

# Stripling Irrigation Research Park

October 2019



A different view of the park from  
our drone.

## This Month

- ▶ From the Superintendent
- ▶ Drought Conditions
- ▶ Water Resources
- ▶ At the Park
- ▶ Past & Upcoming Events
- ▶ In The News
- ▶ SIRP Weather



UNIVERSITY OF  
**GEORGIA**

College of Agricultural &  
Environmental Sciences

C.M. STRIPLING IRRIGATION  
RESEARCH PARK

# From the Superintendent

Well, September was HOT and DRY at Stripling Park and October has started out the same. For many of our cotton growers, conditions likely expedited maturity of the crop and I'm seeing much of the crop in our area being defoliated or already picked. Many peanut growers are still irrigating to finish out their crop. "Dry corners" are very evident right now and some growers are harvesting those peanuts separately from irrigated areas of fields.

We 'endured' some tough weather here: four days with highs of 100F+, nine days with highs of 98F+, and only 1.01 inches of rain over 4 events. Our highs ranged from 101 to 87.5 and our lows ranged from 74.3 to 60.6. Our long term average for September shows 8 rainy days for 3.92 inches, an average high temp of 88.3 and an average low temp of 66.6. We are below our long term average annual rainfall (42.3 inches) as SIRP has received only 35.24 inches as of Sept 30<sup>th</sup>. We are hearing from drought experts that we are experiencing a 'flash drought'.

The SIRP crew was busy last month with irrigation, spraying fungicide on peanut plots, spraying defoliant on cotton plots, prepping peanut combines and cotton pickers, inverting and harvesting peanuts, and picking cotton. Some of the harvest was non-data rows that border "data rows" in various studies and much of the harvest was good, old 'bagging' of yields from research plots. During our first day of cotton picking, we had the excitement of a smoldering fire in our first dump into our boll buggy. Our BJ later realized the problem and dumped the cotton onto a debris pile from last year's hurricane – and within minutes we had a nice inferno!

Visitors to the Park included Corbett Falgout with Senninger, Hunter Brannon with Valley Irrigation, Mike Mills with Reinke Irrigation, the Flint River Soil & Water Conservation District employees, and CAES Plant Pathology grad students Bikash Ghimire and Bennett Harrelson. Mike installed the hardware for the Reinke Reincloud remote monitoring and control in the control panel of our Reinke center pivot.

We were also pleased to host, for the second time, the SW District 4-H Forestry Field Day. There were 4 counties participating (Crisp, Decatur, Echols & Randolph). Craven Hudson, state 4-H Specialist, and Jason Blankenship, Randolph County Ag Agent, coordinated a great event. We also hosted, for the third time(?), the Lee County Middle School East ag/STEM student group. These thirty 6<sup>th</sup> graders kept us on our toes with great questions.

Finally, I mentioned above that we are in what experts are calling a "flash drought". I have included several pages in this newsletter related to drought. Please take a minute and look over this info and take advantage of web resources offered by the various groups. I hope by the time you read this you have received some much needed rain!

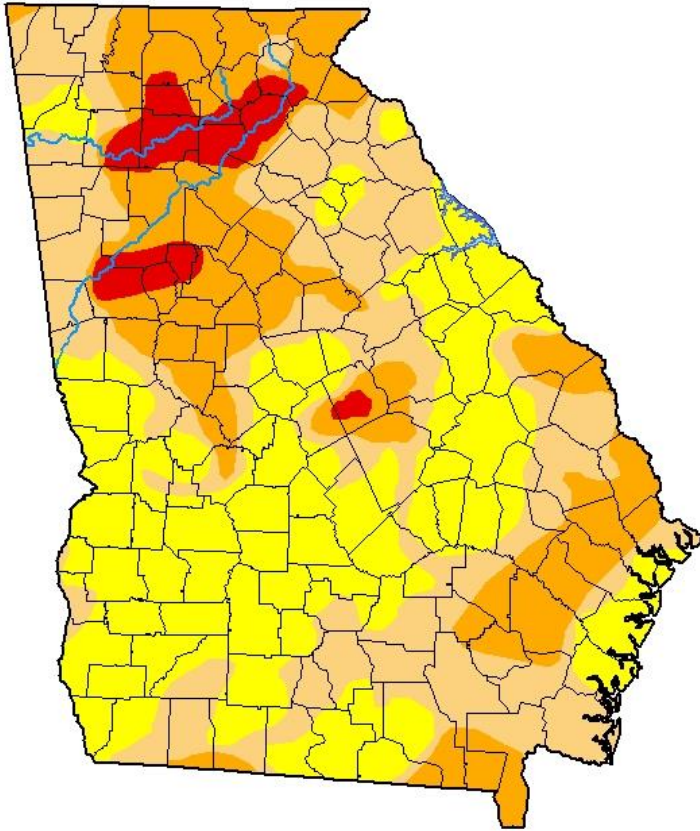


Calvin Perry

# Drought Conditions

## U.S. Drought Monitor Georgia

**October 1, 2019**  
(Released Thursday, Oct. 3, 2019)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

|   | None   | D0-D4  | D1-D4 | D2-D4 | D3-D4 | D4   |
|---|--------|--------|-------|-------|-------|------|
| <b>Current</b>                              | 0.00   | 100.00 | 61.58 | 28.35 | 4.49  | 0.00 |
| <b>Last Week</b><br>09-24-2019              | 0.72   | 99.28  | 56.20 | 16.11 | 0.00  | 0.00 |
| <b>3 Months Ago</b><br>07-02-2019           | 63.35  | 36.65  | 6.89  | 0.00  | 0.00  | 0.00 |
| <b>Start of Calendar Year</b><br>01-01-2019 | 100.00 | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 |
| <b>Start of Water Year</b><br>10-01-2019    | 0.00   | 100.00 | 61.58 | 28.35 | 4.49  | 0.00 |
| <b>One Year Ago</b><br>10-02-2018           | 54.52  | 45.48  | 8.27  | 0.00  | 0.00  | 0.00 |

Intensity:

|                     |                        |
|---------------------|------------------------|
| None                | D2 Severe Drought      |
| D0 Abnormally Dry   | D3 Extreme Drought     |
| D1 Moderate Drought | D4 Exceptional Drought |

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brian Fuchs  
National Drought Mitigation Center



[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

Drought Monitor map for Georgia as of October 1. Conditions have changed dramatically since last month. Currently, 100% of the state is categorized as abnormally dry, 61% is in moderate drought, 28% is in severe drought and 4.5% is considered extreme drought. Last month, as this 'flash drought' was intensifying, we were at 40% abnormally dry or moderate drought.

For more info:

<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?GA>

# Drought Conditions

Auburn University Water Resources Center and the National Integrated Drought Information System (NIDIS) hosts a monthly drought webinar (every 2 weeks during drought status) for the Apalachicola-Chattahoochee-Flint (ACF) River Basin in the states of Alabama, Georgia, and Florida. Each webinar addresses local and regional weather, climate, surface water, and groundwater conditions and forecasts impacting the ACF River Basin and the Southeastern U.S. as a whole.

For more info and to sign up for their webinar emails:

<https://aaes.auburn.edu/wrc/extension-outreach/droughtwebinar/>

Their Oct 1 webinar, a special edition, is available at:

**Apalachicola-Chattahoochee-Flint River Basin  
Drought Assessment Webinar**

<https://myemail.constantcontact.com/Recap--Special-Edition-10-1-19-ACF-Drought-Webinar.html?soid=1107257096495&aid=4vGR5WRB9RM>

We're providing a summary slide from that Oct 1 webinar on the next page.

# Drought Conditions

## Drought Assessment Webinar Summary

### ACF Basin Precipitation and Climate Conditions and Outlooks

- Month of September brought record and near-record heat and dryness across the Southeast
- Persistent high pressure ridging and dry airmass have been the dominant feature, aided by indirect impacts from hurricanes Dorian and Humberto
- Agricultural impacts greatest on range/pasture, peanut harvest problematic
- ACF basin ranges from abnormally dry (D0) to moderate and even severe drought (D2)
- Near and mid-range forecasts call for continued hot and dry
- Neutral conditions in the Pacific, forecast to continue through winter
- CPC seasonal forecast (July - Sept) favors higher chances for warm temperature across the US, equal chances for rainfall
- Drought likely to intensify quickly

### State of Alabama Input

### ACF Basin Streamflow and Groundwater Level Conditions

- Real-time streamflow in the ACF basin are currently in the below normal range in the upper basin, dryer in lower basin
- Hydrologic drought conditions have increased across Georgia and Alabama with some areas classified as extreme hydrologic drought.
- 28-day average streamflow in the Chattahoochee River are currently in the normal to below normal range.
- 28-day average streamflow for the Flint River continue to decrease, and are now in the much below normal range.
- Real-time groundwater levels range from above normal to low across the ACF Basin.

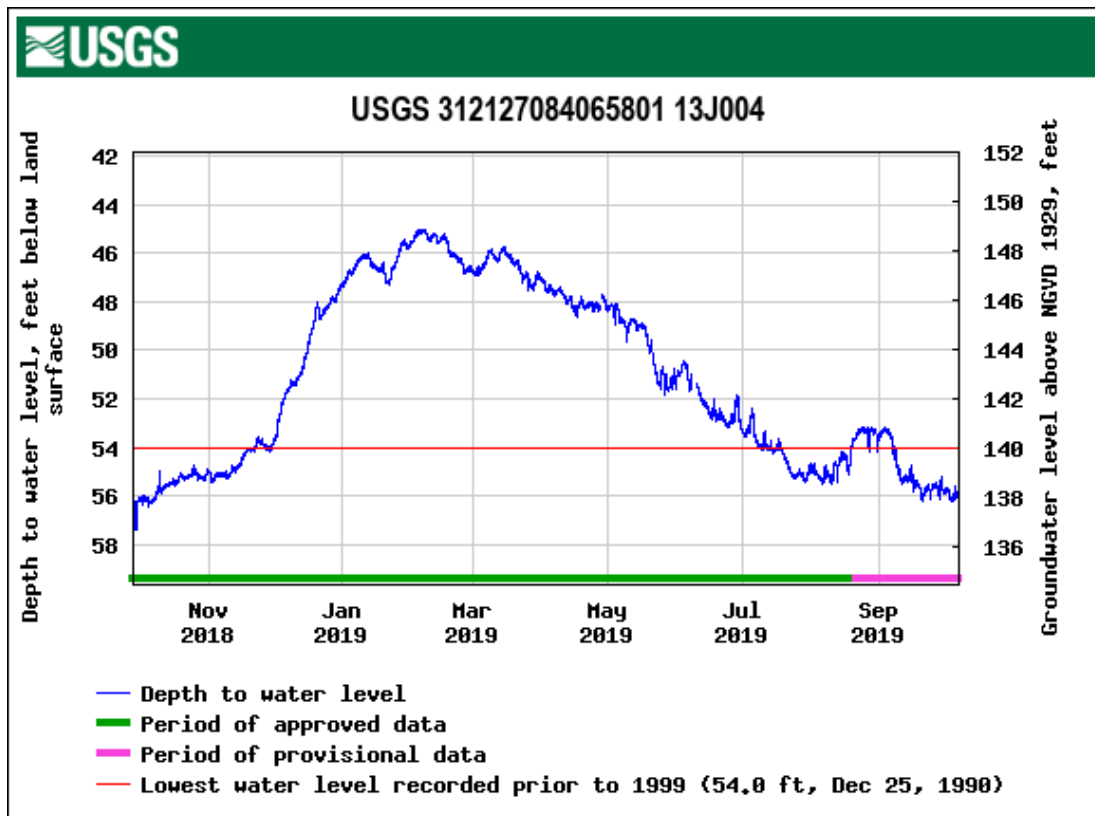
### Streamflow Forecasts

- The Southeast River Forecast Center's 1-Month Streamflow Forecast predicts below normal for the entire ACF Basin.
- The Southeast River Forecast Center's 3-Month Streamflow Forecast predicts below normal flows for the entire ACF Basin.
- \*Note: stream flow forecast pie charts do not directly include any adjustments to the ESP forecast based on ENSO, CPC, or other factors, but are based on soil conditions relative to normal in concert with historical precipitation.

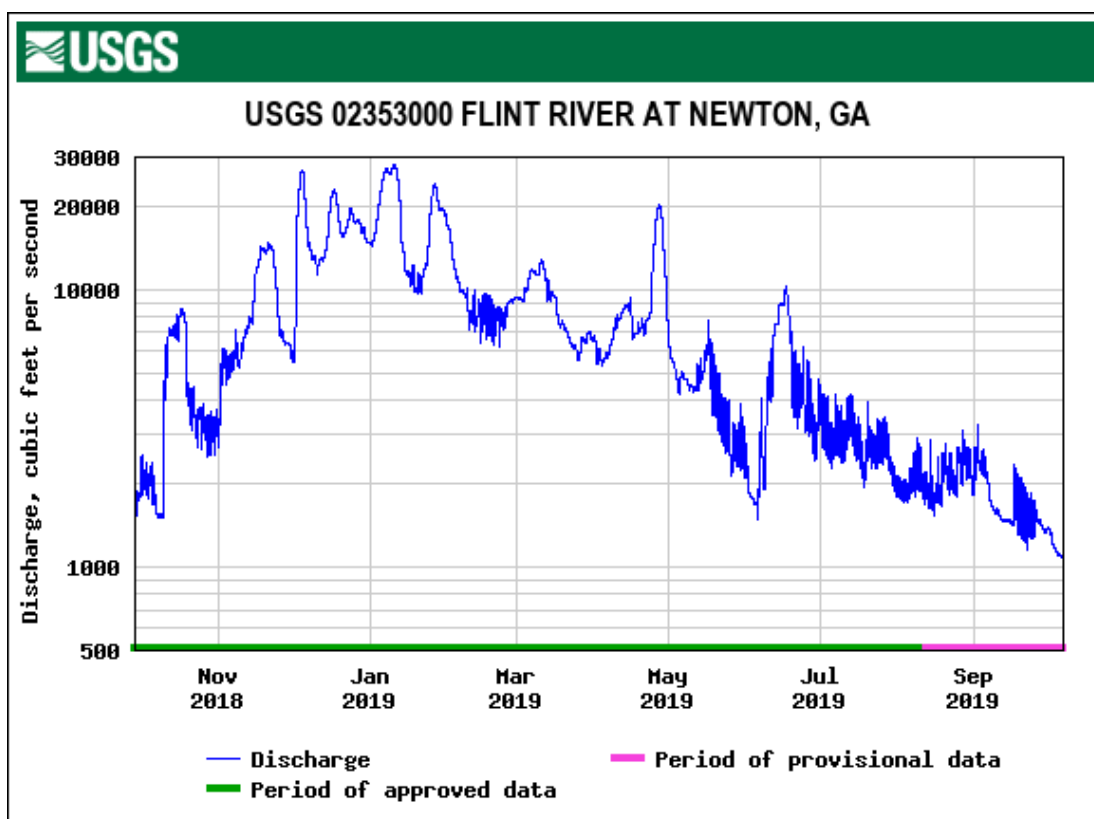
### ACF Basin Reservoir Conditions

- Inflows into the projects have fallen.
- Lanier, West Point and WF George are below guide curve.
- Continuing to meet downstream minimum flow requirements.
- The ACF system conservation storage is in Zone 1 and is forecasted to stay in Zone 1 for the next few weeks.

# Water Resources



Above and below - USGS data for the past year for a groundwater monitoring well in northern Mitchell County and stream gage on the Flint River at Newton.



# At the Park



Above: B.J. spraying Dr. Kemeraït's cotton study in our 'Front Four South' block.

Bottom: Kyle showing the difference between the use of a growth regulator on the 'Front Four South' cotton.



# At the Park



Above: And they're off... LOL  
Below: B.J. inverting peanuts in the Camilla lateral.





# At the Park



Above: Cotton bolls began smoldering in boll buggy, so B.J. dumped on debris pile (not burning)... Turns into...  
Below: ... a small inferno in only a few minutes!



# At the Park



Above & Below: Lee Co. Middle School East's 6<sup>th</sup> grade Ag/STEM class visit & tour.



# At the Park



Above: Harvesting cotton in the VRI field.  
Below: A field full of cotton.



# At the Park



Above: B.J., Mandy & Kyle weighing cotton samples from data rows.  
Below: Calvin & Kyle are a little dusty after bagging yields for Dr. Vellidis.



# Events

## Past events

|         |   |
|---------|---|
| Sept 26 | Lee Co. Middle School visit & tour      |
| Oct 10  | 1 year anniversary of Hurricane Michael |
|         |   |

## Upcoming events

|             |                         |
|-------------|-------------------------|
| Oct 15 – 17 | Sunbelt Expo (Moultrie) |
| Nov 28 – 29 | Thanksgiving Holidays   |
| Dec 25 – 31 | Christmas Holidays      |
| Jan 1, 2020 | New Year's Holiday      |
|             |                         |

# In the News

[Georgia Cotton: Harvest Ahead of Schedule, Crop Looking Good](#)

[Georgia Pecans: Late Season Drought – When to Turn Off Irrigation](#)

[Adama, Taranis take precision ag partnership to next level](#)

[Local - Tyson Foods Unveils Alternative Protein Products and New Raised & Rooted® Brand](#)

[Tyson Foods Expands, Creates 100 Jobs in Mitchell Co.](#)

[Flint River SWCD recognized in Clean 13 Report](#)

[EPA, Corps of Engineers finalize 2015 WOTUS repeal](#)

[Is the cotton virus a problem in Georgia?](#)

[EPA Announces Changes to Ethanol Policy](#)

[Biofuel Groups Win 15 Billion Gallon Floor in RFS Deal](#)

[Three Extension specialists go gator hunting, and this happened](#)

[Irrigation For Farming Could Leave Many Of The World's Streams And Rivers Dry](#)

[Flint River Soil and Water Conservation District Sponsoring Agricultural and Environmental Education Grant](#)

[Flint River Soil and Water Conservation District Partners with USDA NRCS and UGA to Expand Smart Irrigation Technologies to Pecans](#)

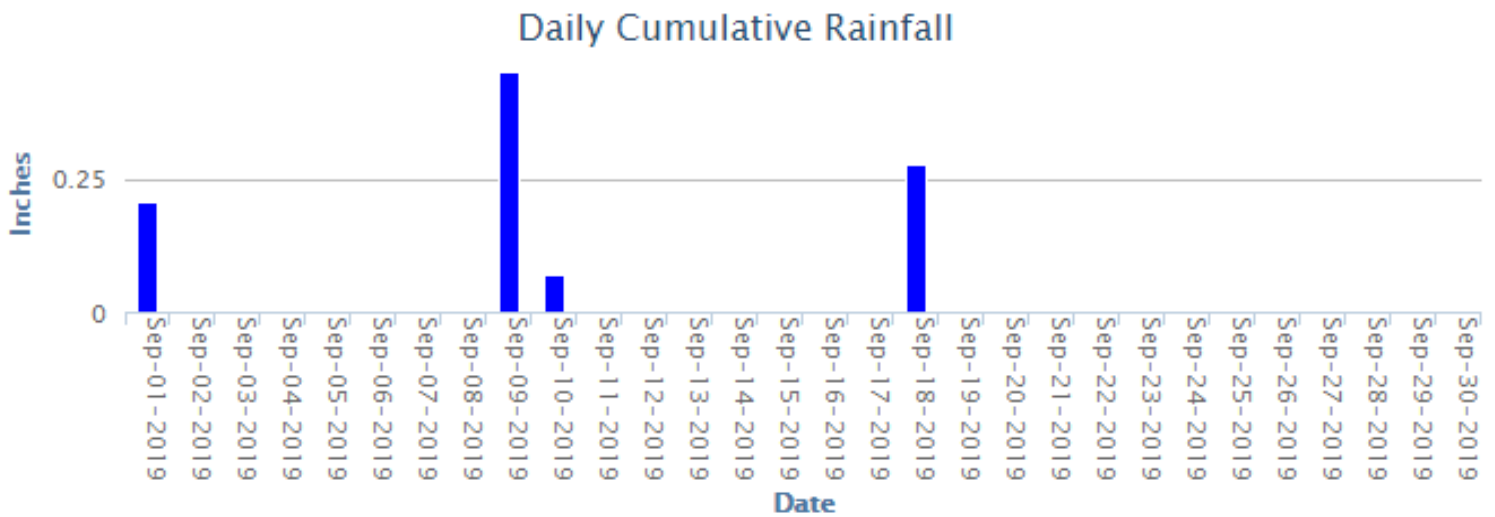
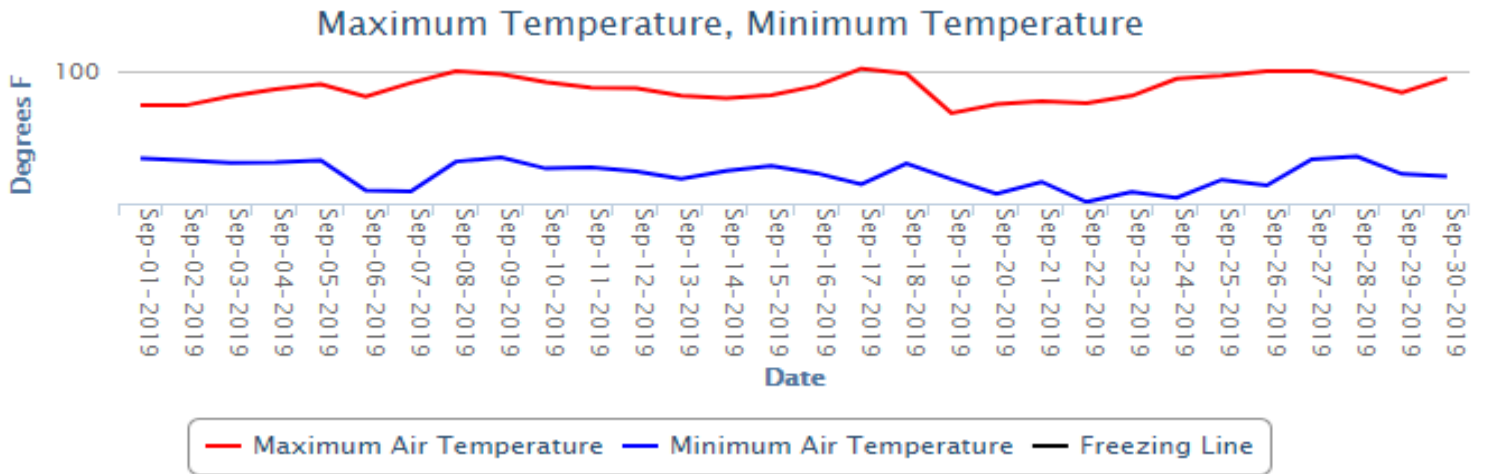
[Dry Conditions Leave Peanut And Cotton Crops In Poor Conditions](#)

[Flint River Soil and Water Conservation District partners with USDA NRCS, UGA to expand smart irrigation technologies to pecans](#)

[PrecisionAg Institute Lists Six Levels of Technology Adoption](#)

[Video: Peterson Farm Brothers New Video: “Tractorstuck”](#)

# SIRP Weather



For September, SIRP had 1.01 inches of rainfall, compared to 4.82 inches in August, 6.15 inches in July, 4.77 inches in June, 3.42 inches in May, and 4.25 inches in April.

To explore weather information, visit [www.georgiaweather.net](http://www.georgiaweather.net).

# Contact Information

CM Stripling Irrigation Research Park  
8207 Highway 37 West  
Camilla, GA 31730  
(229) 522-3623

Calvin Perry (Superintendent): perrycd@uga.edu  
Candace Gray (Admin. Associate): sirp@uga.edu



## C.M. Stripling Irrigation Research Park

*College of Agricultural & Environmental Sciences*

**UNIVERSITY OF GEORGIA**

### Trivia:

What great politician was nicknamed "The Great Communicator"?