AG WATER USE UPDATE AND OTHER STUFF

Upper Flint Regional Water Planning Council
Reynolds, GA – January 22, 2020

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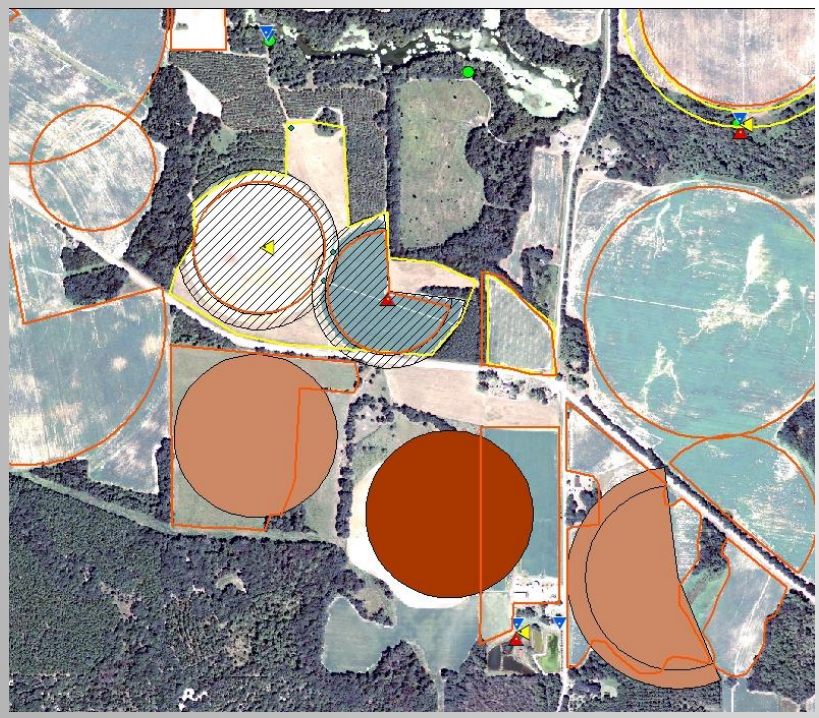
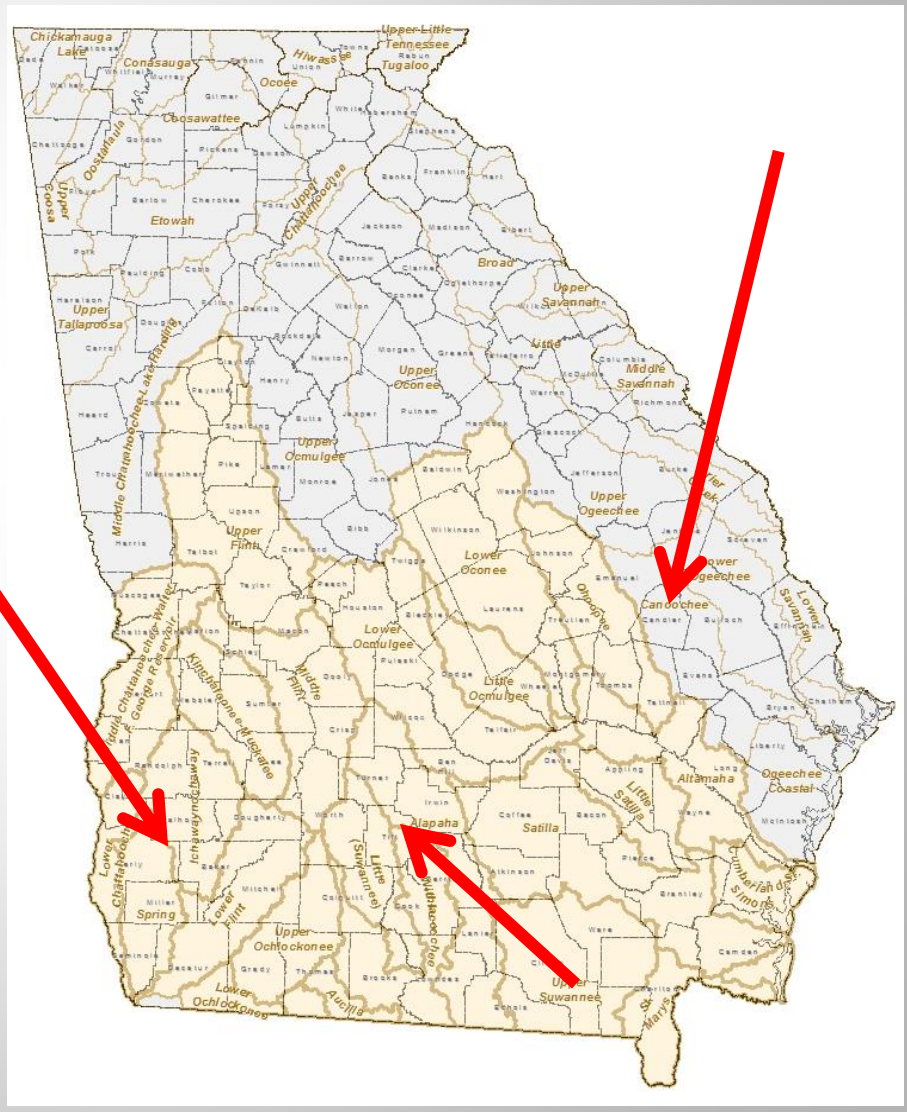
2015-16 Current Agricultural Water Use Estimates - Methods

- **Wetted Acreage Mapping**
  - Detailed mapping
  - Desktop survey
  - Review source assumptions

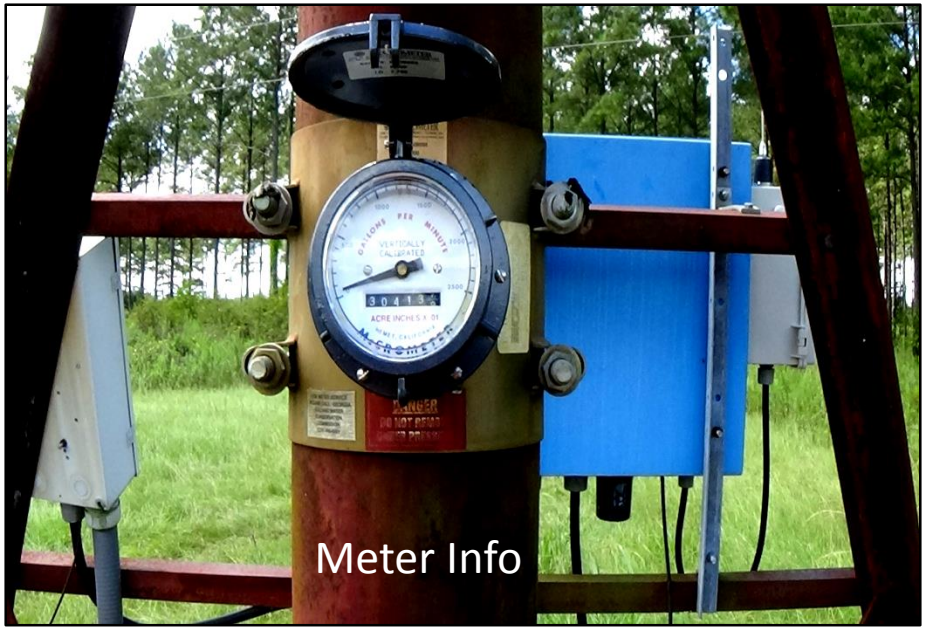




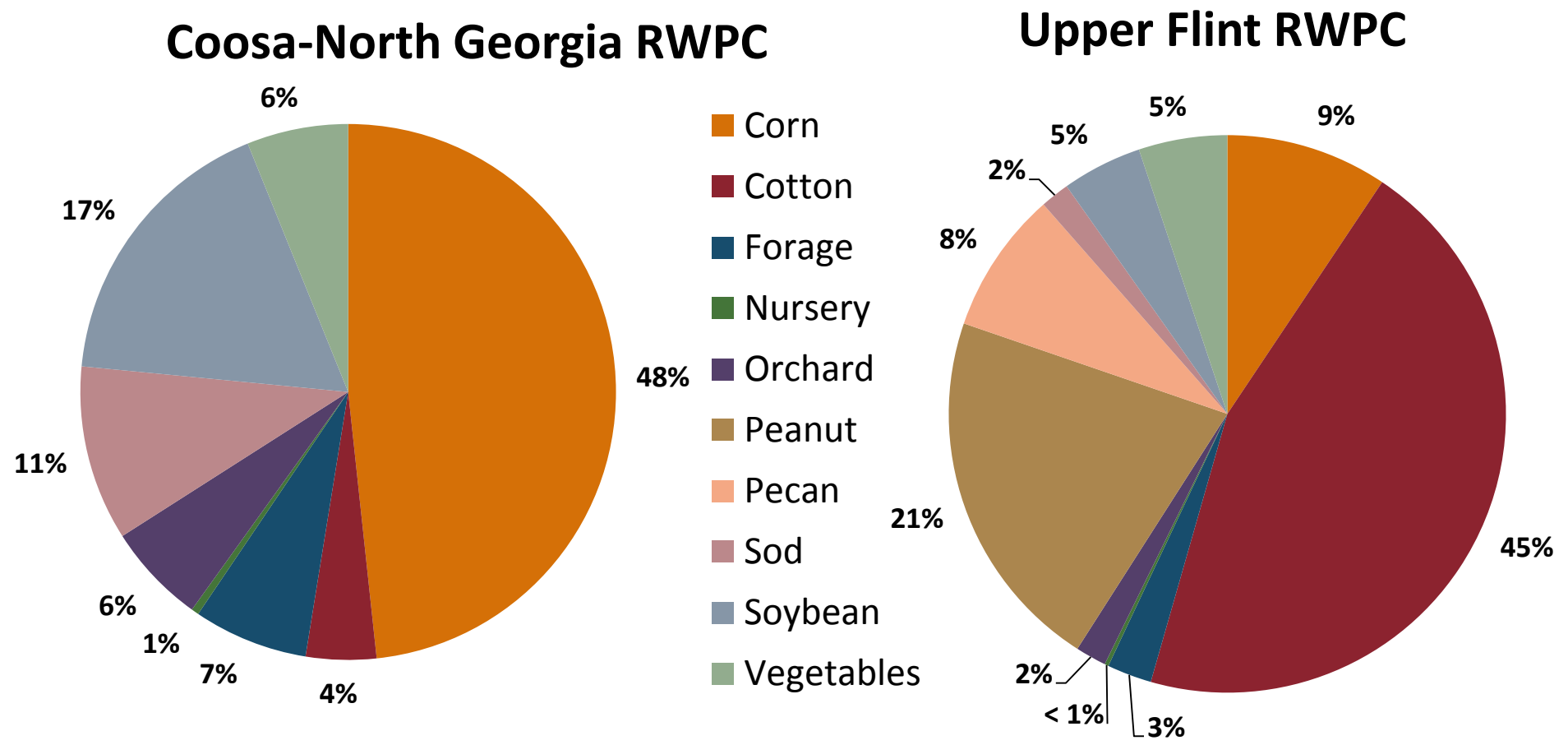

Source


Hardware and Acreage


System Characteristics

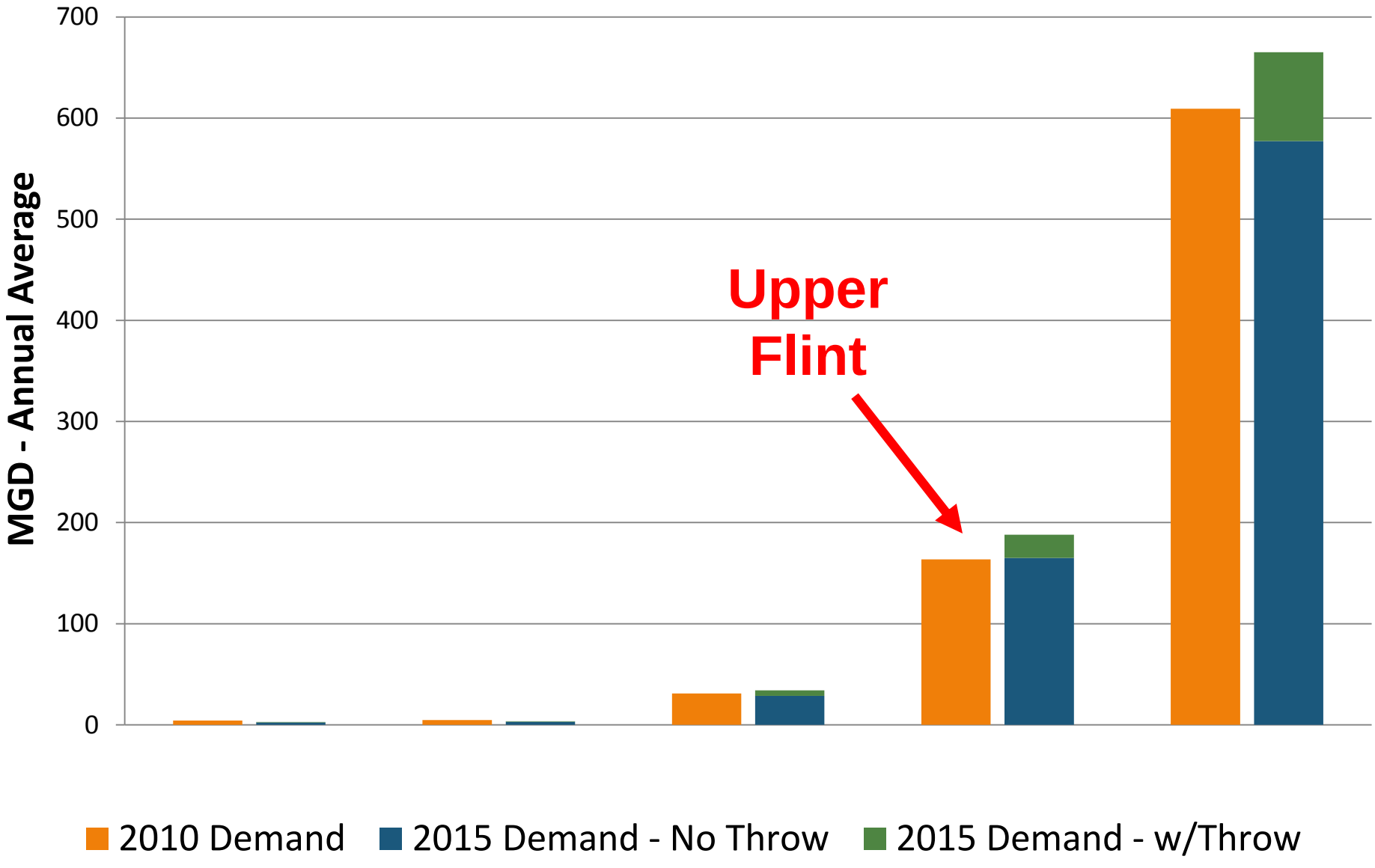

Meter Info

Baseline Crop Mix by RWPC

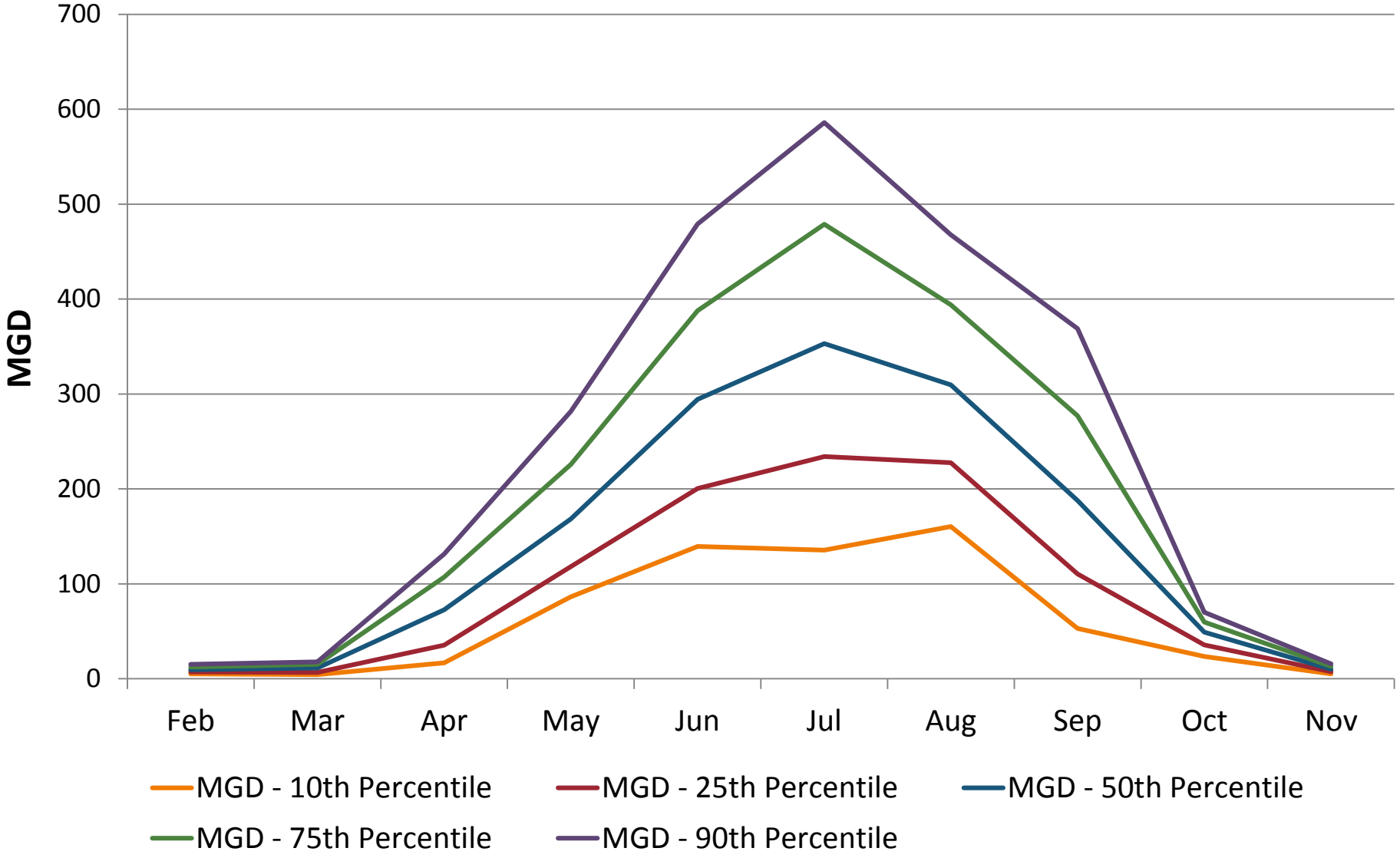


- Wet, normal and dry year estimates by crop/soil/county (e.g. 10th – 50th – 90th percentiles) – Incorporate meter data
- Aggregated spatially to 2015 irrigated acreage

Ag Demand – 75th Percentile
Round 1 (2010) and Round 2 (2015)



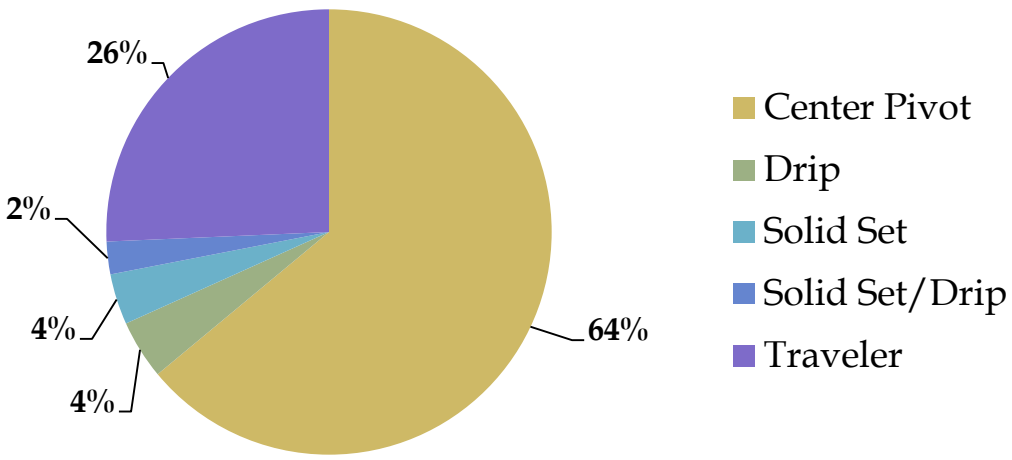
Upper Flint RWPC– Monthly
(2015, without throw)



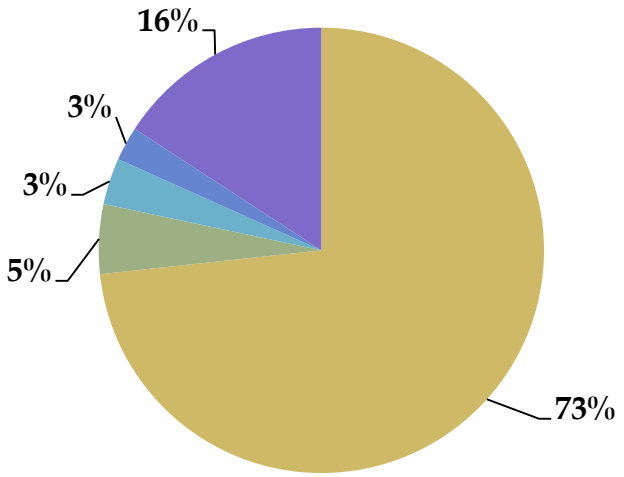
Upper Flint RWPC

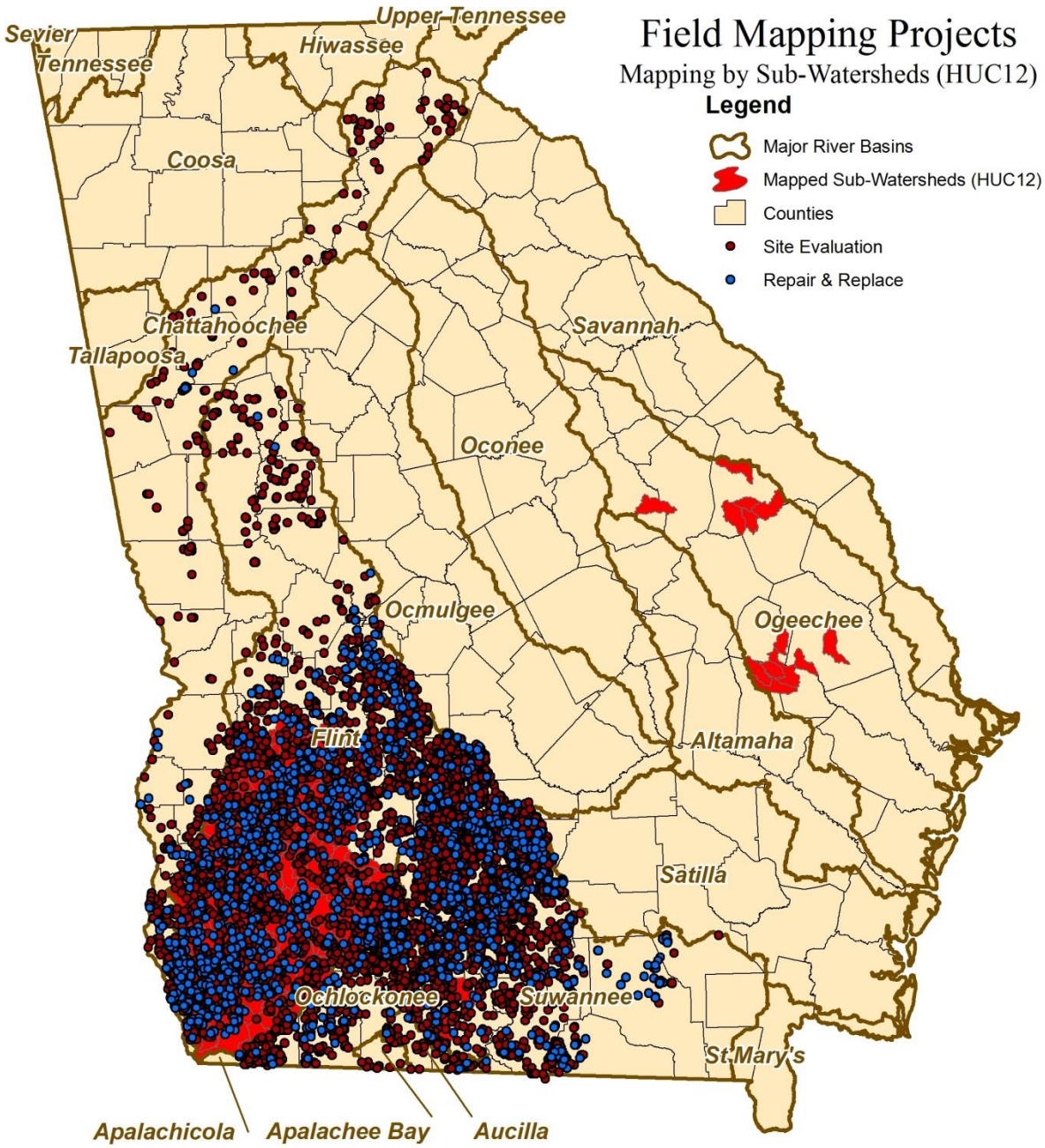
	2010	2015	% Change
Total # of Fields	3,381	3,803	+ 12.5%
Total Acreage	178,633	192,108	+ 7.5%
Total GW Acreage	105,497	131,858	+ 25.0%
Total SW Acreage	73,136	60,250	- 17.6%
Total Center Pivots	1,802	2,431	+ 34.9%
Center Pivot Acreage	117,229	140,719	+ 20.0%

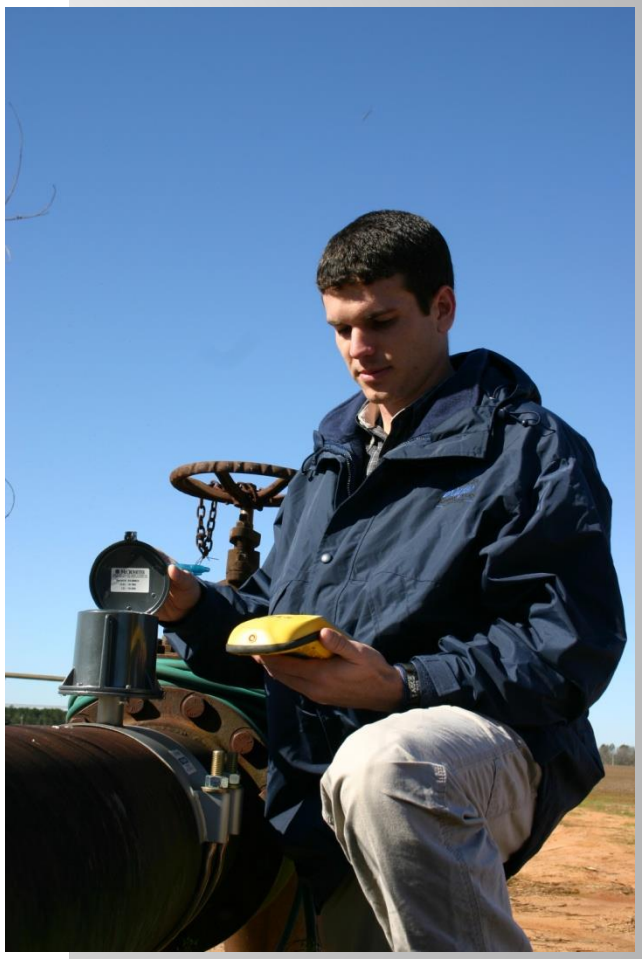
System Type - % of Systems



System Type - % of Acreage




Field Mapping Projects
Mapping by Sub-Watersheds (HUC12)
Legend
Major River Basins
Mapped Sub-Watersheds (HUC12)
Counties
Site Evaluation
Repair & Replace
Upper Tennessee
Sevier
Tennessee
Hiwassee
Coosa
Chattahoochee
Tallapoosa
Savannah
Oconee
Ocmulgee
Ogeechee
Flint
Altamaha
Satilla
Ochlockonee
Suwannee
St.Mary's
Apalachicola
Apalachee Bay
Aucilla



FACETS

Floridan Aquifer Collaborative Engagement for Sustainability

The Floridan Aquifer Collaborative Engagement for Sustainability (FACETS) project is funded by the USDA National Institute of Food and Agriculture.

USDA United States Department of Agriculture National Institute of Food and Agriculture

UF Water Institute UNIVERSITY of FLORIDA

UNIVERSITY OF GEORGIA 1785

Albany State University UNIVERSITY SYSTEM OF GEORGIA

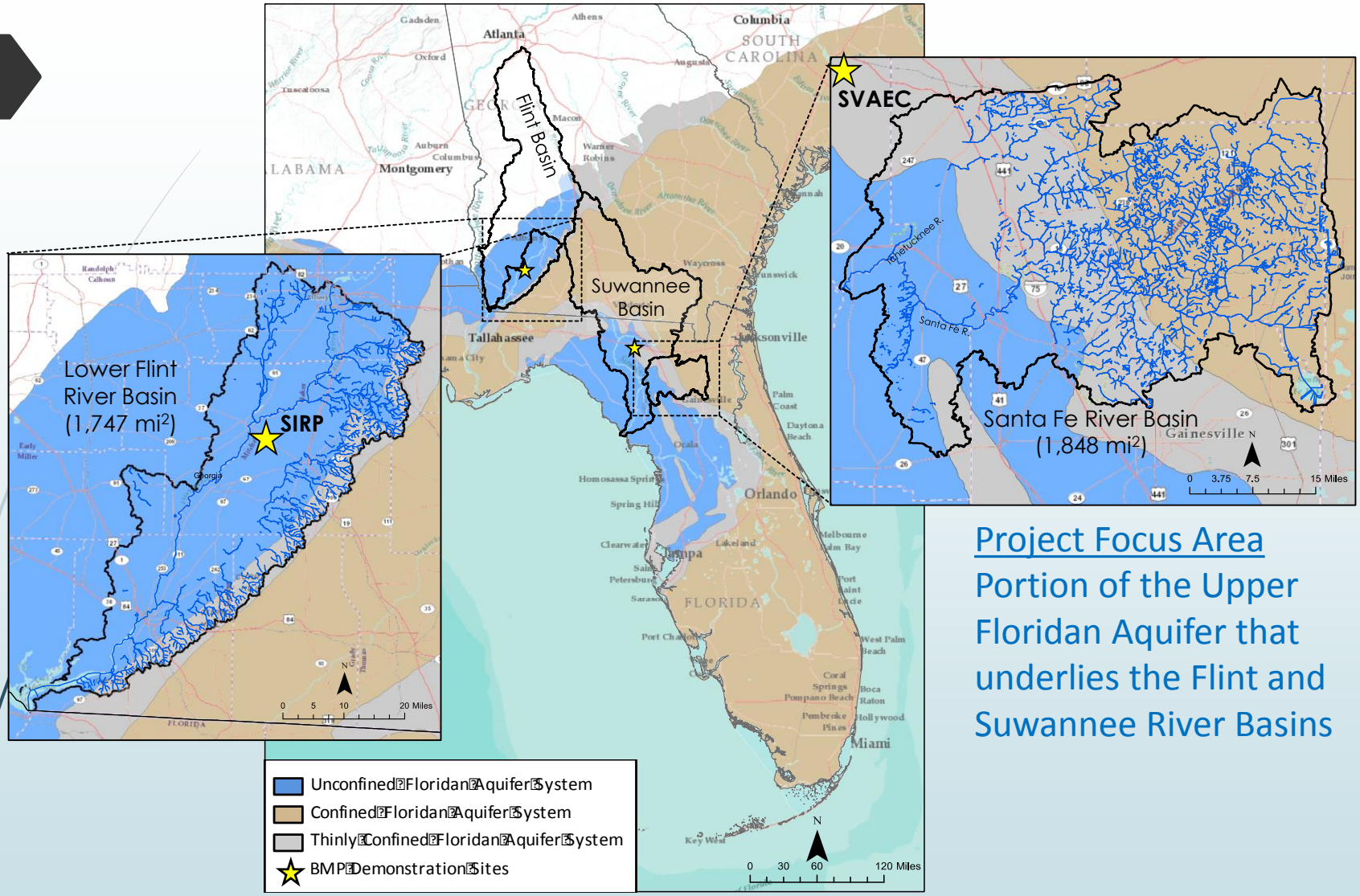
USDA NIFA Program Director: Jim Dobrowolski

FACETS

Floridan Aquifer Collaborative Engagement for Sustainability

PROJECT VISION

Promote economic sustainability of agriculture and silviculture in N Florida and S Georgia while protecting water quantity, quality, and habitat in the Upper Floridan Aquifer and the springs and rivers it feeds.



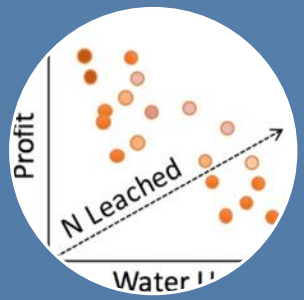
Project Focus Area

Portion of the Upper Floridan Aquifer that underlies the Flint and Suwannee River Basins

PROJECT ACTIVITIES AND OUTPUTS

BMP Research

- Water use, quality, yield impacts of alternative irrigation & nutrient practices



Modeling Platform

- Land use/mgmt. impacts
- Water quantity and quality, farm and forest yield, net return, and regional economy

Stakeholder Engagement

- Baseline & future scenarios
- Tradeoffs
- Social Learning
- Communication tools

Extension and Outreach

- On-farm BMP demos
- In-Service Training for Extension
- Water Schools for decision makers

collaborative research and outreach

Cropping Systems & BMPs

- Initial focus: farm scale
  - corn, cotton, peanut, carrot (FL only), hay, pasture
- BMPS
  - Nutrient Management: Application rates and timing
  - Irrigation Management: Calendar, soil moisture probe, apps
  - Winter cover crops
  - Conservation tillage
  - Conversion to less intensive rotational production systems
  - Conversion to silviculture






For more information
http://Floridanwater.org