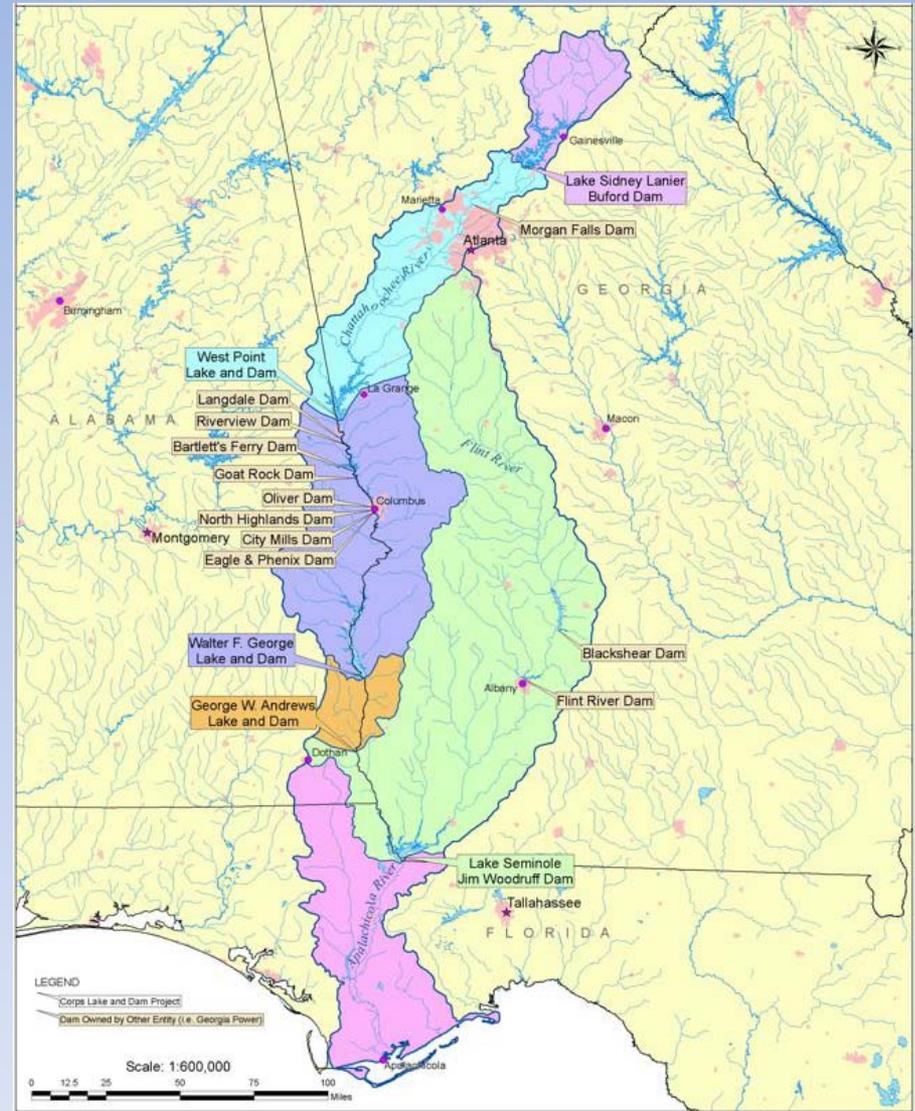
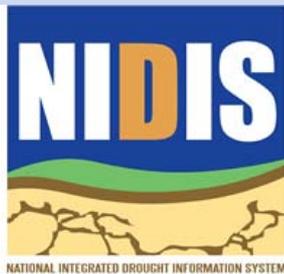


National Integrated Drought Information System

Southeast US Pilot for Apalachicola-Chattahoochee-Flint River Basin

30 August 2011



Current drought status from Drought Monitor

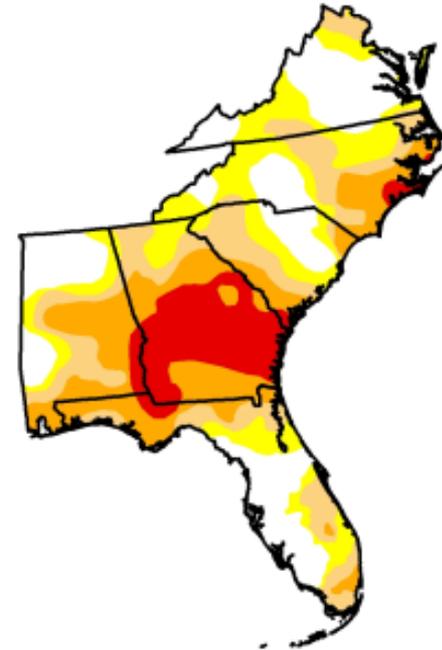
U.S. Drought Monitor Southeast

August 23, 2011

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	25.86	74.14	53.96	33.83	12.94	0.00
Last Week (08/16/2011 map)	24.64	75.36	53.03	34.23	12.78	0.00
3 Months Ago (05/24/2011 map)	27.51	72.49	49.14	30.69	10.67	0.00
Start of Calendar Year (12/28/2010 map)	23.01	76.99	51.84	23.55	5.63	0.00
Start of Water Year (09/28/2010 map)	18.18	81.82	38.04	10.32	0.90	0.00
One Year Ago (08/17/2010 map)	40.02	59.98	20.60	5.10	0.00	0.00



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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



Released Thursday, August 25, 2011

<http://drought.unl.edu/dm>

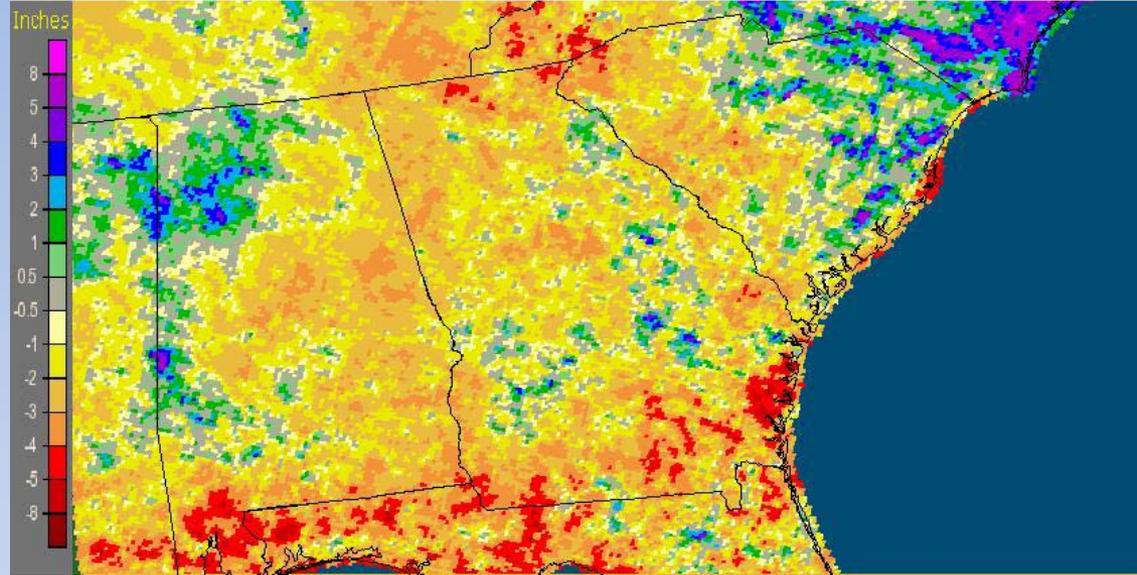
Eric Luebehusen / Laura Edwards, USDA / Western Regional Climate Center

<http://www.drought.unl.edu/dm/monitor.html>

Cumulative Rainfall Deficits

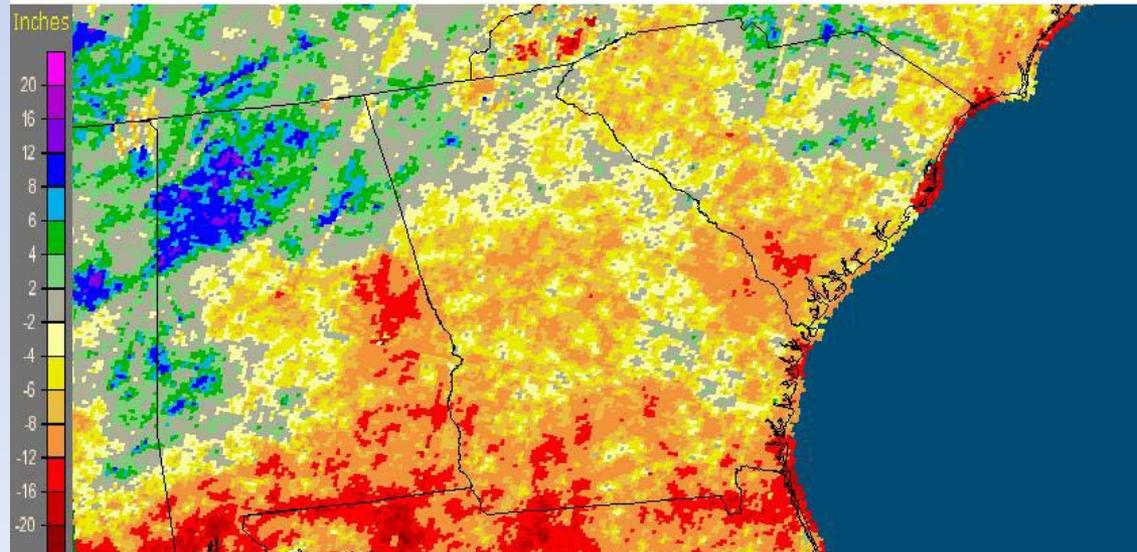
Past 30 days

Georgia: Current 30-Day Departure from Normal Precipitation
Valid at 8/29/2011 1200 UTC- Created 8/30/11 0:12 UTC



Past 180 days

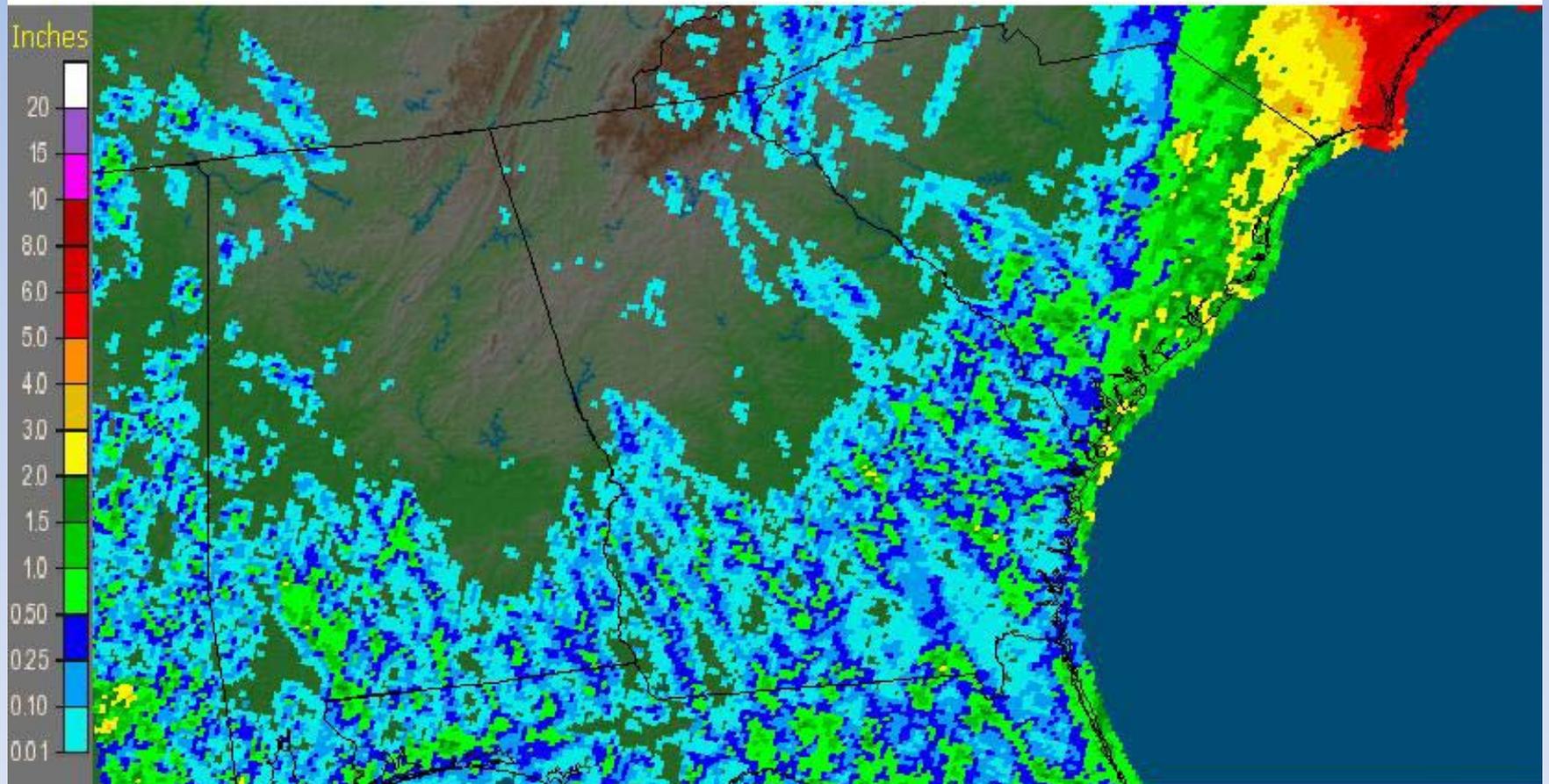
Georgia: Current 180-Day Departure from Normal Precipitation
Valid at 8/29/2011 1200 UTC- Created 8/30/11 0:26 UTC



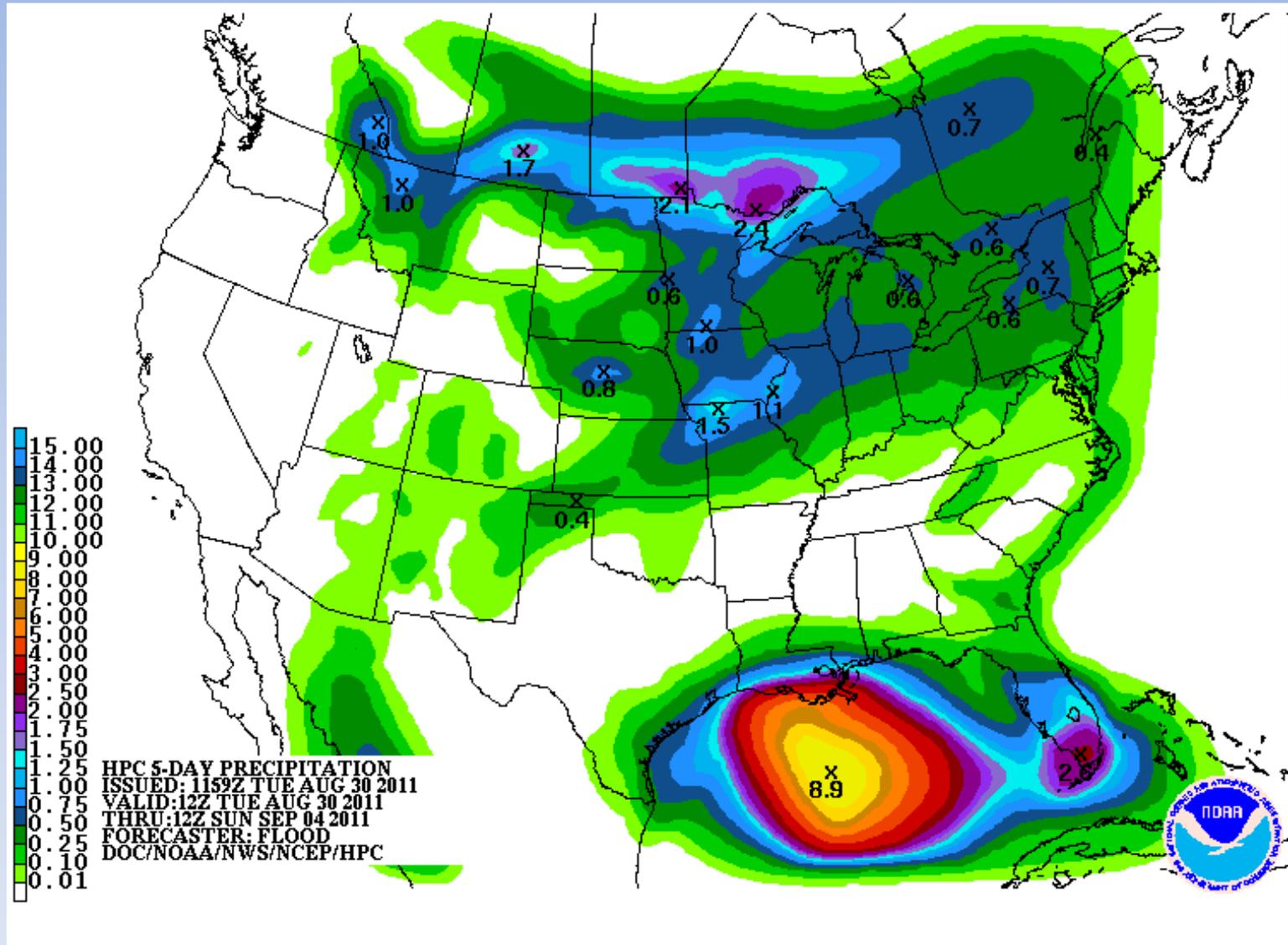
<http://water.weather.gov/precip/>

7-day Rainfall Totals

Georgia: Current 7-Day Observed Precipitation
Valid at 8/29/2011 1200 UTC- Created 8/29/11 23:59 UTC

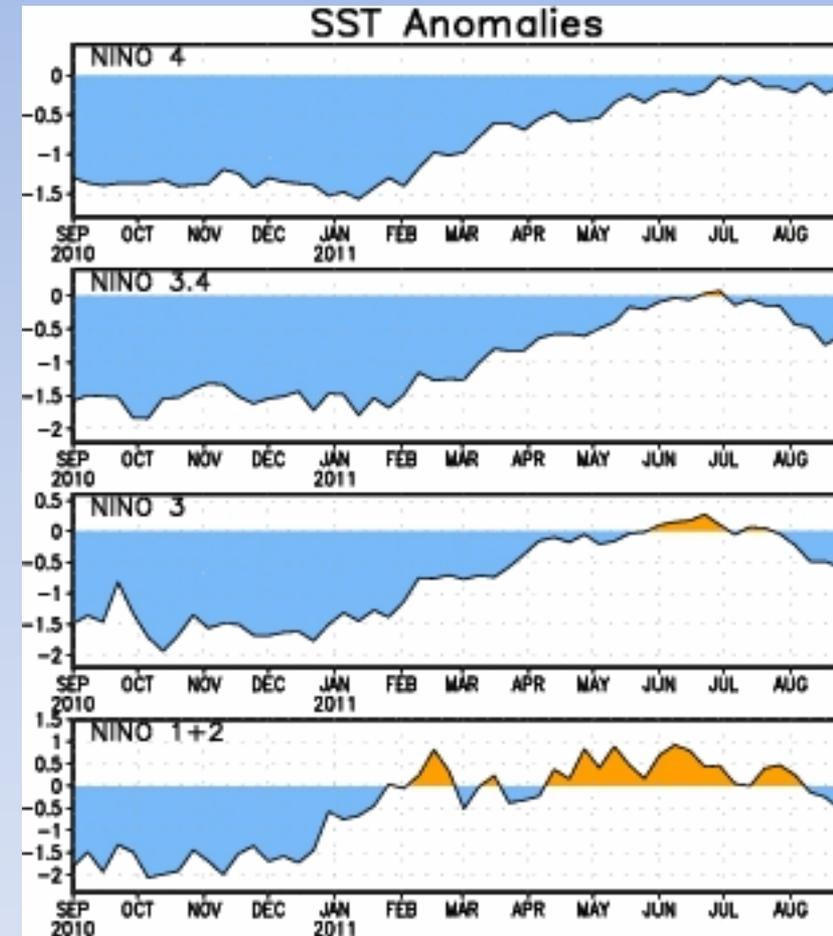
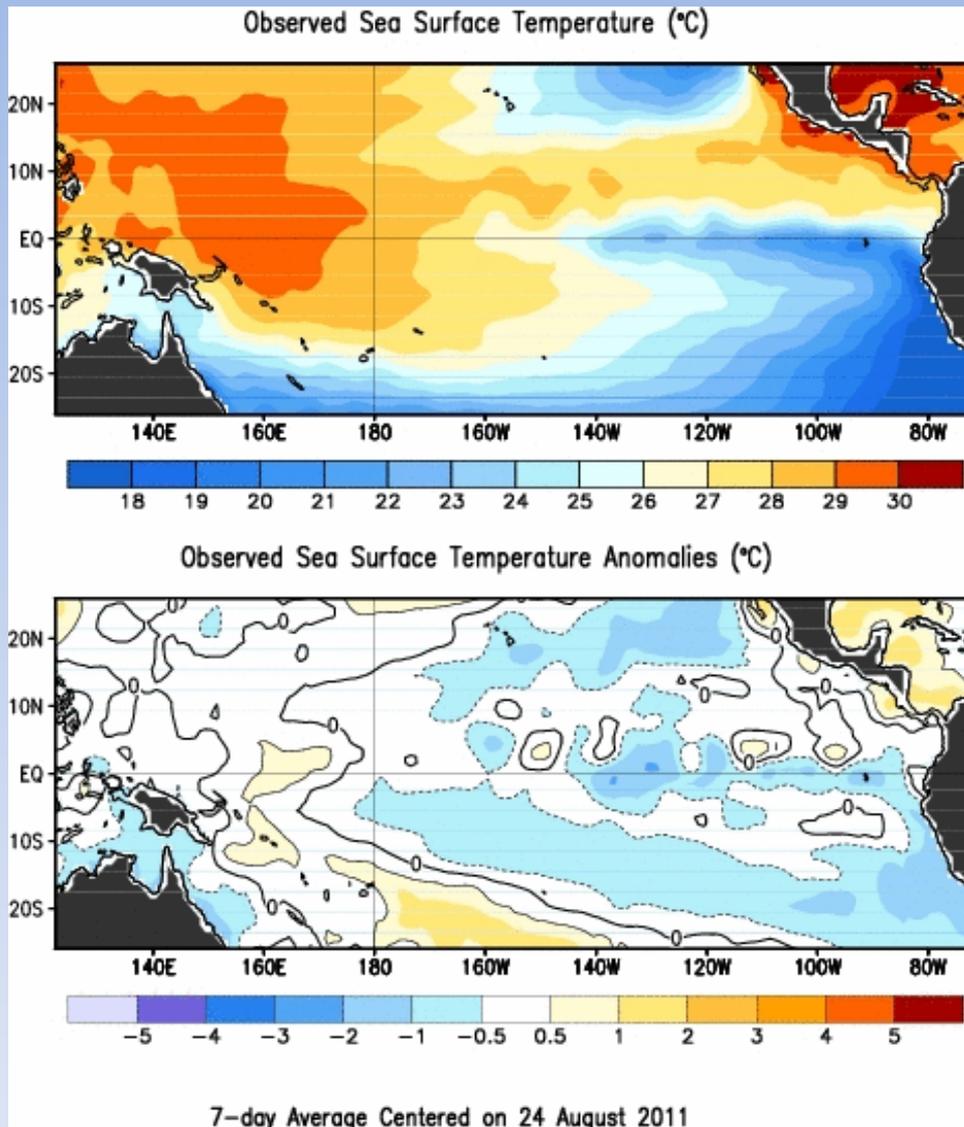


5-Day Precipitation Forecast



<http://www.hpc.ncep.noaa.gov/qpf/day1-5.shtml>

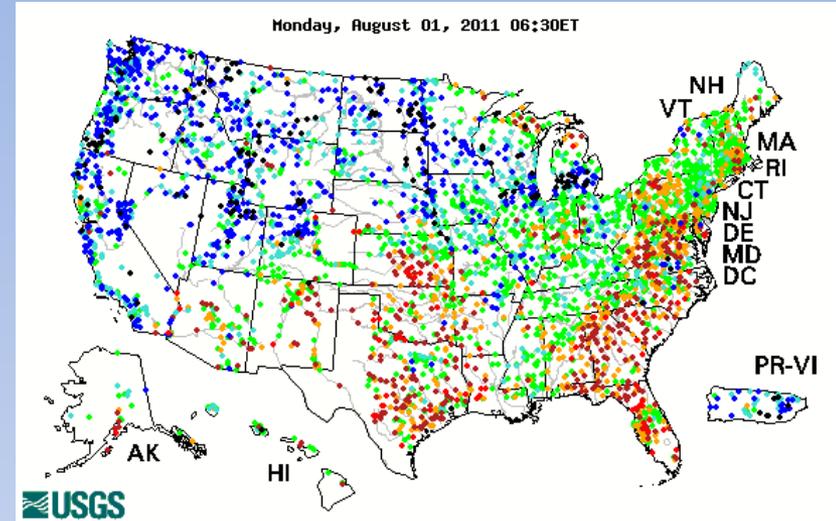
7-day average Pacific Ocean SST Anomalies



<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml>

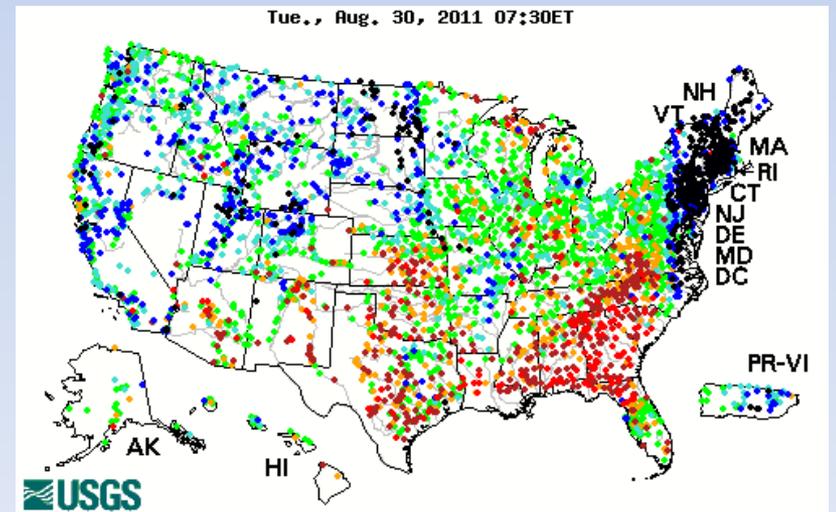
Realtime stream flow compared with historical averages

Previous Month:



Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

Current:



<http://waterwatch.usgs.gov>

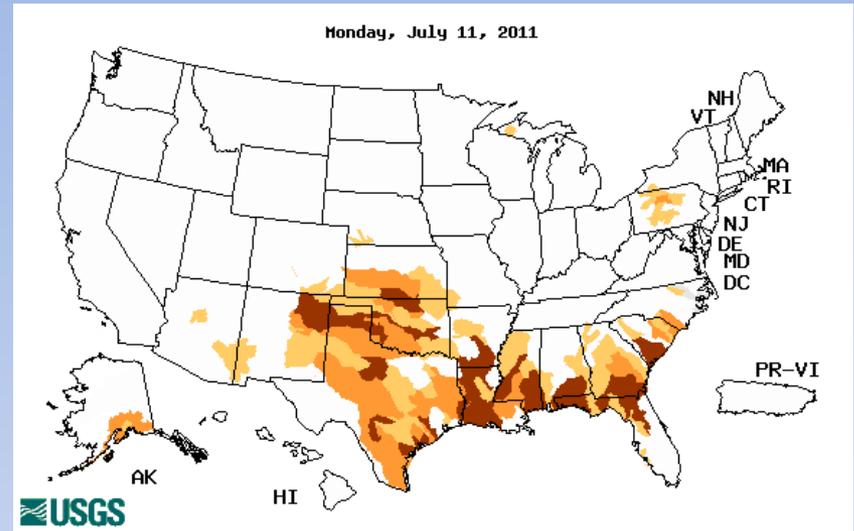
Below Normal 7-day Average Streamflows

Previous month:

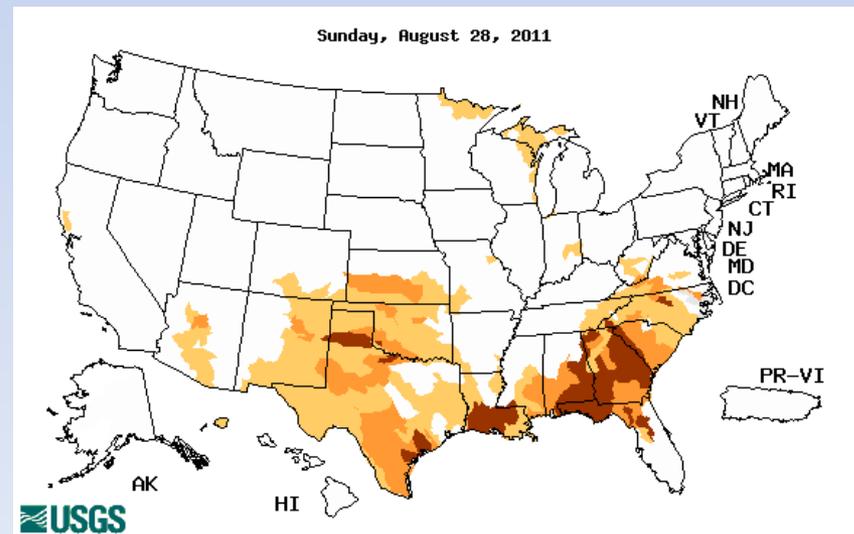
Below normal 7-day average streamflow as compared with historical streamflow for day shown

Current:

<http://waterwatch.usgs.gov>



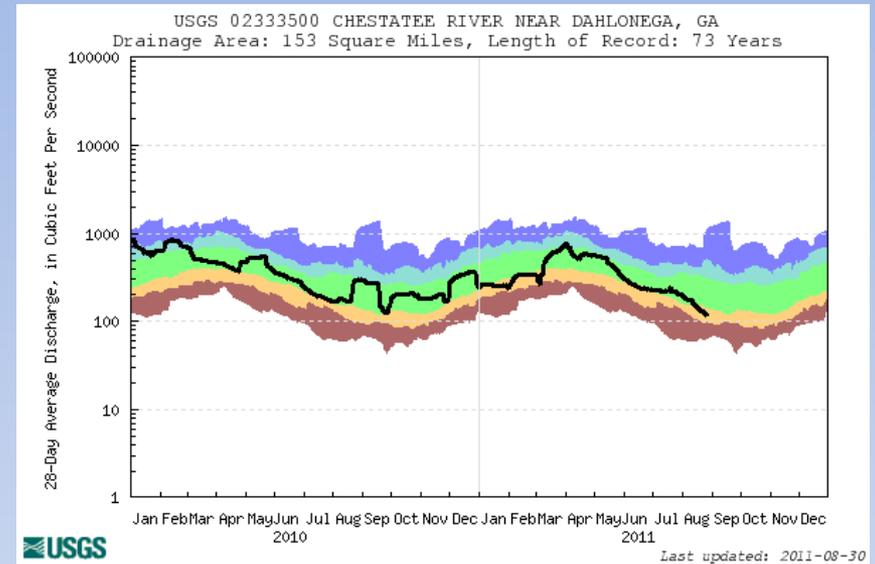
Explanation - Percentile classes				
Low	<=5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	



Lake Lanier Inflows

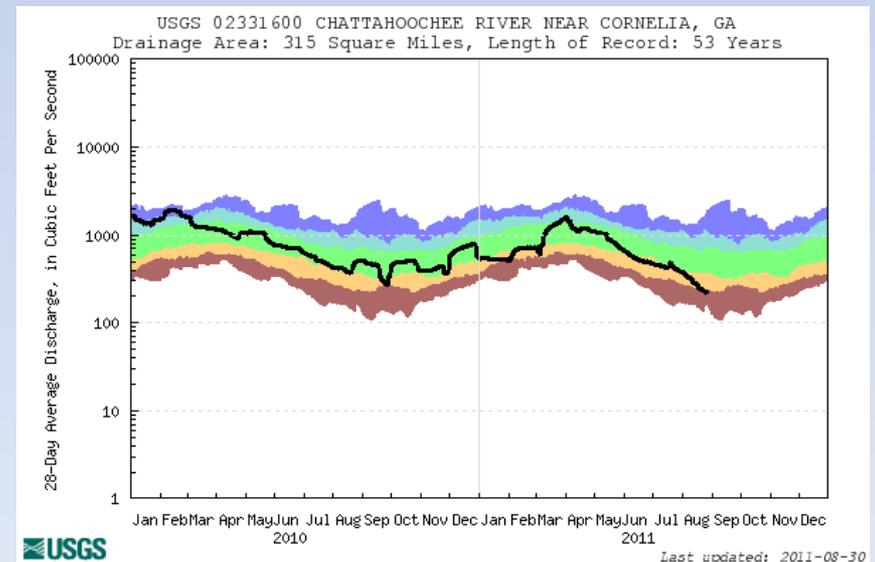
Chestatee near
Dahlonega
(02333500)

<http://waterwatch.usgs.gov>



Chattahoochee near
Cornelia (02331600)

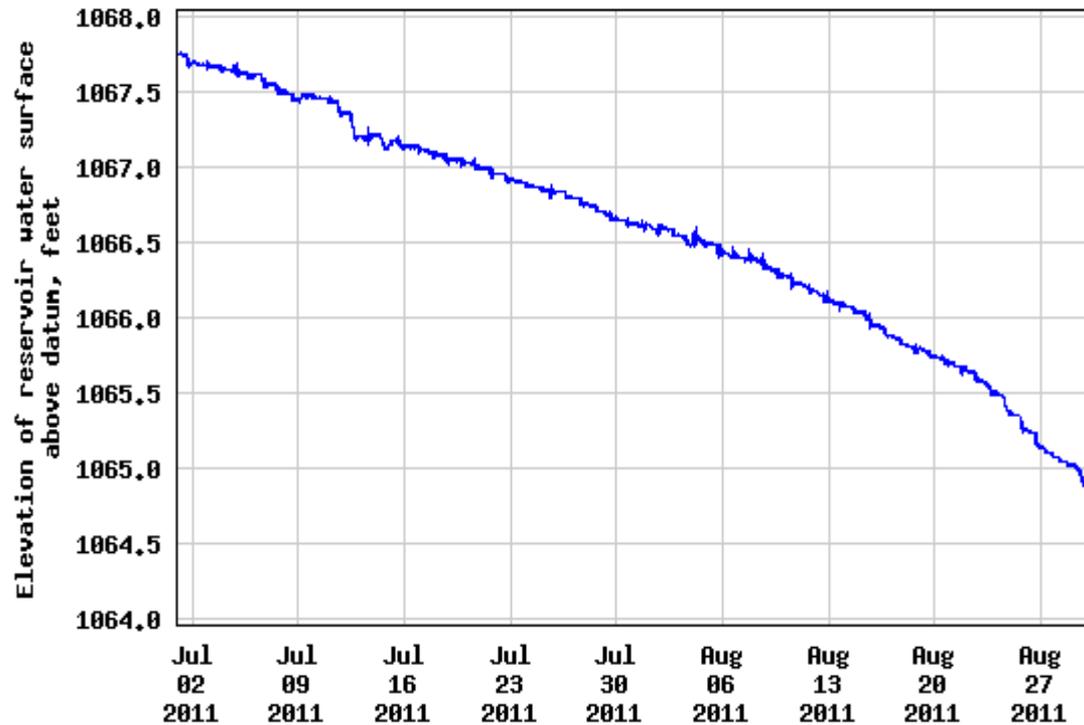
Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile-highest	FLOW
Much below normal	Below normal	Normal	Above normal	Much above normal	



Lake Lanier Levels (02334400) for Previous 60 Days



USGS 02334400 LAKE SIDNEY LANIER NEAR BUFORD, GA

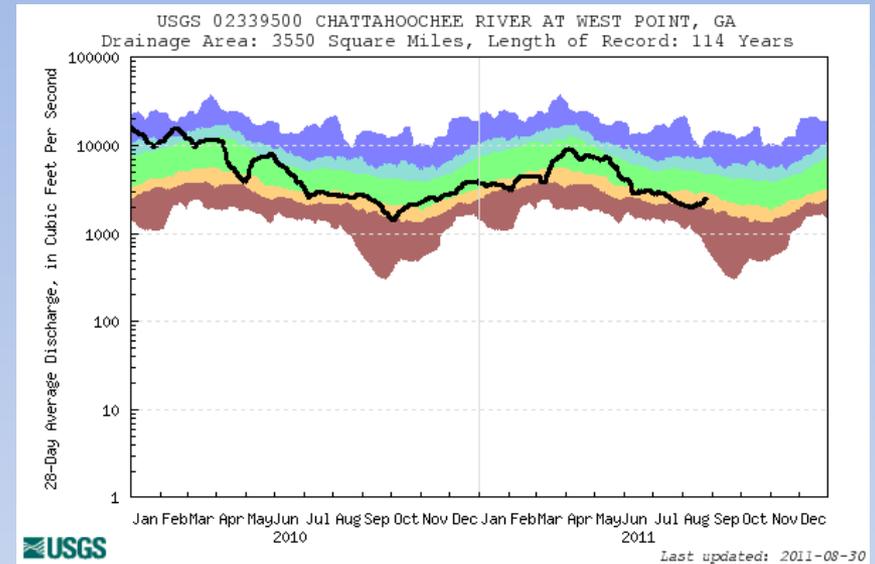


----- Provisional Data Subject to Revision -----

Current Streamflows

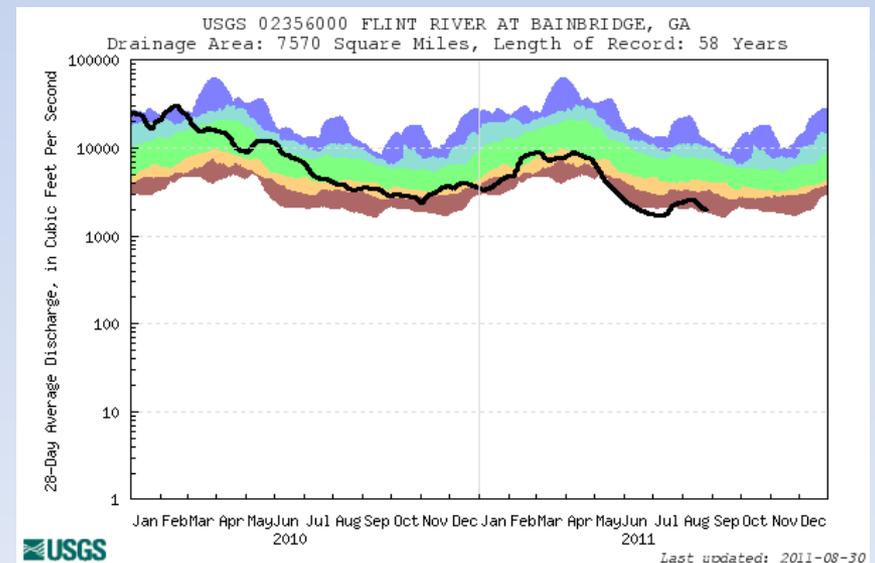
Chattahoochee at West Point (02339500)

<http://waterwatch.usgs.gov>



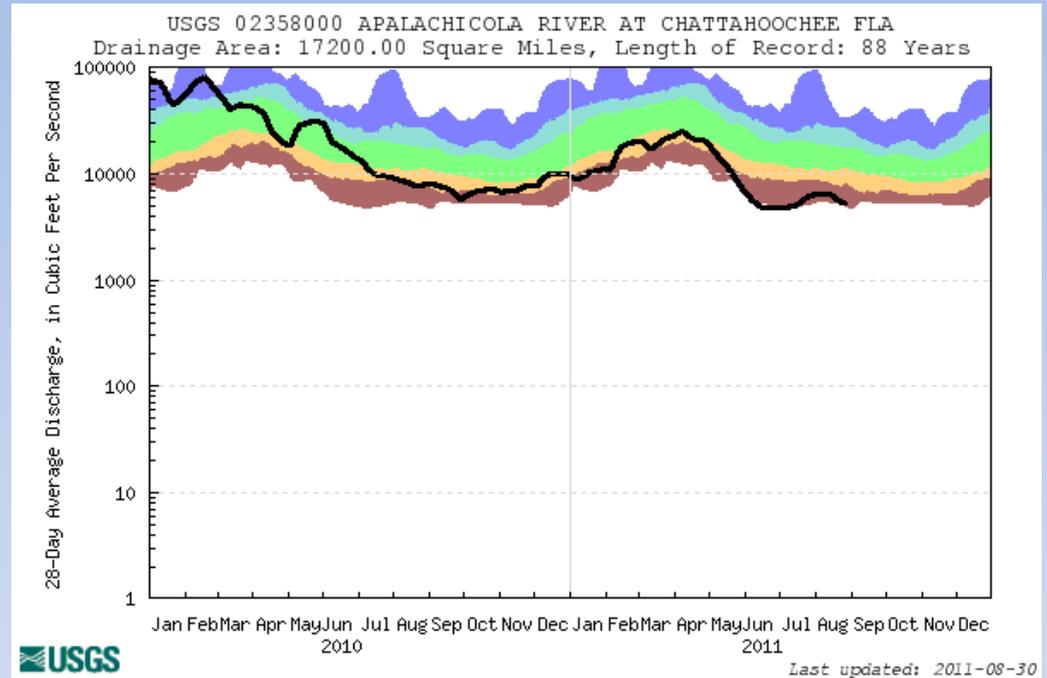
Flint at Bainbridge (02356000)

Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile-highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	



Streamflows

Apalachicola at Chattahoochee (02358000)

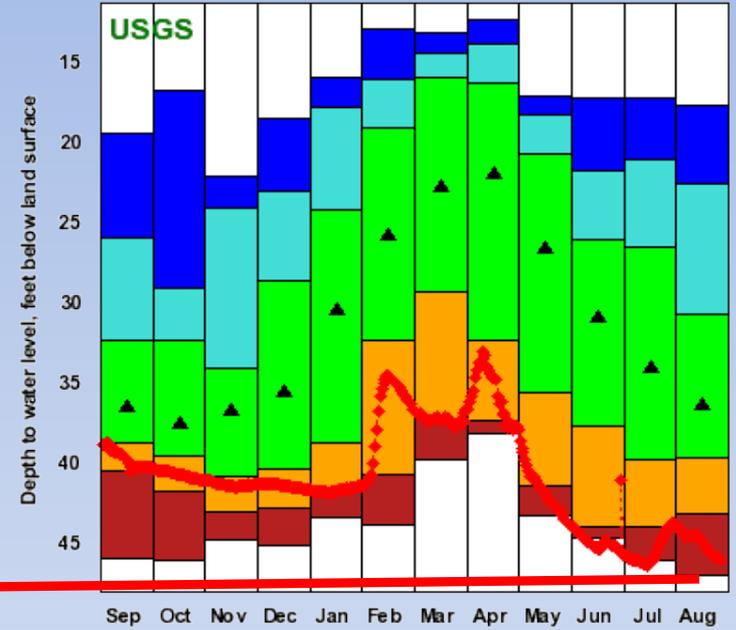
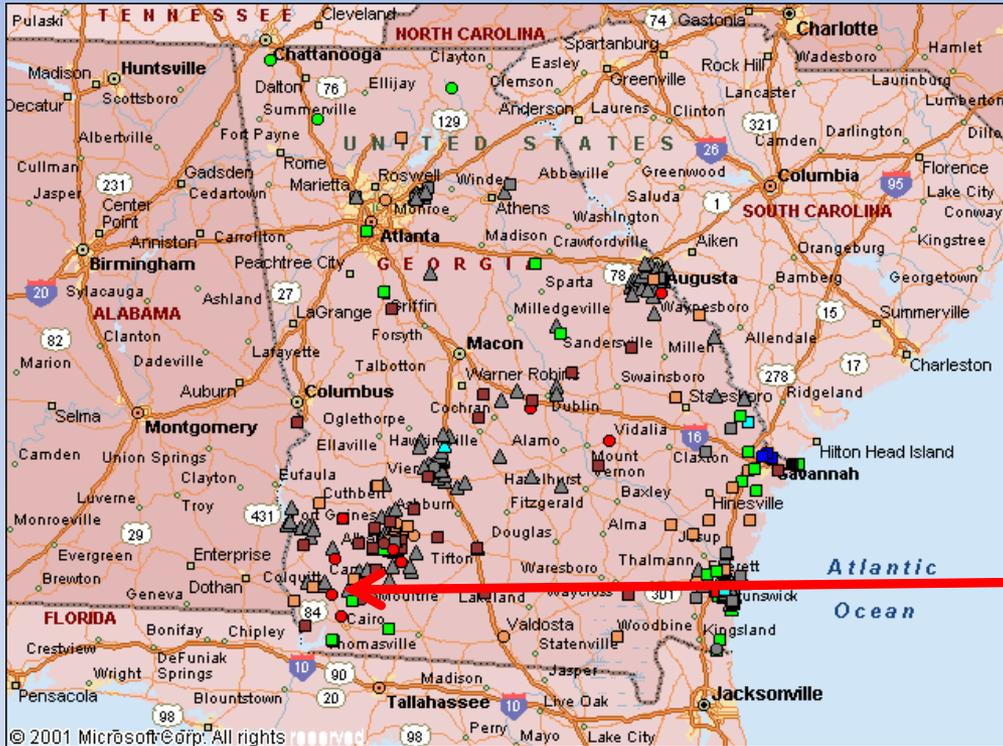


<http://waterwatch.usgs.gov>

Explanation - Percentile classes					Flow
lowest-10th percentile	10-24	25-75	76-90	90th percentile-highest	
Much below normal	Below normal	Normal	Above normal	Much above normal	

Groundwater Status

310651084404 501 - 08G001



Plot created 08/29/11 11:55

Explanation - Percentile Classes
 ◆ Data Point
 ● < 10
 ● 10-24
 ● 25-75
 ● 76-90
 ● > 90
 ▲ Monthly Median

Explanation - Percentile classes (symbol color based on most recent measurement)

●	●	●
Low	<10	10-24
	Much Below Normal	Below Normal

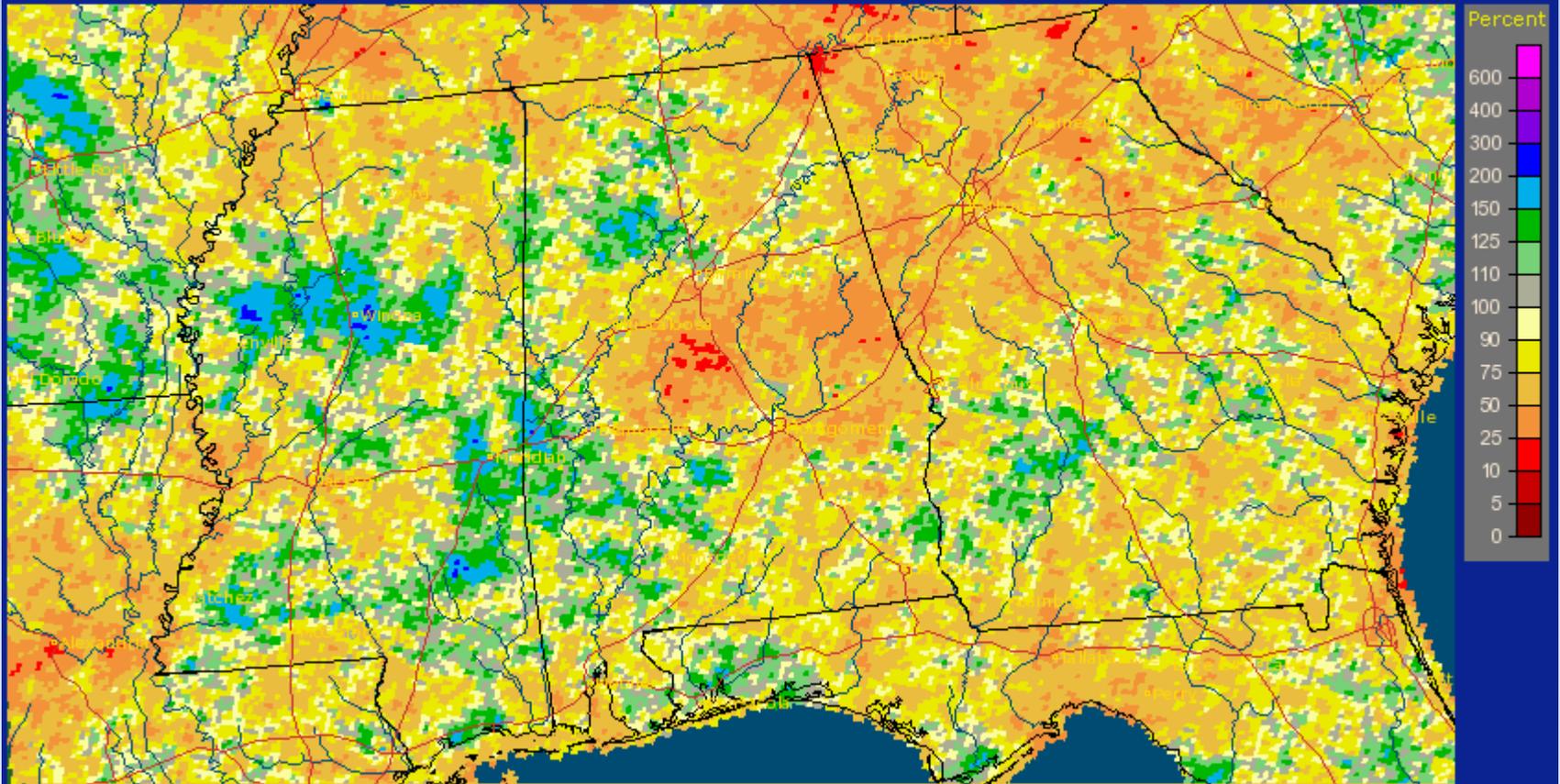
- Real Time
- Continuous
- △ Periodic Measurements

Miller County, GA
 (Upper Floridan Aquifer)

<http://groundwaterwatch.usgs.gov>

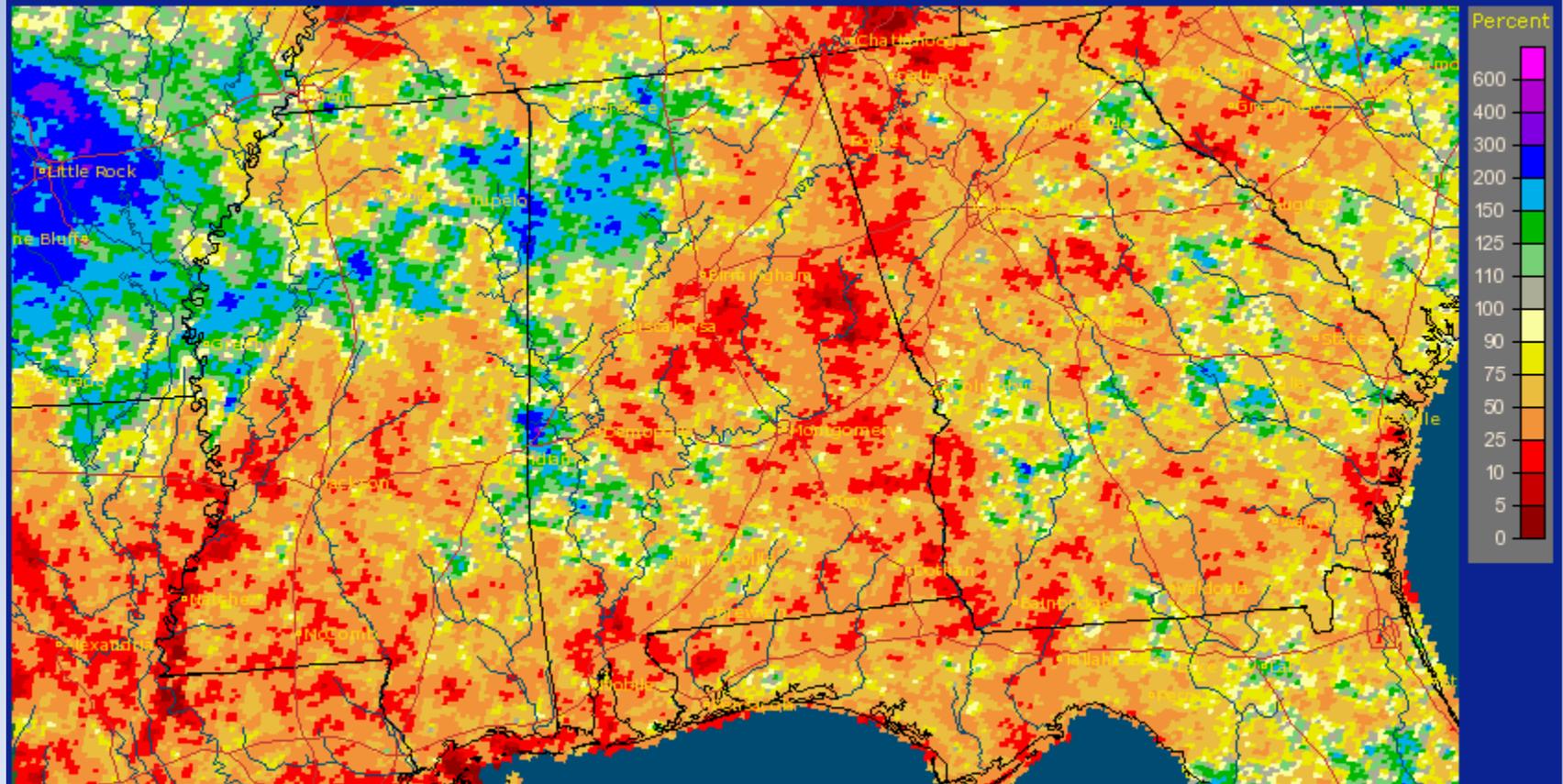
LAST 60-Days Percent of Normal

Alabama: Current 60-Day Percent of Normal Precipitation
Valid at 8/29/2011 1200 UTC - Created 8/29/11 20:19 UTC



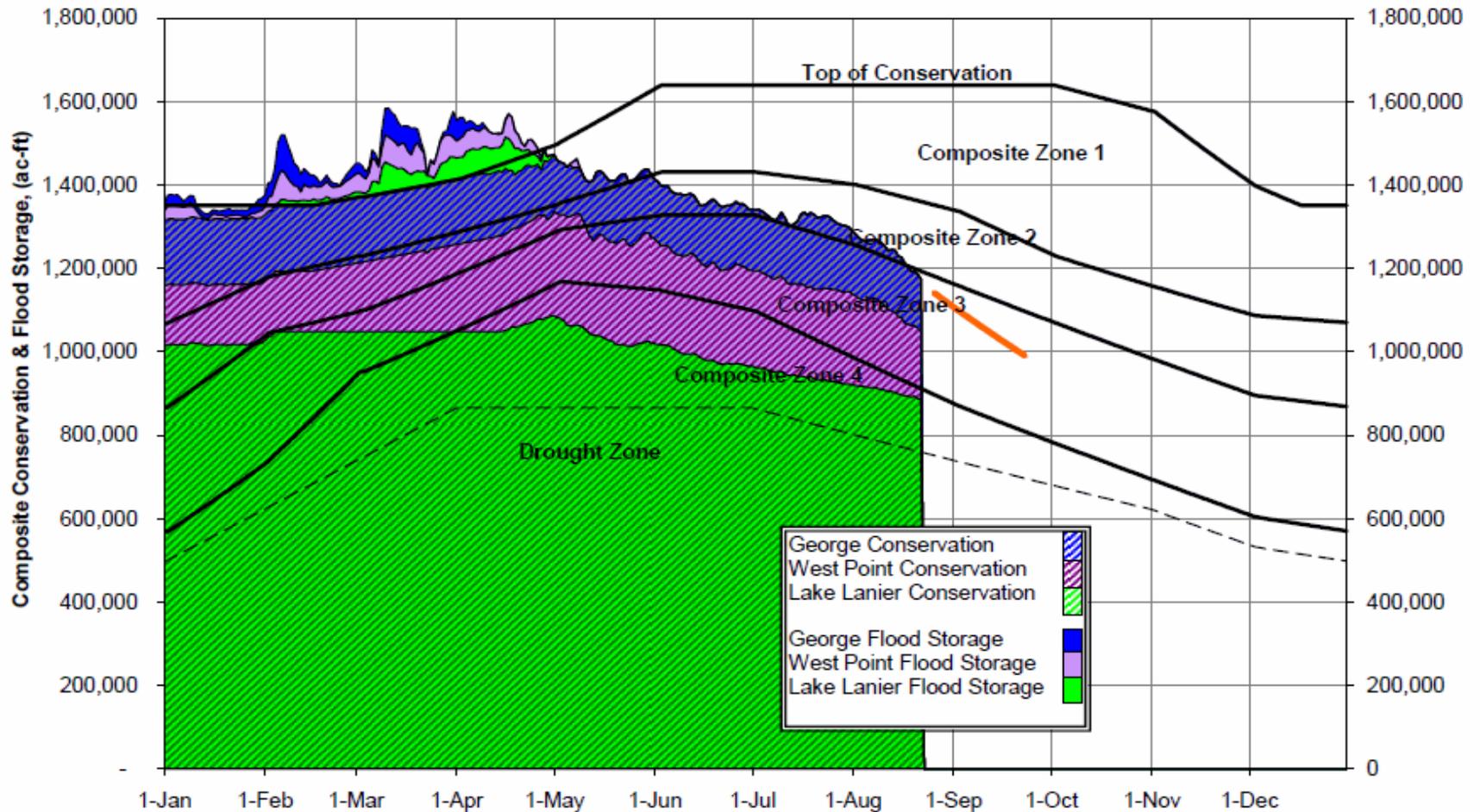
Last 30-Days Percent of Normal

Alabama: Current 30-Day Percent of Normal Precipitation
Valid at 8/29/2011 1200 UTC - Created 8/29/11 20:14 UTC



2011 ACF Basin Composite

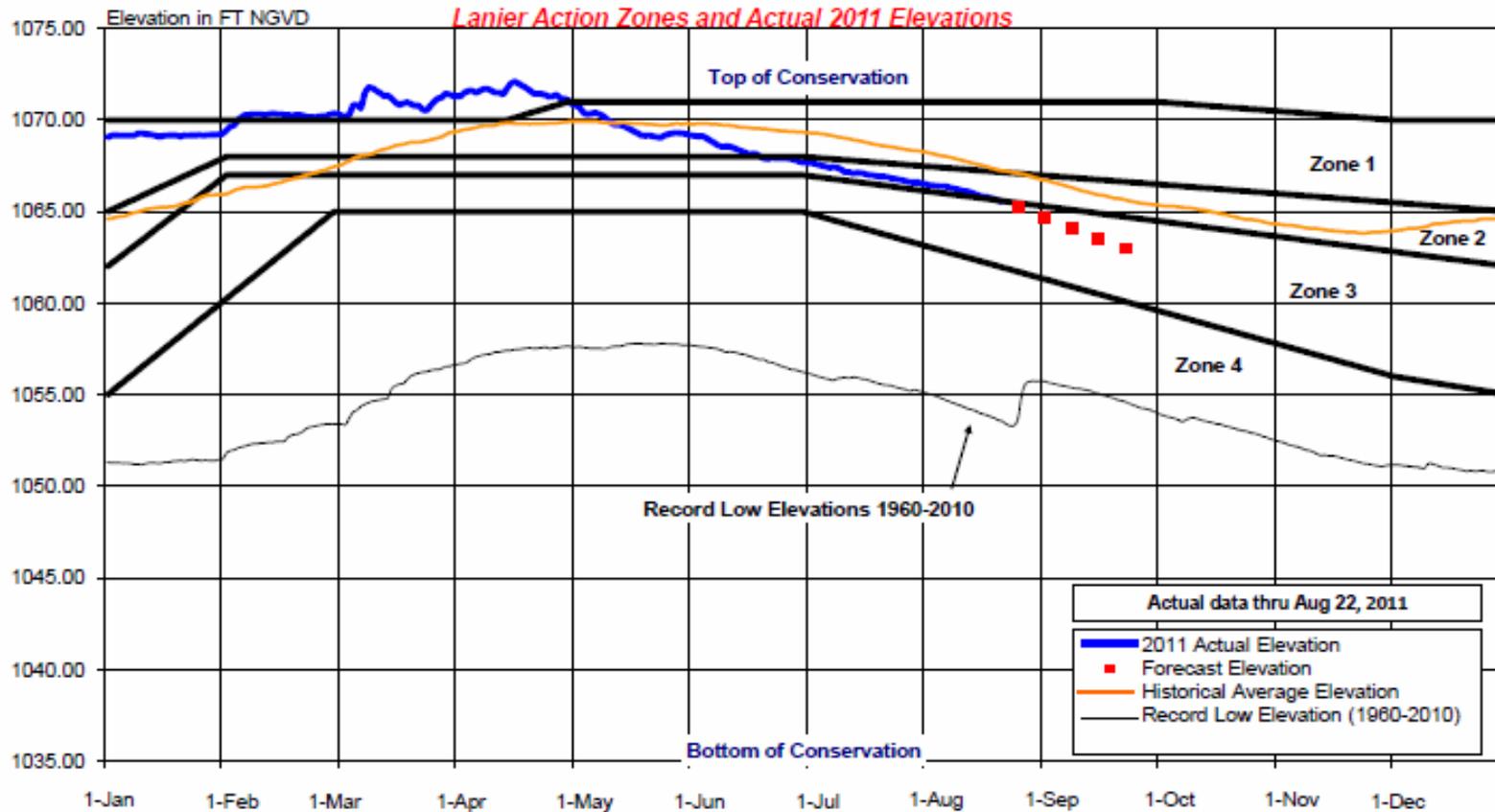
2011 ACF Basin Composite Conservation & Flood Storage



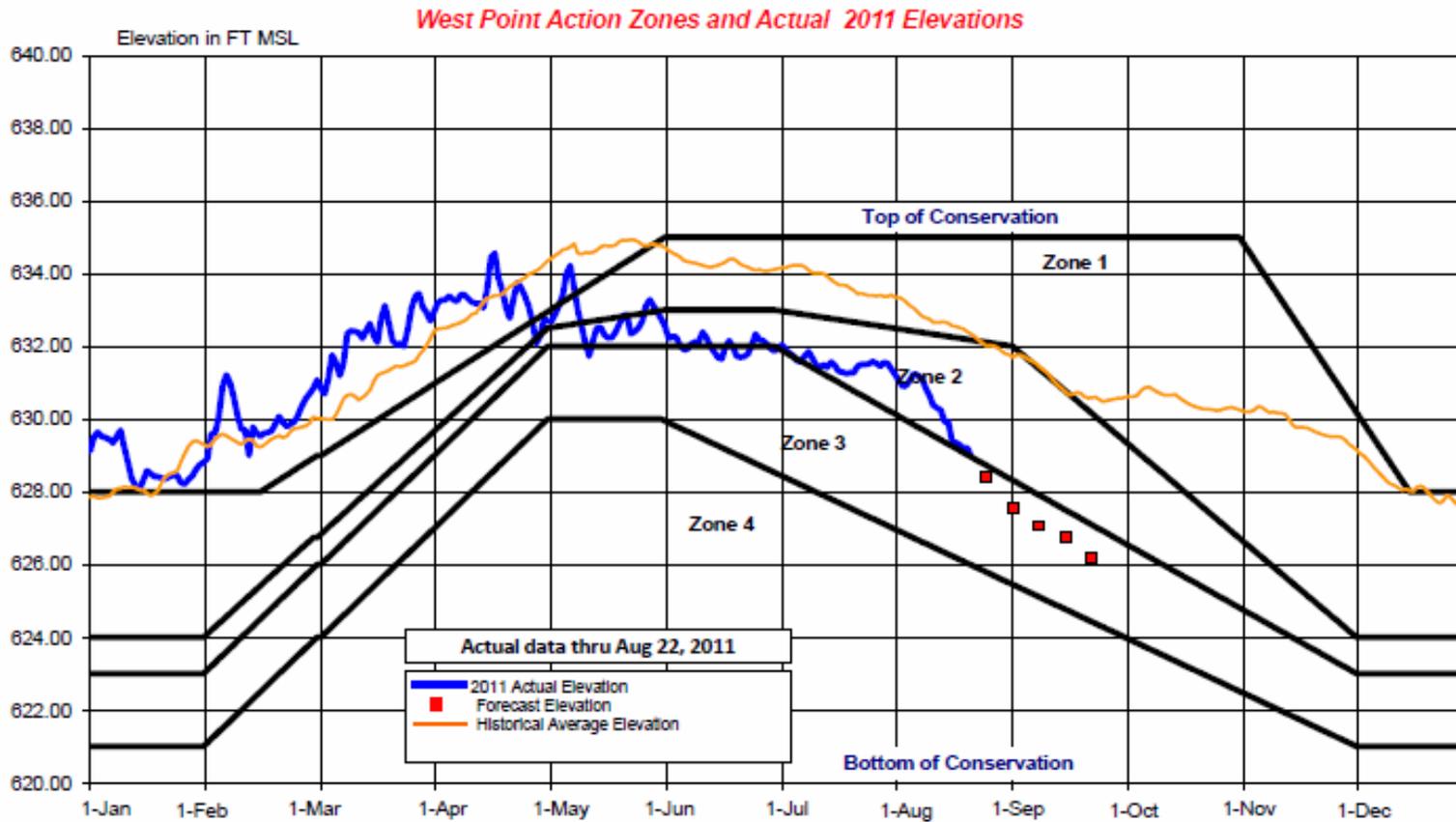
Actual data through 8-22-2011

Add value of 1,856,000 acre-ft to include inactive storage.

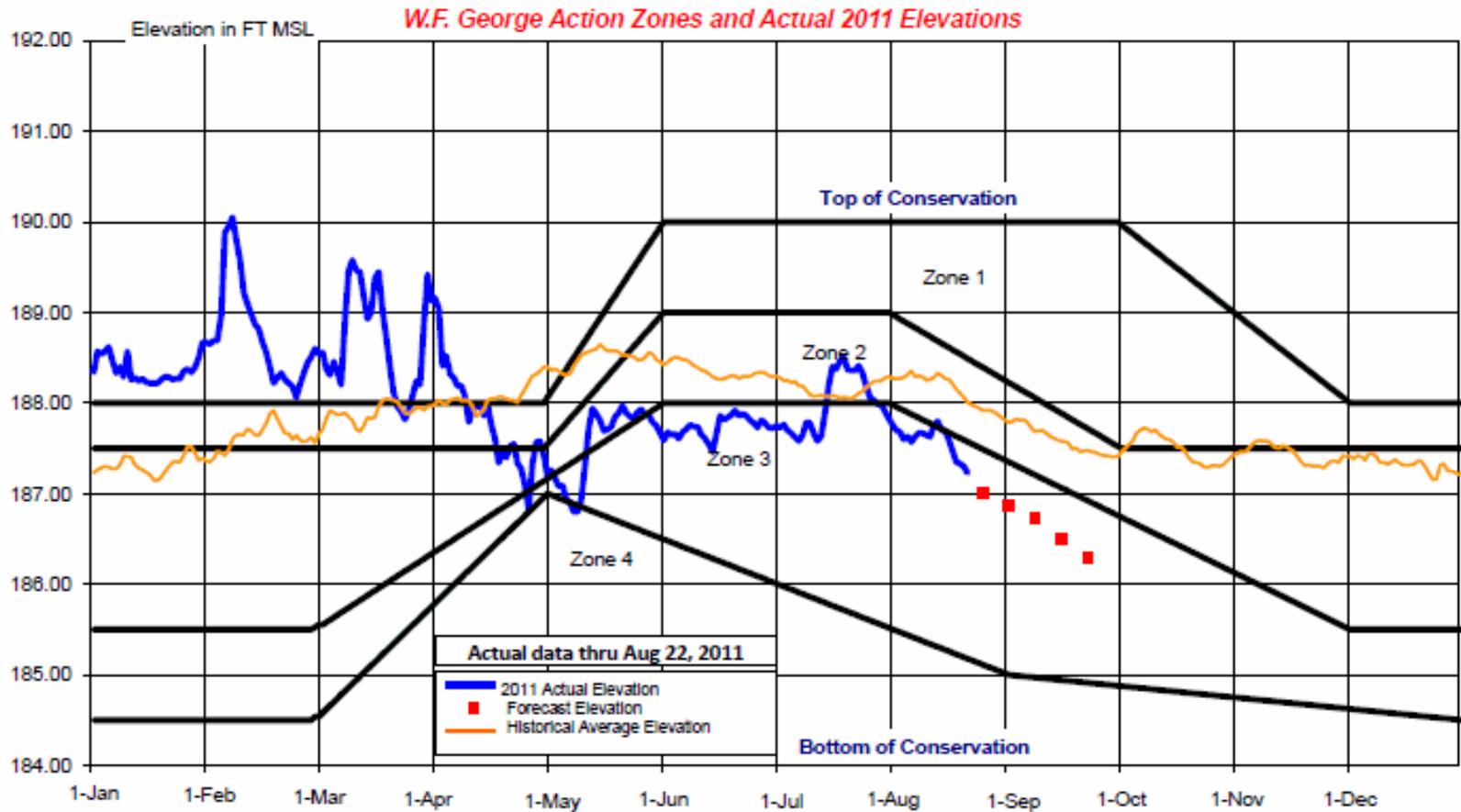
Lake Lanier



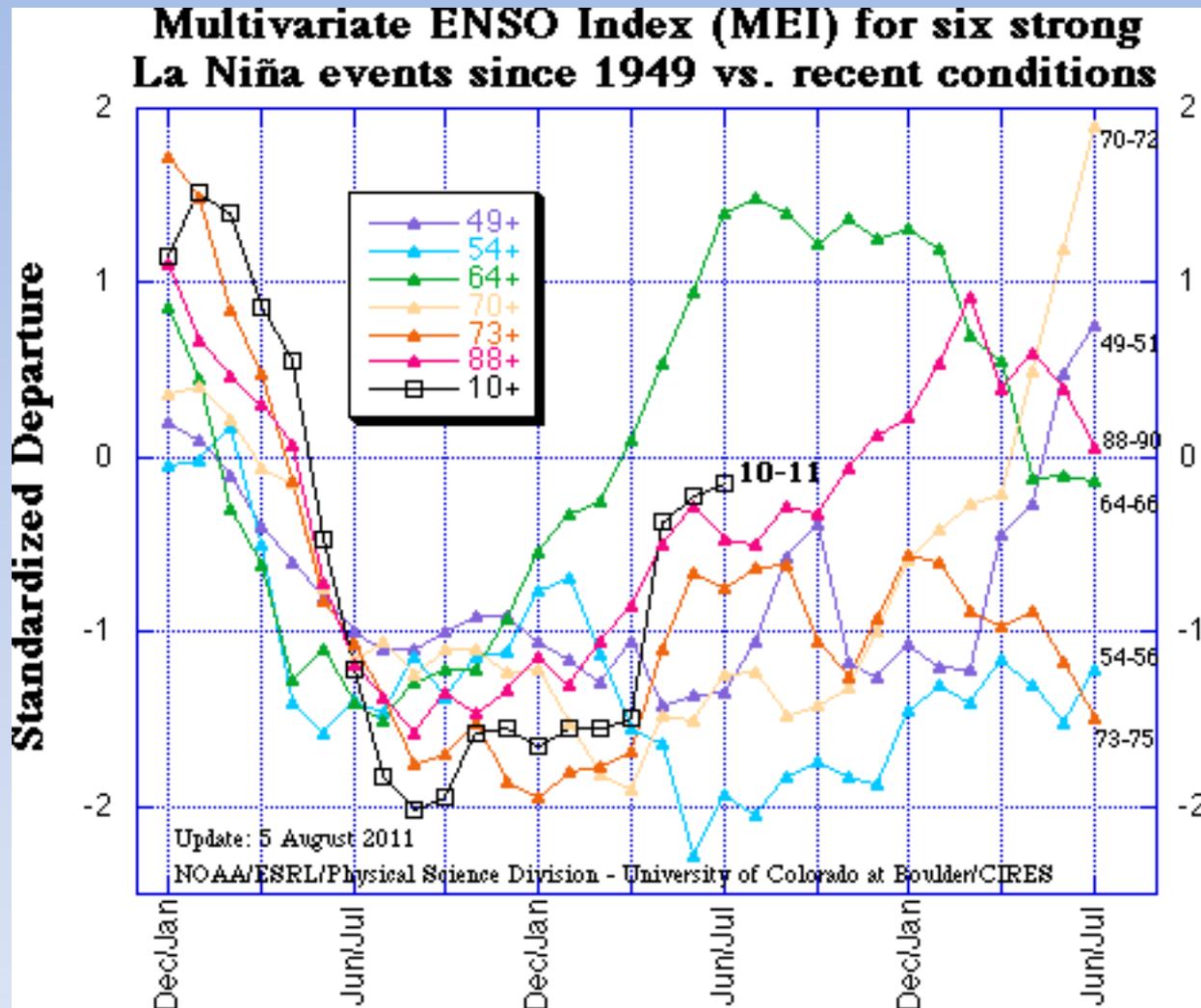
West Point



W.F. George

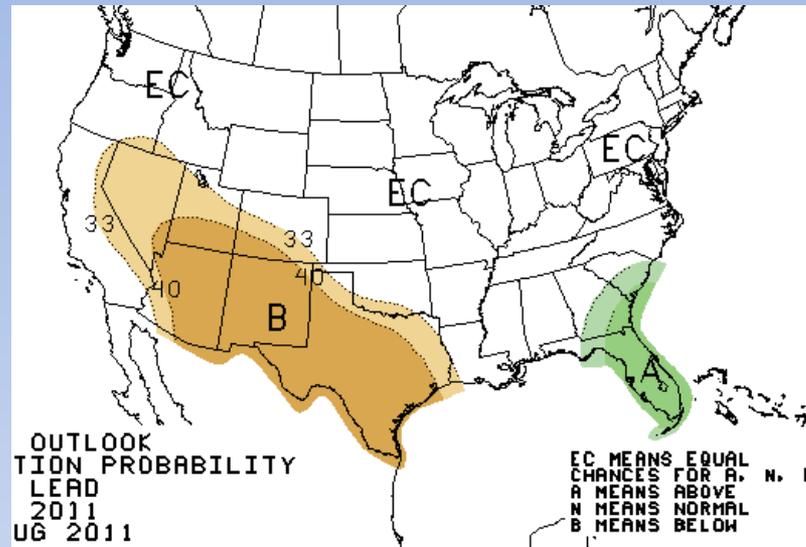


Multivariate ENSO Index: recent and six strong La Niña events

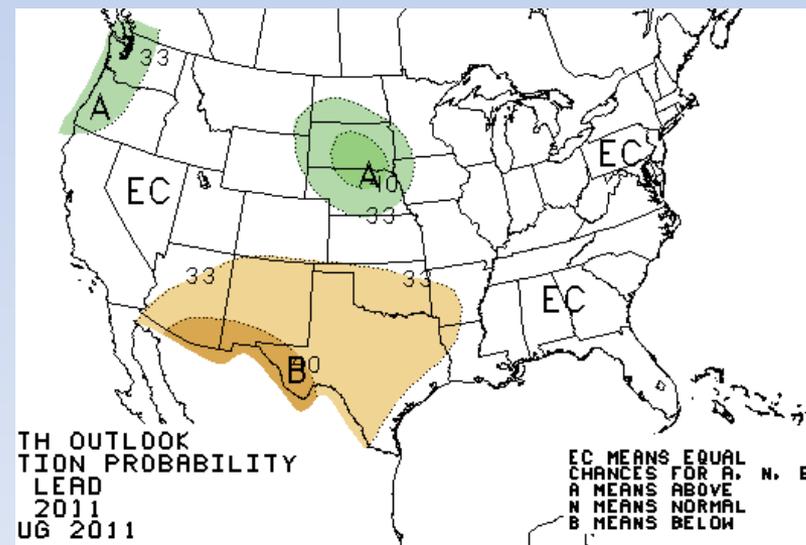


Precipitation Outlooks

1-month

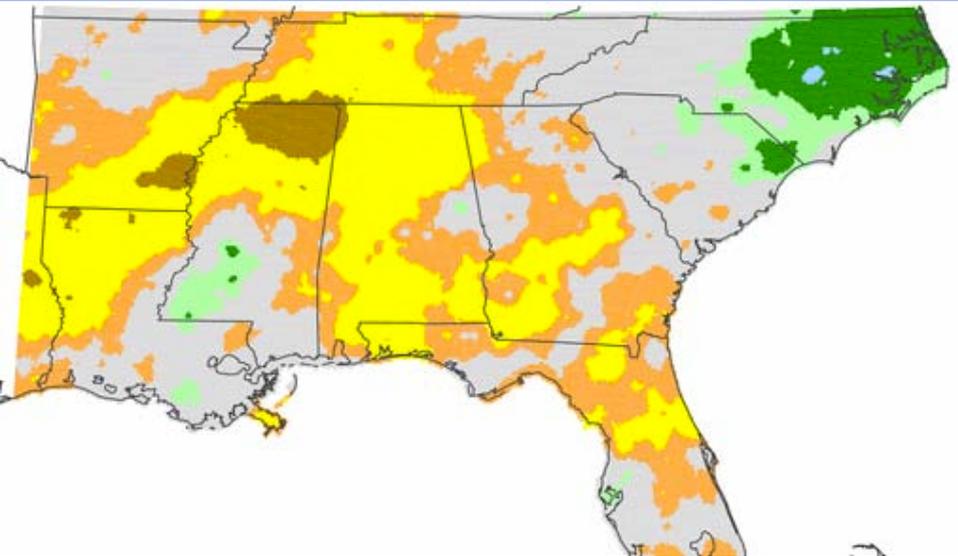


3-month

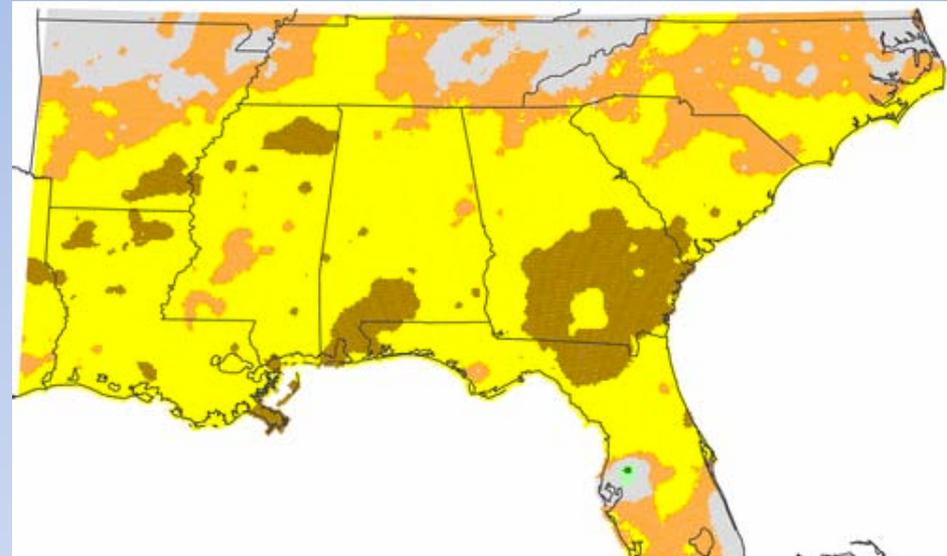


La Nina Composites

September



October



1-Month Streamflow

Forecasts

Apalachicola Watershed

Southeast River Forecast Center

September 2011

-  Above Normal
-  Near Normal
-  Below Normal



3-Month Streamflow

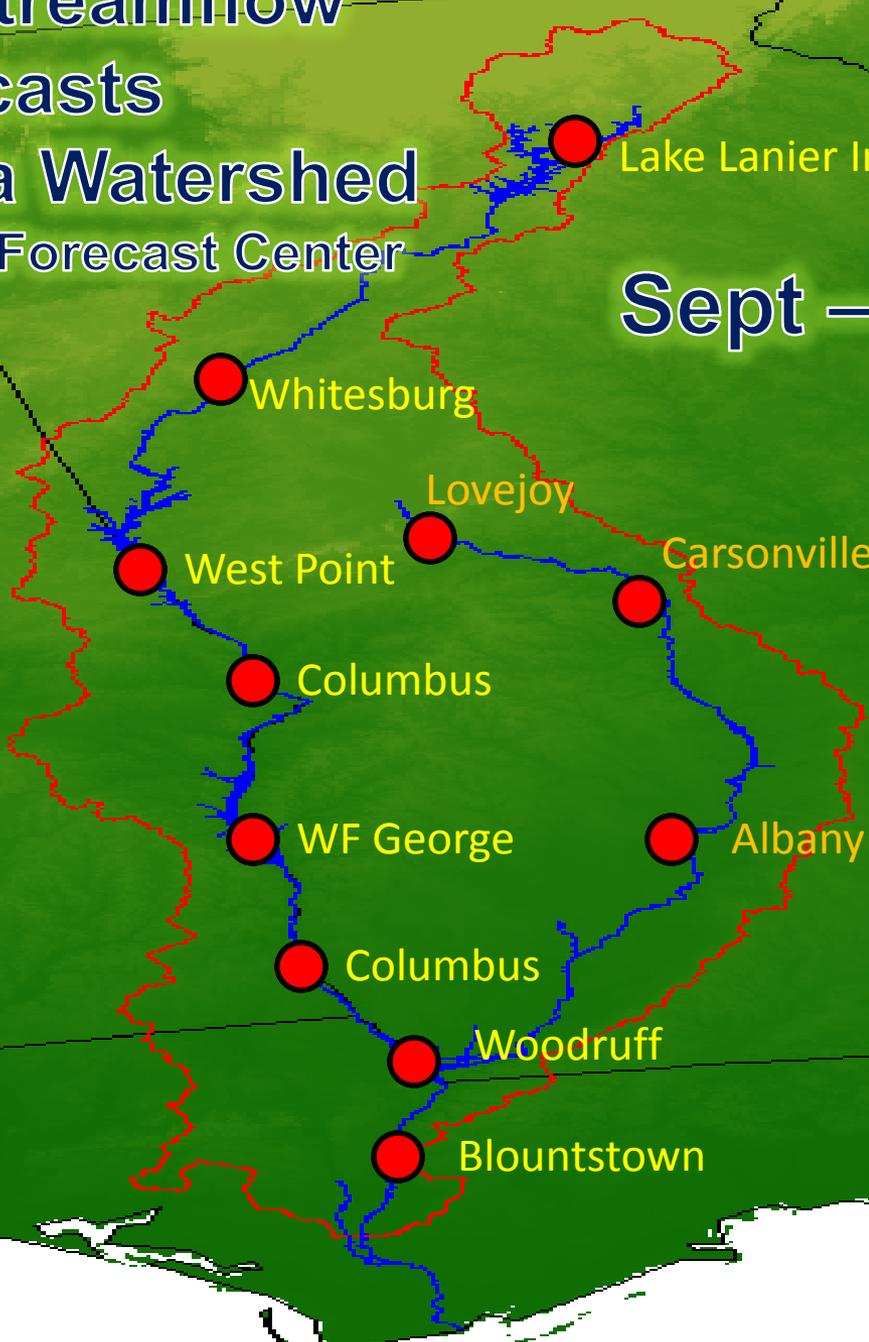
Forecasts

Apalachicola Watershed

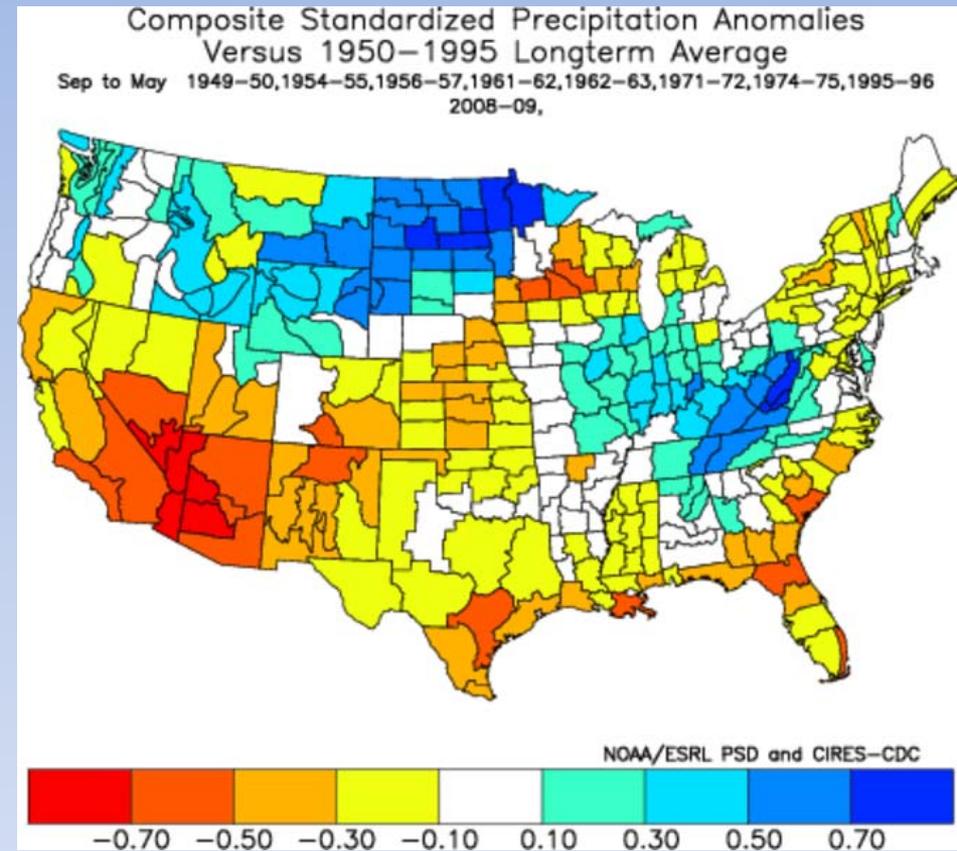
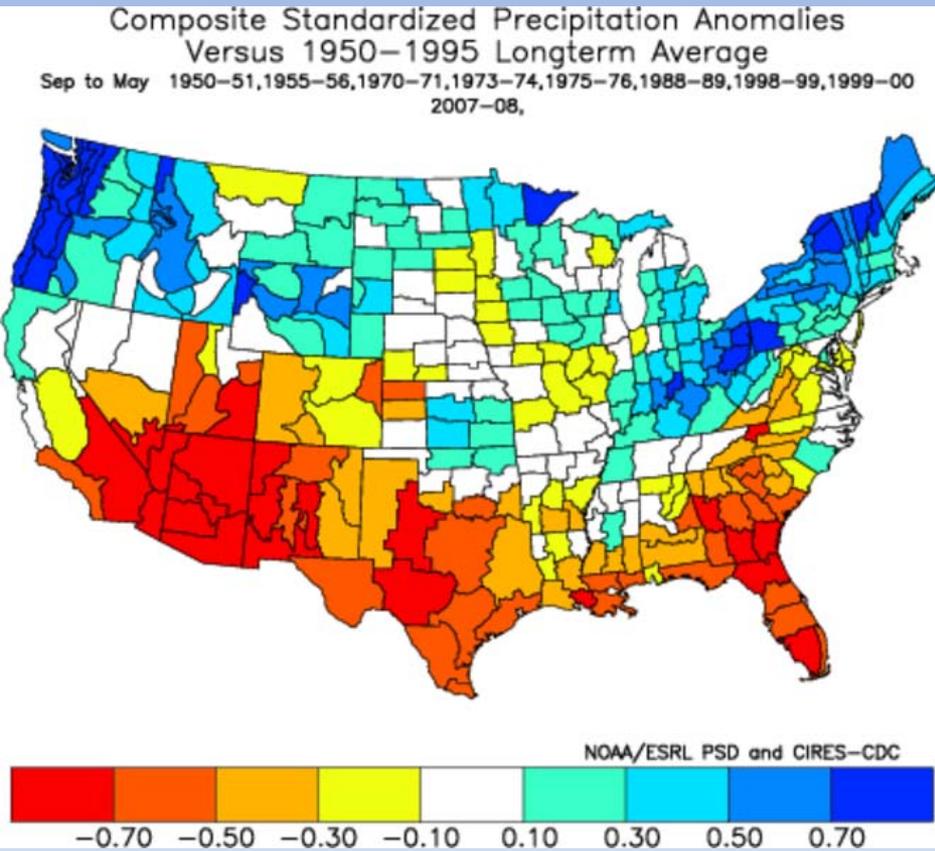
Southeast River Forecast Center

Sept – Nov 2011

-  Above Normal
-  Near Normal
-  Below Normal



Moderate-Strong La Niña vs. Weak La Niña Events



Strong La Niña events (left) have a more reliable dry footprint in southern tier of states than weaker events (right), especially in northern Georgia. Upper Colorado signal is less clear-cut for the snow accumulation zones.

'Double-dip' La Niña Events

Northern Georgia: Sep-May ["]



Mean precip for Year 1:
34.6" ($\Delta=-2.0$ ")

Mean precip for Year 2:
31.5" ($\Delta=-5.1$ ")

**Data courtesy of
Melissa Griffin
(Florida Asst. SC)**

In northern GA, Las Niñas tend to be drier in the 2nd year than in the 1st (7 out of 10). Of the 8 stronger events, 2nd yr peaks in 1910, 51, 56,'00 vs. 1st yr peak in 17, 71, 75,'08 were mostly drier in 2nd year, while the double Las Niñas of the early 20s and 60s were comparatively wet. 2010-11 was quite dry in this region, raising concerns for next year, IF La Niña returns.

Summary

- Recent and forecast rains have provided some relief from drought, but most of the ACF is still rated as severe to extreme drought
- Streamflows and ground water levels remain extremely low in most of the basin
- All reservoirs are below historic mean, mostly in Zone 3
- Forecasts show little likelihood of recovery over the next 3 months
- Of greatest concern is that a second La Niña would reduce the probability of hydrological recharge over the fall and winter

Drought Impact Reporter

<http://droughtreporter.unl.edu>

Submit your drought impacts through the NDMC Drought Impact Reporter. Click on “Add a drought impact” and fill out the online form.

Drought Impact Reporter
National Drought Mitigation Center



[View Drought Impacts](#) | [Add A Drought Impact](#) | [Time-Lapse Animation](#) | [About](#) | [Help](#) | [User Login](#)

Map Options

Impact Categories:

- Agriculture
- Water/Energy
- Environment
- Fire
- Social
- Other

Source: All Sources

Time Period: Last Month

[Show Drought Monitor Layers](#)

Legend

- No reported impacts
- 1 - 7 reported impacts
- 8 - 14 reported impacts
- 15 - 20 reported impacts
- 21 - 27 reported impacts
- 28 - 34 reported impacts

Instructions: Click on a state to see the reported drought impacts that affect that state.

created by  **GIS Workshop**

 **University of Nebraska Lincoln**

References

Speakers

David Zierden, FSU

Brian McCallam, USGS

Rob Erhardt, USACE

John Feldt, SERFC

Klaus Wolter, NOAA

Joel Lanier, NWS

Moderator

Keith Ingram, SECC/UF

Additional information

General drought information

<http://drought.gov>

<http://www.drought.unl.edu>

General climate and El Niño information

<http://agroclimate.org/climate/>

Streamflow monitoring

<http://waterwatch.usgs.gov>

Groundwater monitoring

<http://groundwaterwatch.usgs.gov>