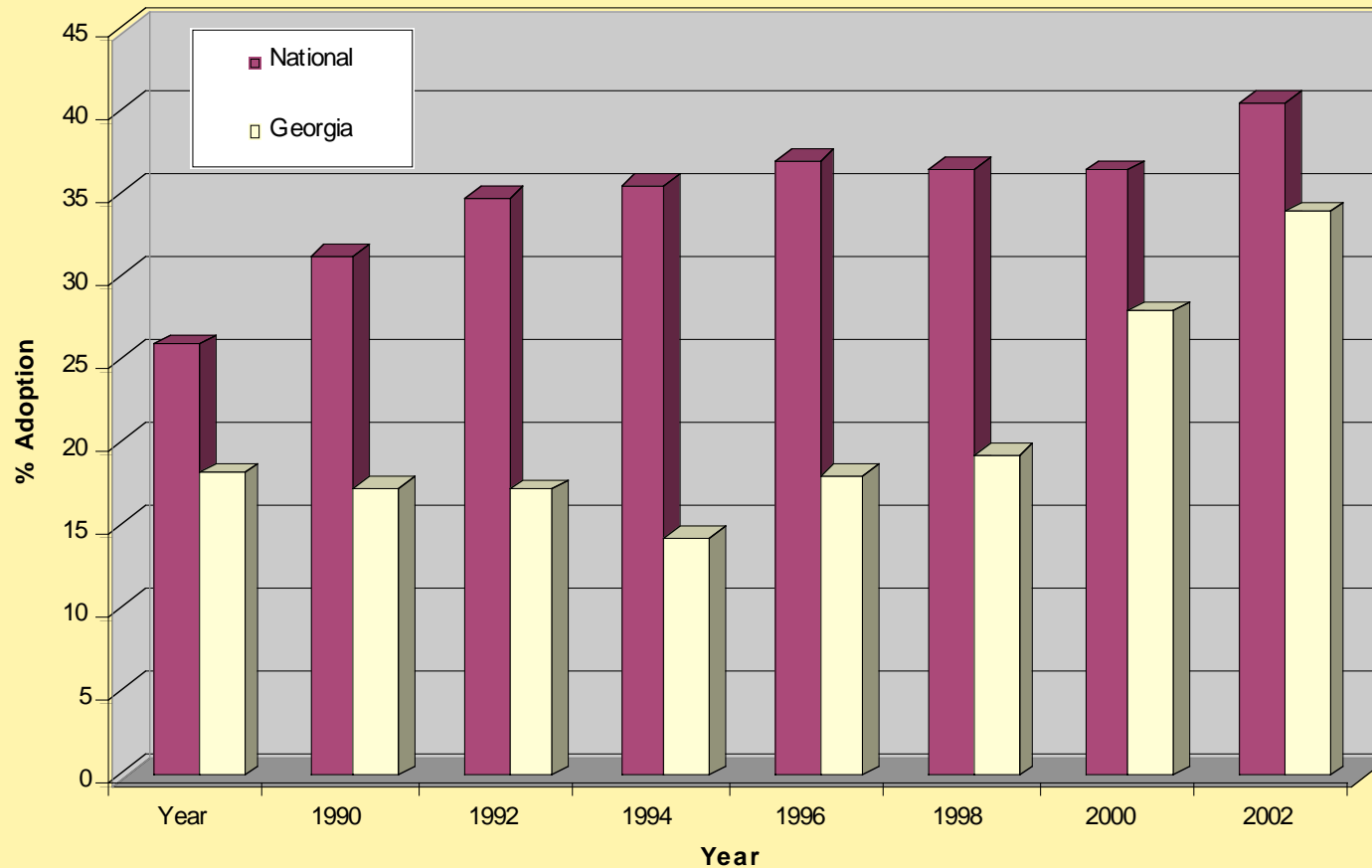


What are
we doing
in
Georgia?



- Trends in CT adoption in Georgia and nationally

Conservation Tillage Adoption Percentages





Task Force

- On the 2004 Agent needs assessment UGA agents requested that they get more training in Conservation Tillage
- Extension Associate Dean charged a multi-agency task force to develop and deliver a training on CT
- Task force involved – UGA, Auburn, USDA-ARS, USDA-NRCS, SWCS



Objectives

- Provide consistent statewide CT training for agents
- Provide modules on various topics
- Provide training based on agents needs
- Conduct pre and post-test to determine knowledge, ability and confidence with CT topics



General Demographics

- 72% have commercial row crops
- 62% spend most of their time with row crops
- 29% often deliver CT programming
- 39% in southern region often deliver programming and 33% in northern region occasionally or never deliver programming



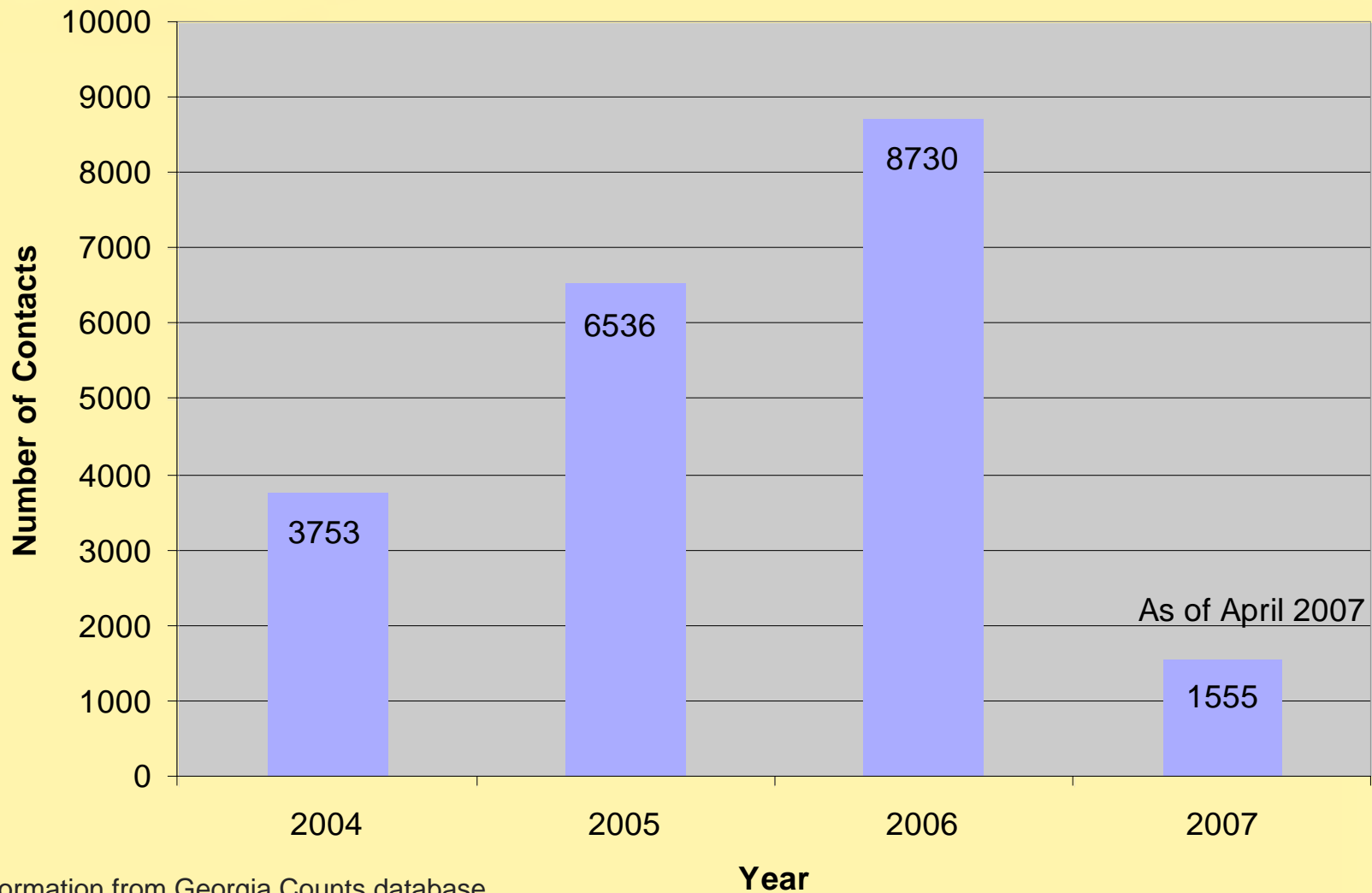
Post-Training Survey

- Program significantly IMPROVED participants Knowledge,
- Program significantly BUILT participants Confidence in working with farmers on questions and training, and
- 36% said they intend to present more programs on CT

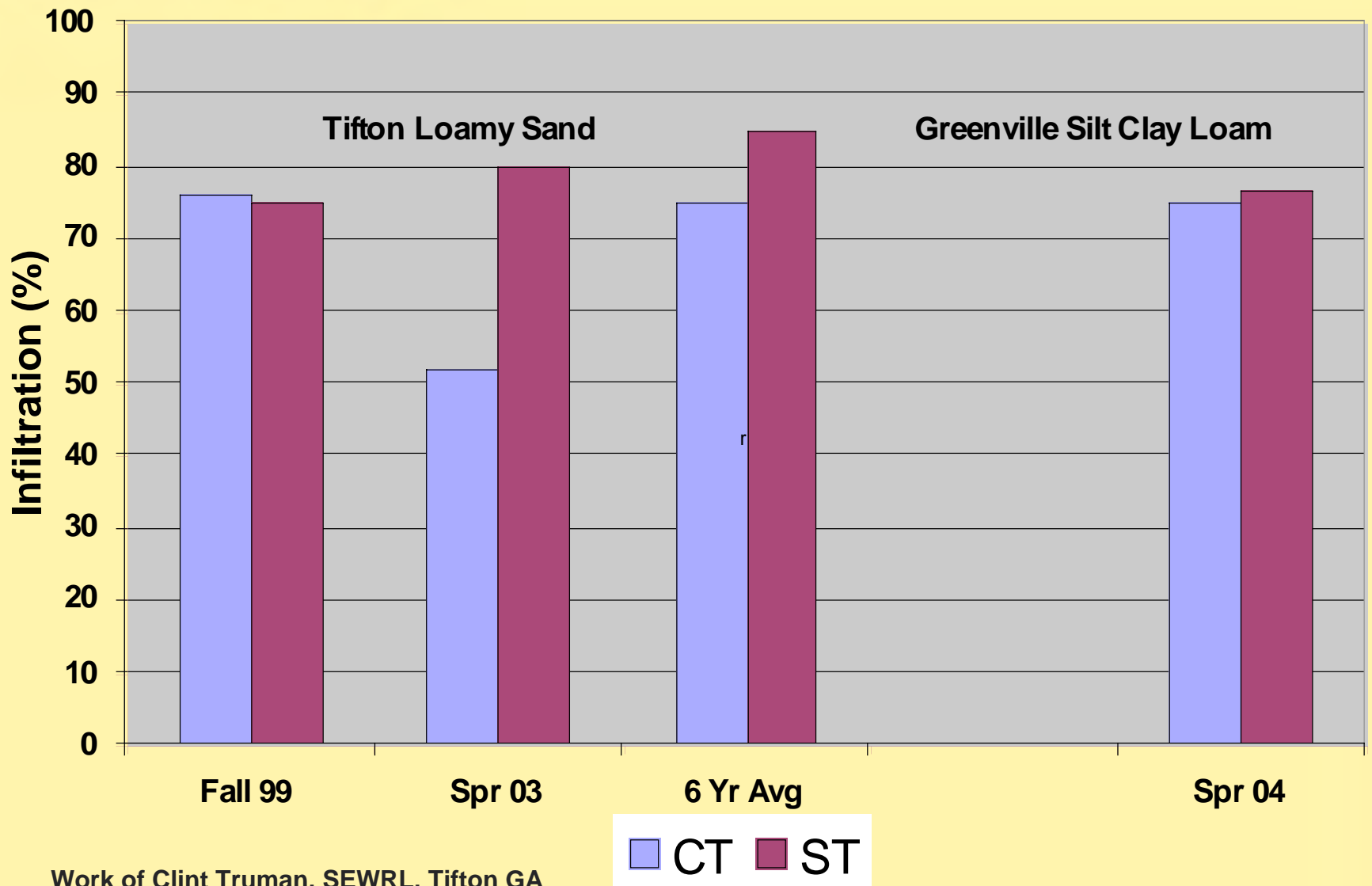


Increase in CT Program delivery

Face to Face Contacts

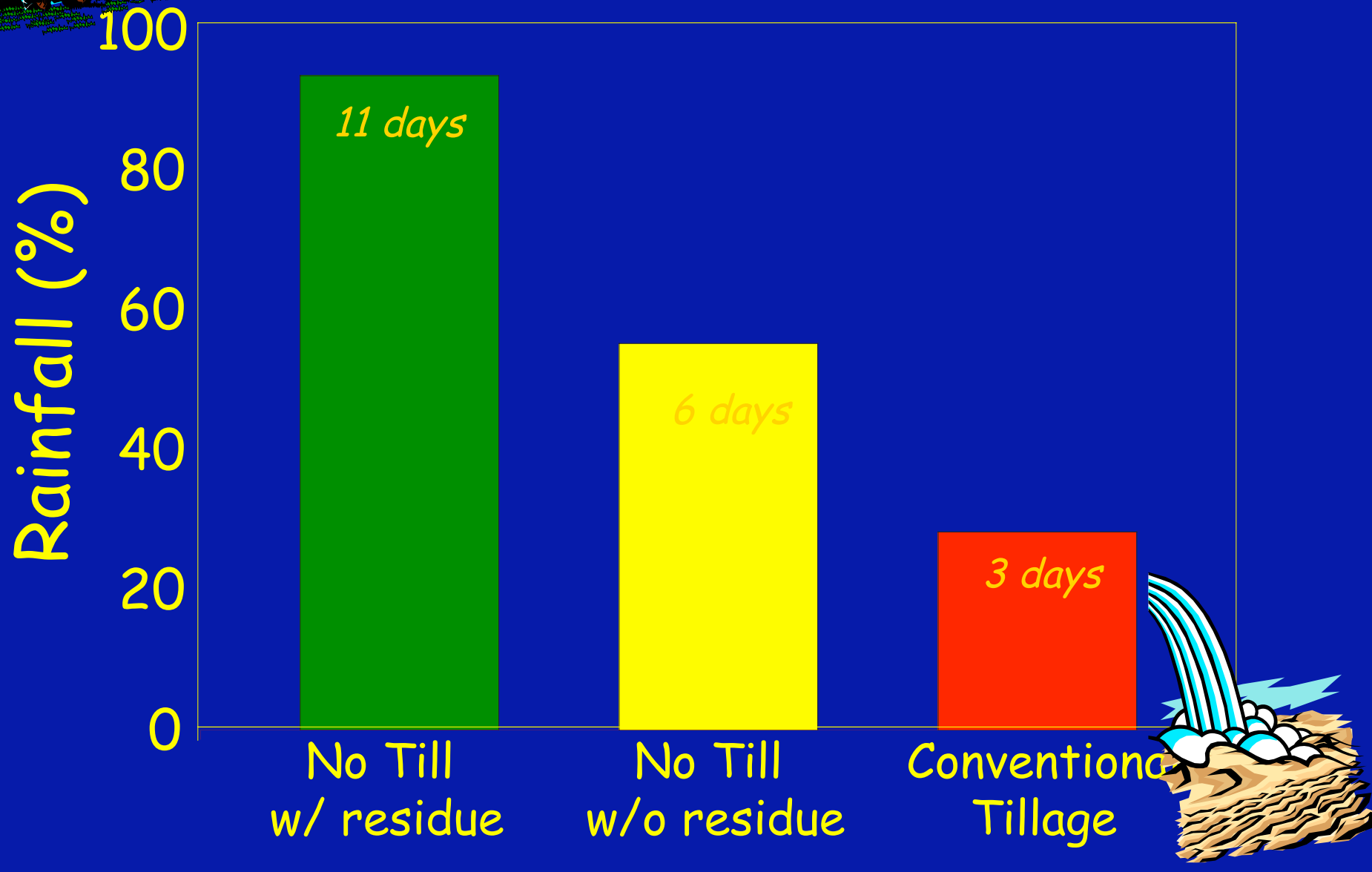


Information from Georgia Counts database





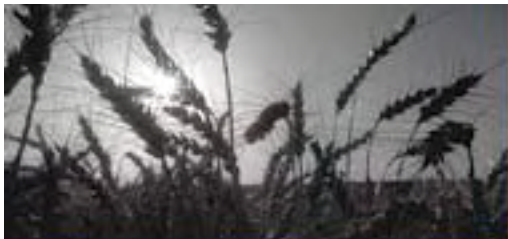
Tillage and residue effects on infiltration of a Coastal Plain Soil (2-inch rain event)





Team Conservation Tillage

- Partnership between:
 - USDA-NRCS (GA and AL)
 - University of Georgia
 - Auburn University
 - USDA-ARS (GA and AL)
 - Georgia Conservation Tillage Alliance



Purpose

- To promote Conservation Tillage through a partnership of organizations and agencies working to conserve soil, water and air resources.





Getting started station



Viewing soil conditions



Demonstrating soil and water interactions



Outside soil erosion demonstration



Mini-pivot demonstrating water savings with CT



We even provide a rest area for those weary travelers





Other Groups and Activities

- 7 Conservation Tillage Alliances
- New NRCS State Agronomist
- Annual Conservation Tillage Conference (average 125 persons)
- Conservation Tillage workshops
- Conservation Tillage research
- Starting a Conservation Agriculture Team at UGA and SE States



Overall

- In Georgia, we are providing trainings for Extension Agents to better prepare them
- Working on Teams to promote conservation tillage
- Conducting workshops in conjunction with partners and agents to provide information, answer questions and offer assistance