

AGRICULTURAL WATER USE FORECAST

Coosa North Georgia Regional Water Planning Council

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Project Team

- ▣ Albany State University – Georgia Water Planning and Policy Center (Lead)
- ▣ University of Georgia Agricultural and Applied Economics

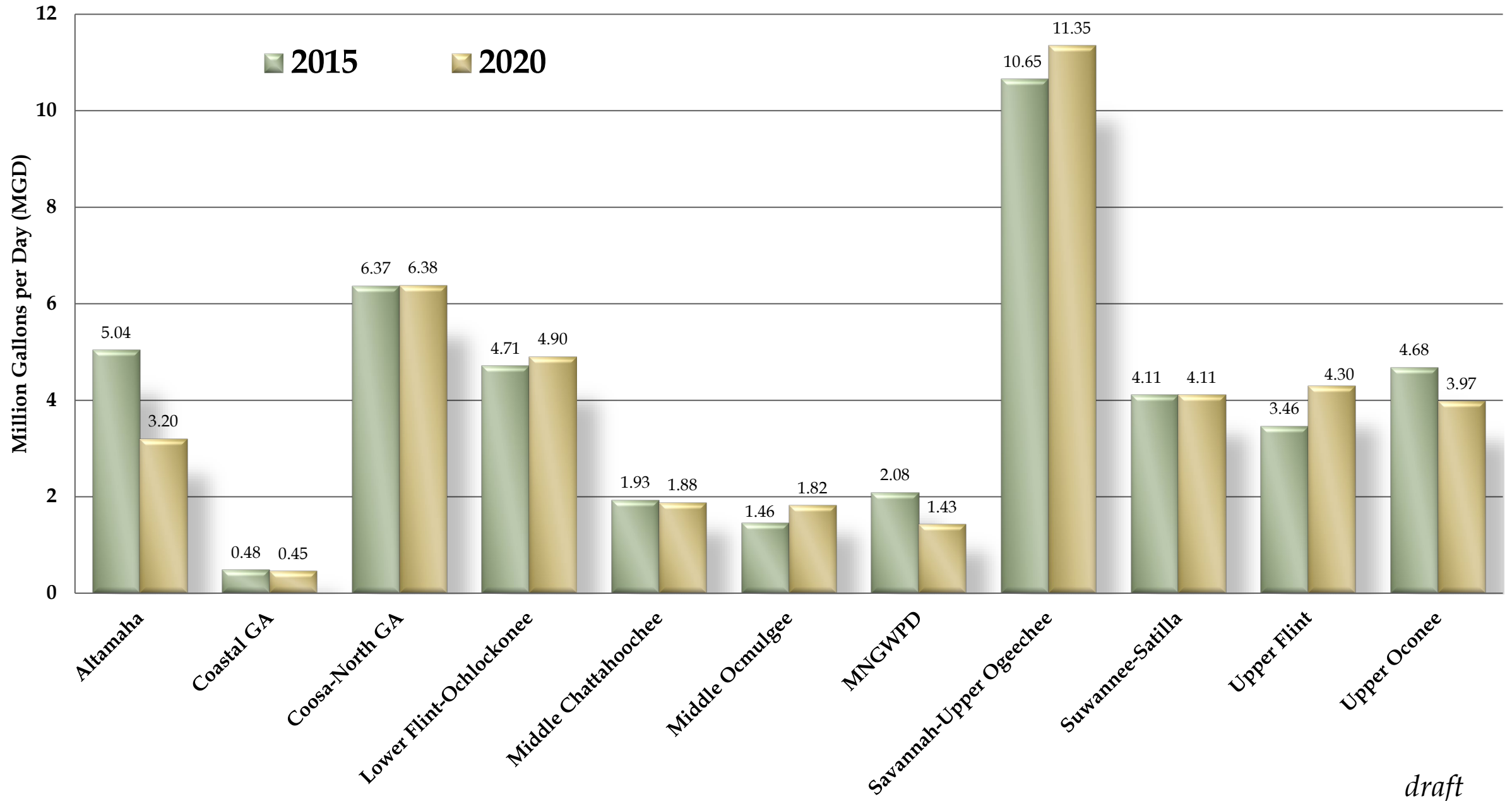


2020-21 Agricultural Water Demand Forecasts - Methods

- ▣ **Acreage – Updated 2020 wetted acreage data**
 - Field observation and aerial survey
- ▣ **Crop projections through 2060 - modeled based on multiple data sources:**
 - Remote sensing and field data
 - USDA Projections, Southeast Model, Georgia Model, Data Trends
- ▣ **Crop water needs - wet, normal, dry years**
 - Expanded use of meter data
 - Review estimates used in 2015-2016 and revise if needed
 - ▣ Surface water method revised to remove “70% assumption”
- ▣ **Animal Ag/Nursery**

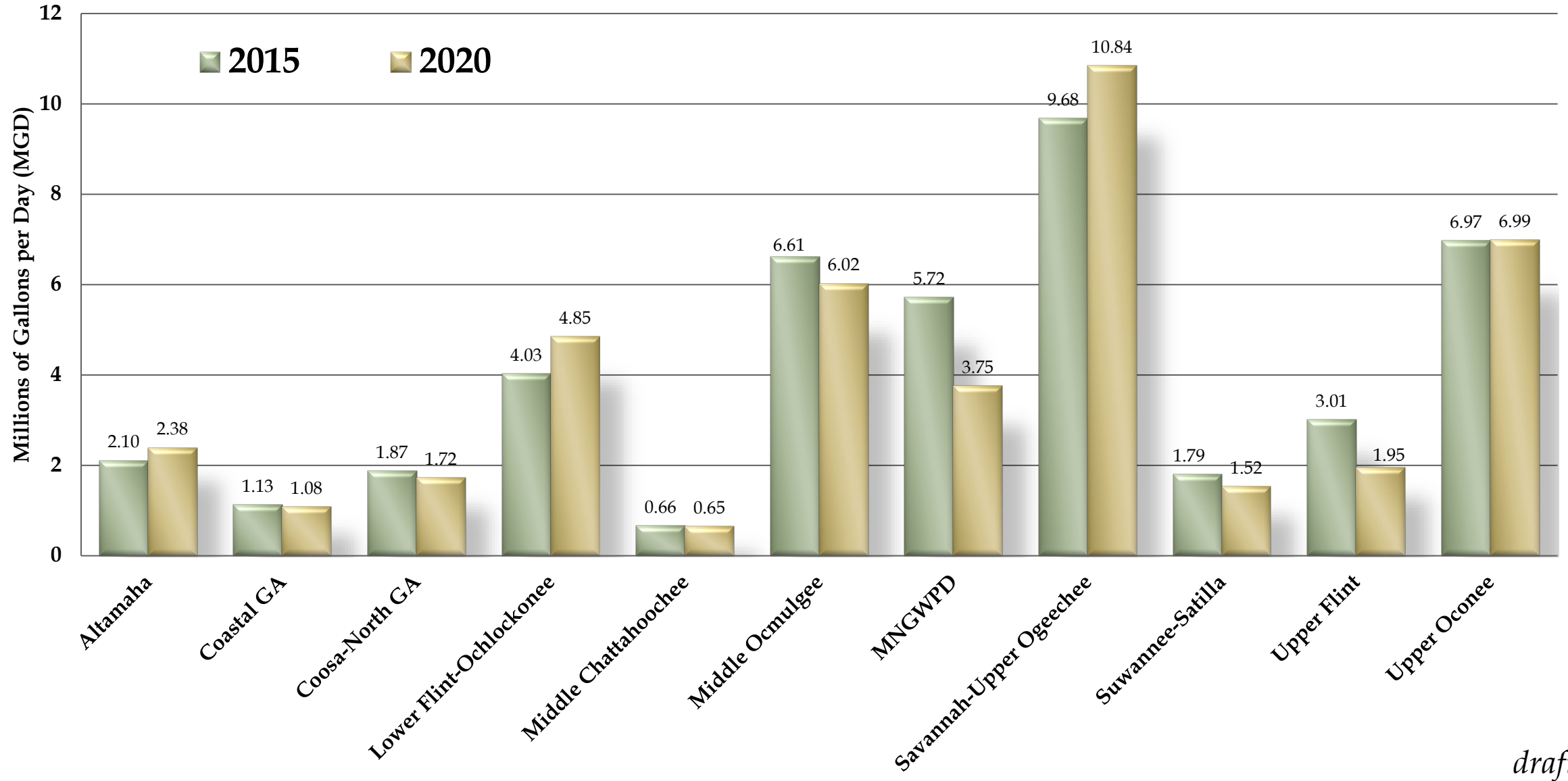
Animal Agriculture - Daily Water Use by Water Planning Region

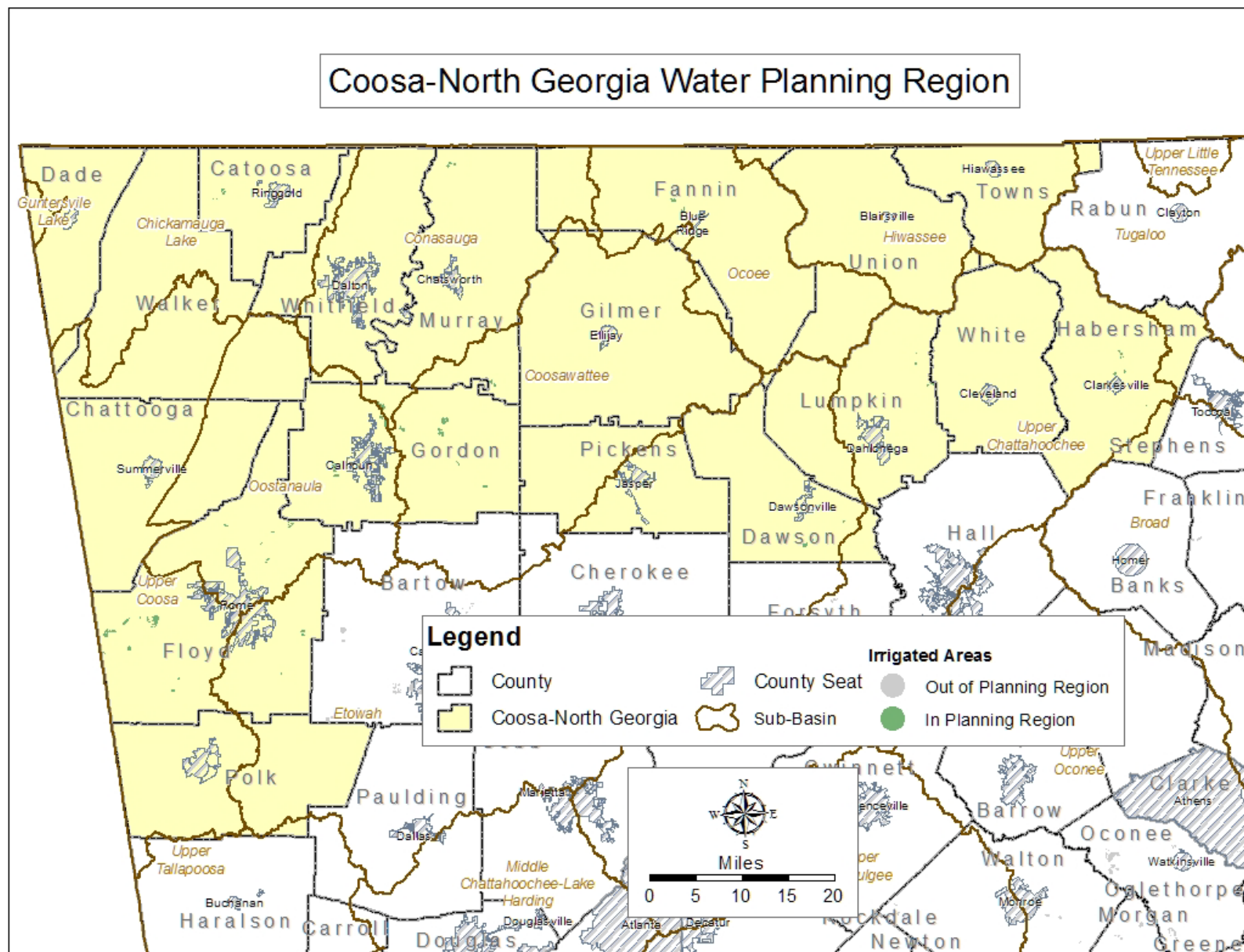
Statewide Total: 43.8 MGD



Daily Water Use by Horticultural Nurseries (Container, In-Ground, and Greenhouse), Millions of Gallons Per Day

Statewide Total: 41.76 MGD - *draft*





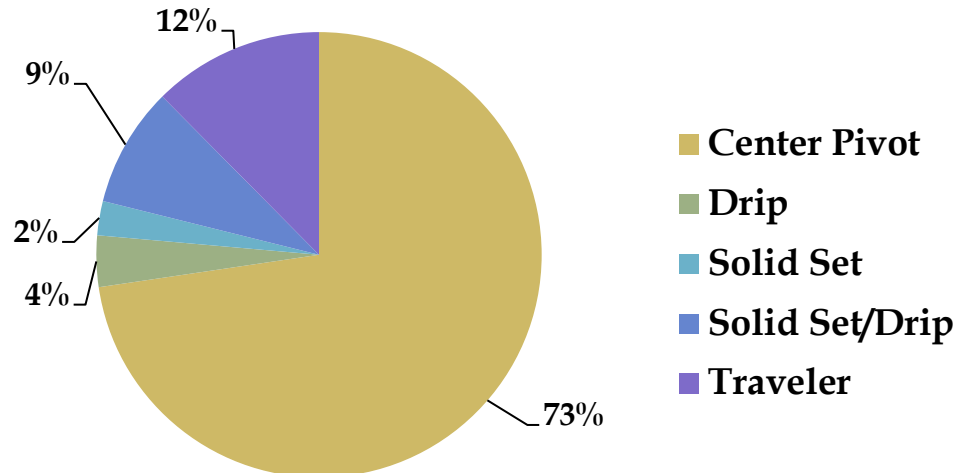
Irrigated Acres

County	2015	2020
CATOOSA	169	169
DAWSON	178	178
FANNIN	202	202
FLOYD	1,745	1,816
GILMER	0	0
GORDON	1,761	2,089
HABERSHAM	273	273
LUMPKIN	101	101
MURRAY	300	300
PICKENS	0	0
POLK	0	0
TOWNS	0	135
UNION	48	48
WALKER	0	0
WHITE	0	0
WHITFIELD	0	0

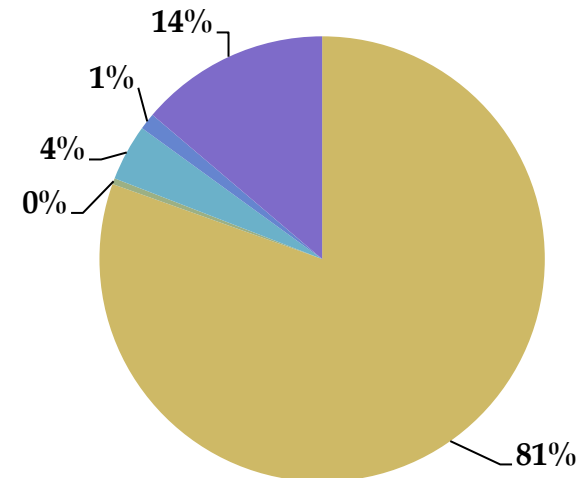
Coosa-North Georgia RWPC

	2015	2020	% Change
Total # of Fields	135	143	+ 5.9%
Total Acreage	4,776	5,310	+ 11.2%
Total GW Acreage	0	0	0%
Total SW Acreage	4,776	5,310	+ 11.2%
Total Center Pivots	67	117	+ 74.6%
Center Pivot Acreage	2,828	4,272	+ 51.1%

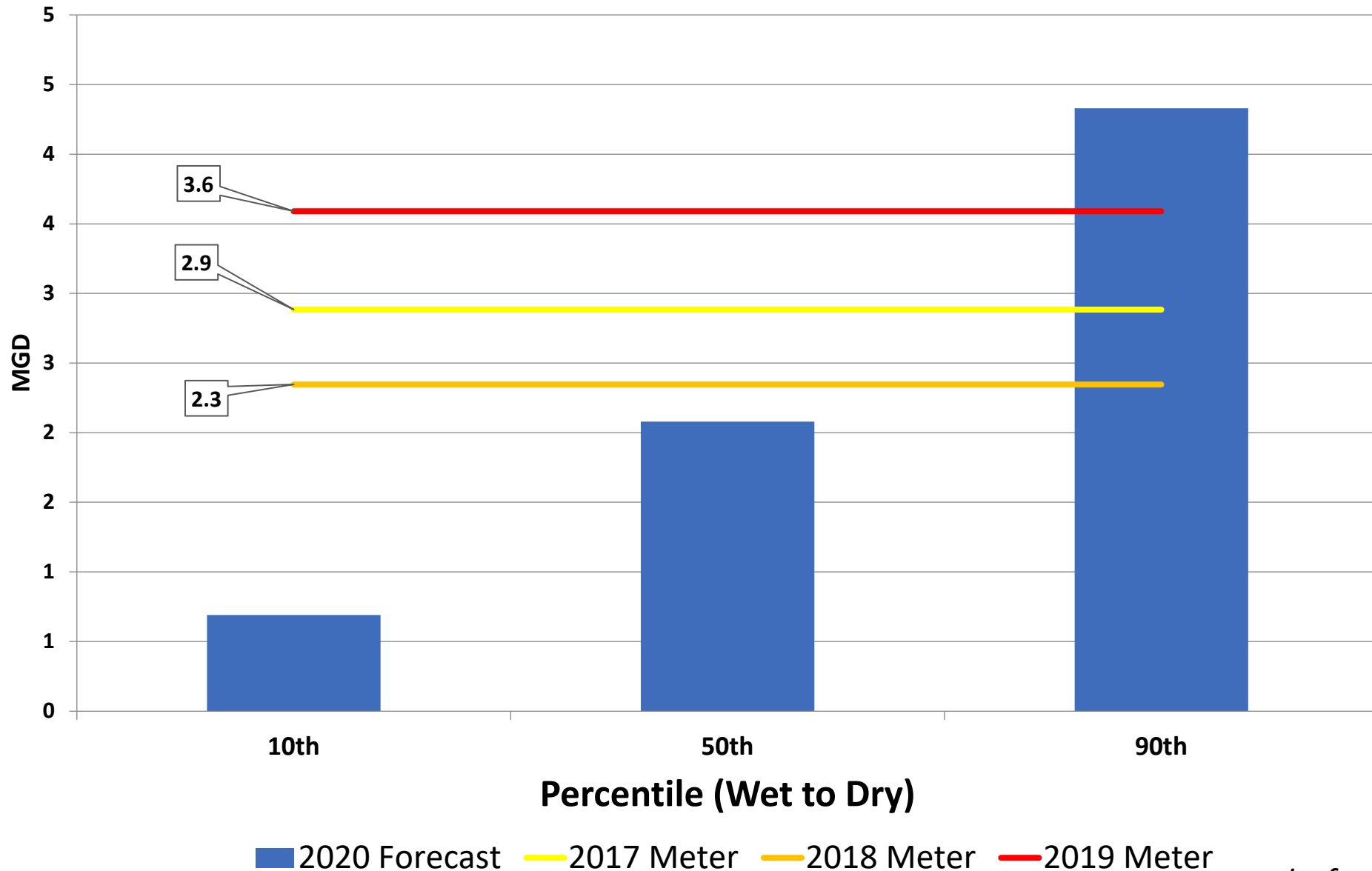
System Type - % of Systems



System Type - % of Acreage

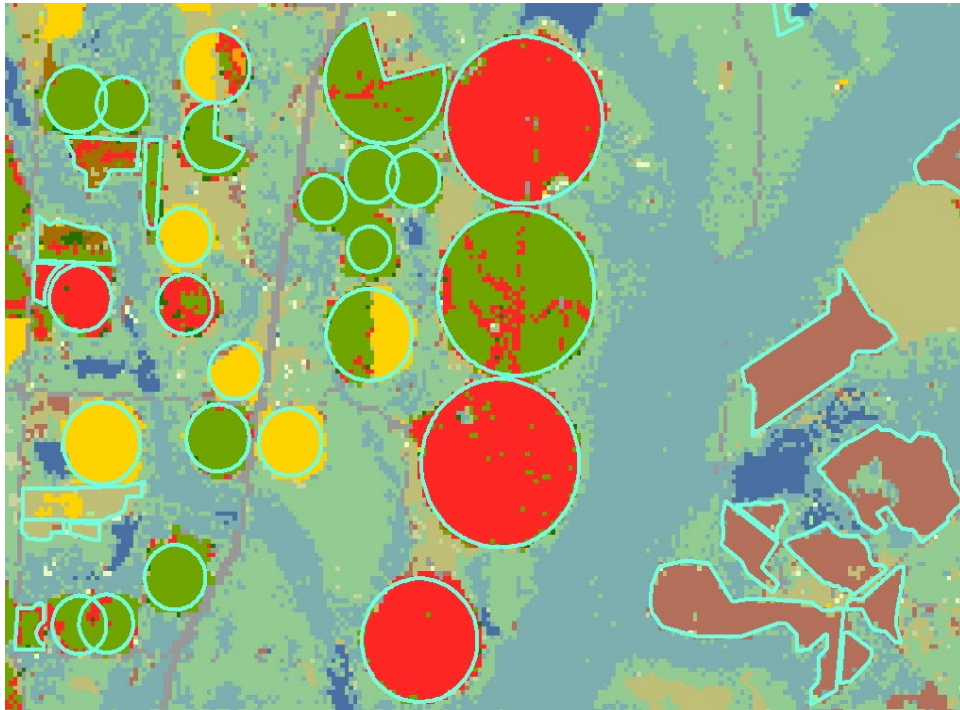


Coosa North Georgia - Surface Water

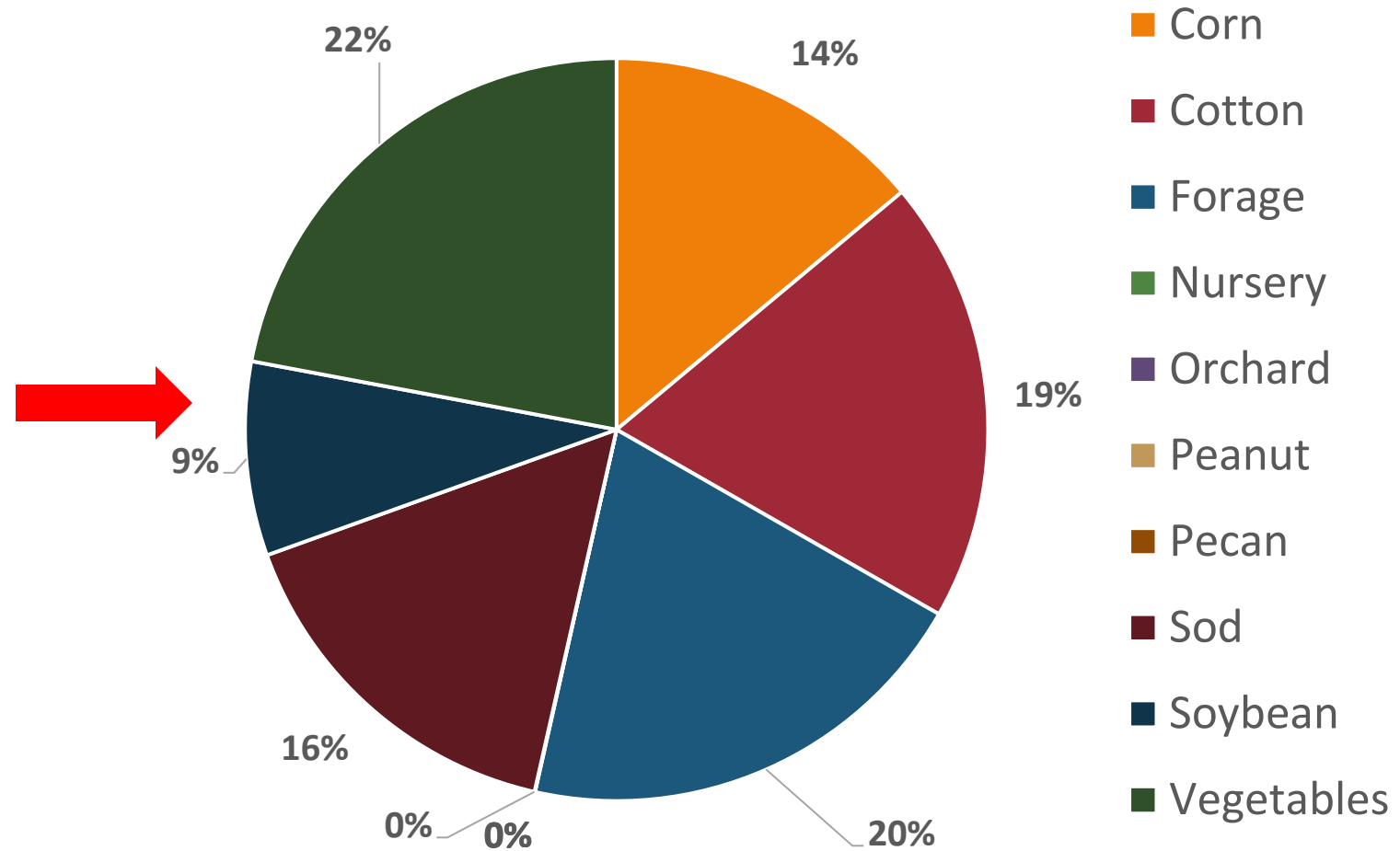


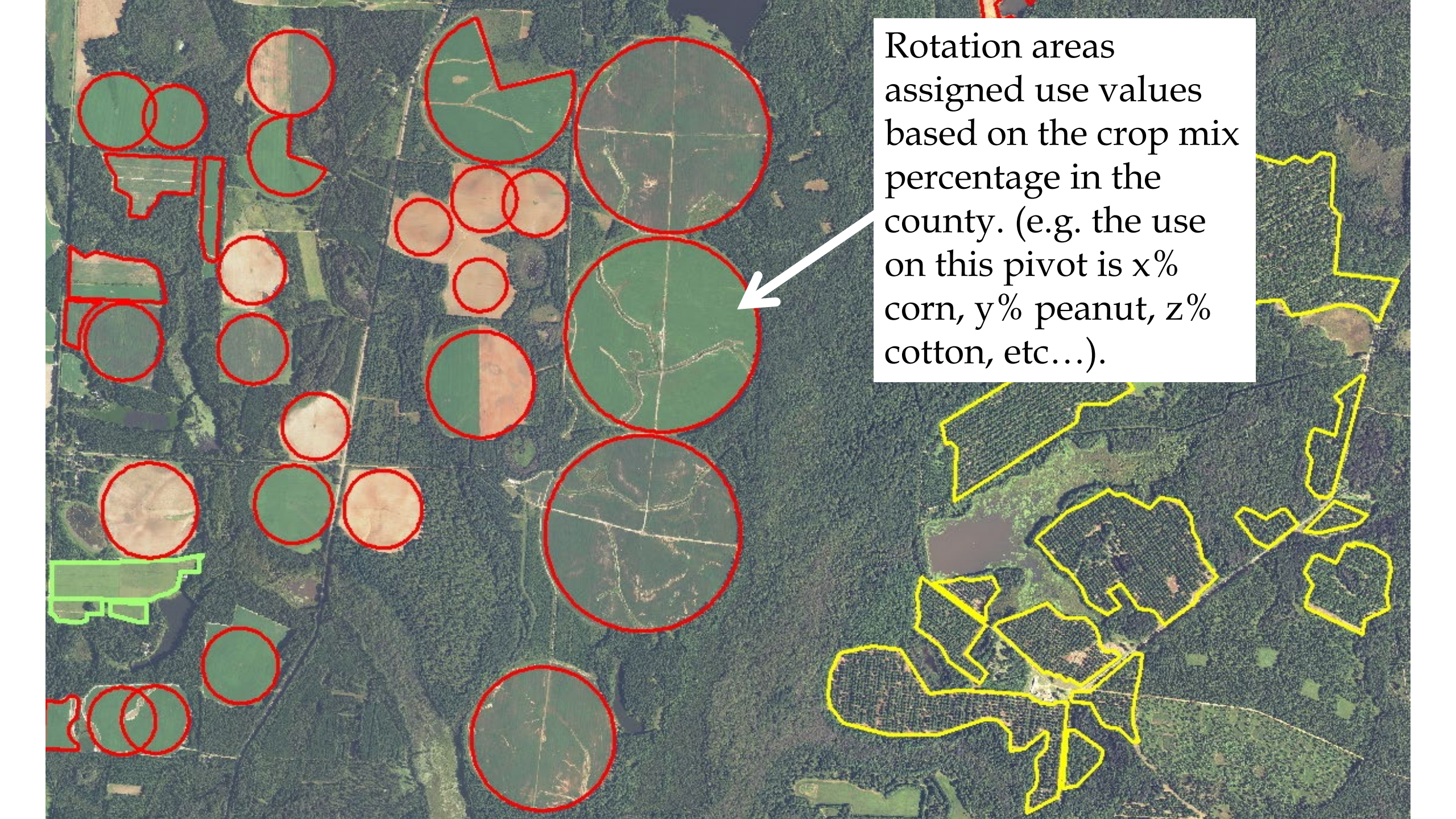
draft

Baseline Crop Mix by RWPC



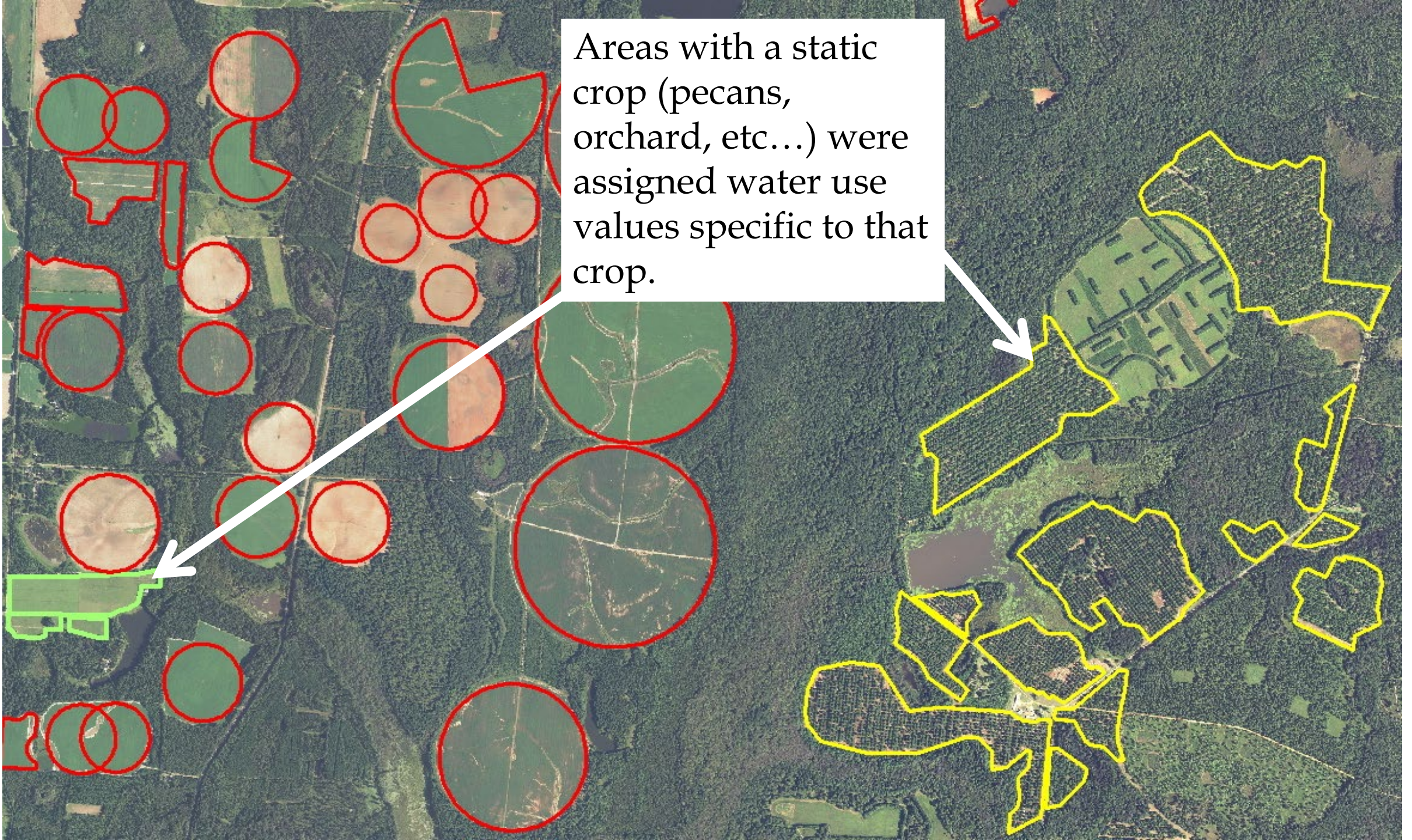
Coosa-N. Georgia RWPC



An aerial photograph of a rural landscape with various agricultural fields. Numerous fields are outlined with red circles or polygons of varying sizes. Some of these red-outlined fields are filled with a semi-transparent green color, while others are filled with a semi-transparent tan color. In the lower right portion of the image, there is a cluster of fields outlined with yellow lines. A white arrow points from a text box to one of the green-filled fields. The text box contains a paragraph explaining the use values assigned to the rotation areas based on crop mix percentages in the county.

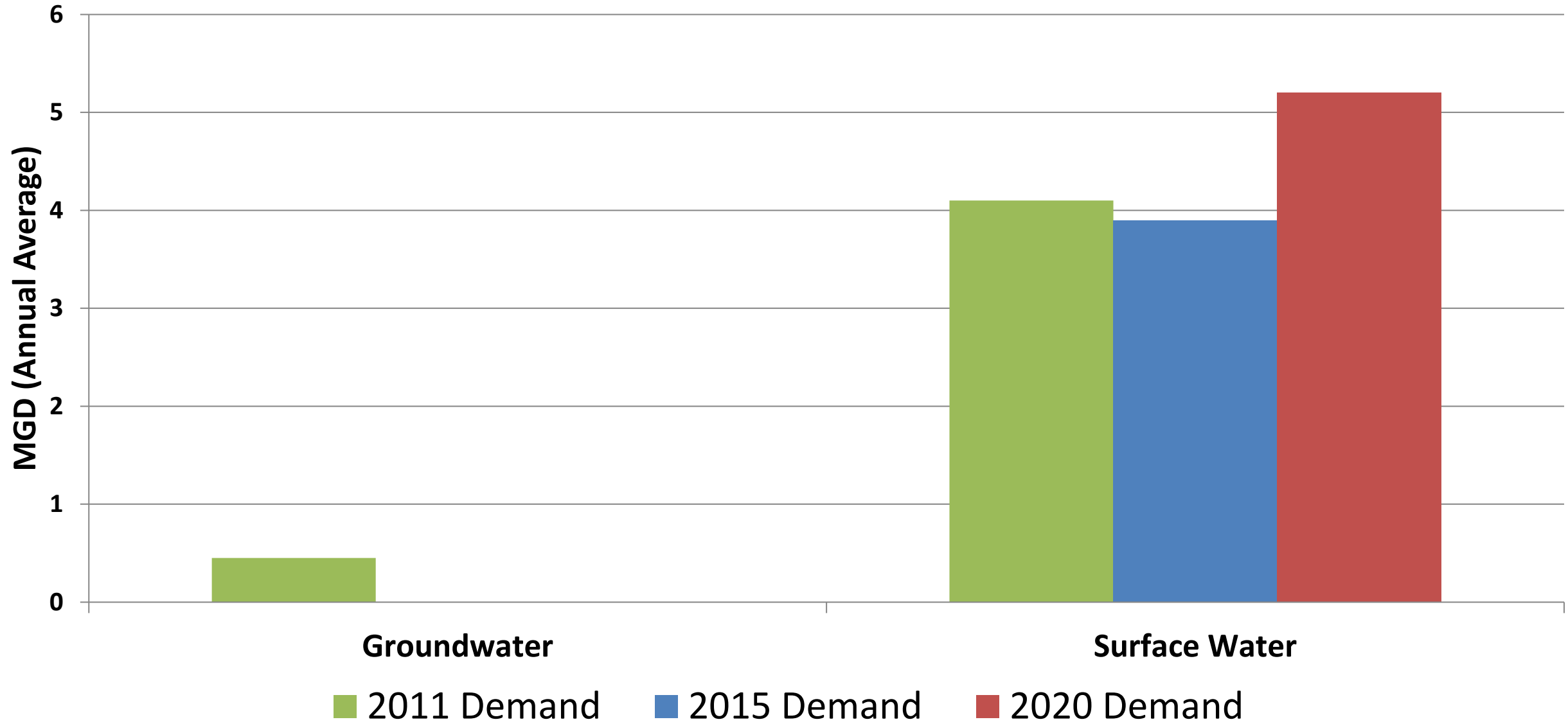
Rotation areas
assigned use values
based on the crop mix
percentage in the
county. (e.g. the use
on this pivot is x%
corn, y% peanut, z%
cotton, etc...).

Areas with a static crop (pecans, orchard, etc...) were assigned water use values specific to that crop.

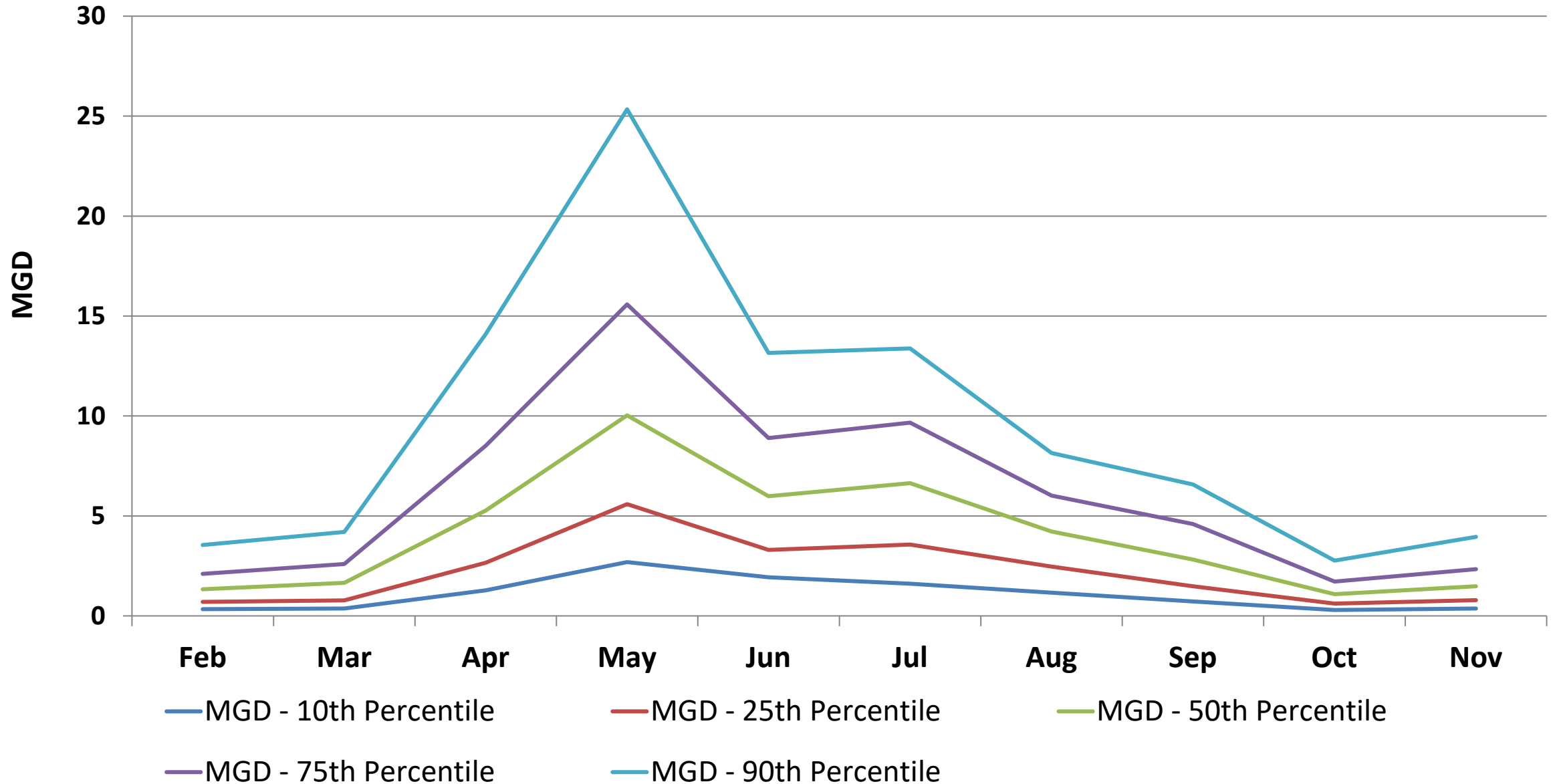


CNG Council – Ag Demand – 75th Percentile

Round 1 (2011), Round 2 (2015) and Round 3 (2020)



Coosa-N. Georgia RWPC - Monthly



CNG – Ag Demand – Forecast – 75th Percentile

Totals (2020 & 2060)

