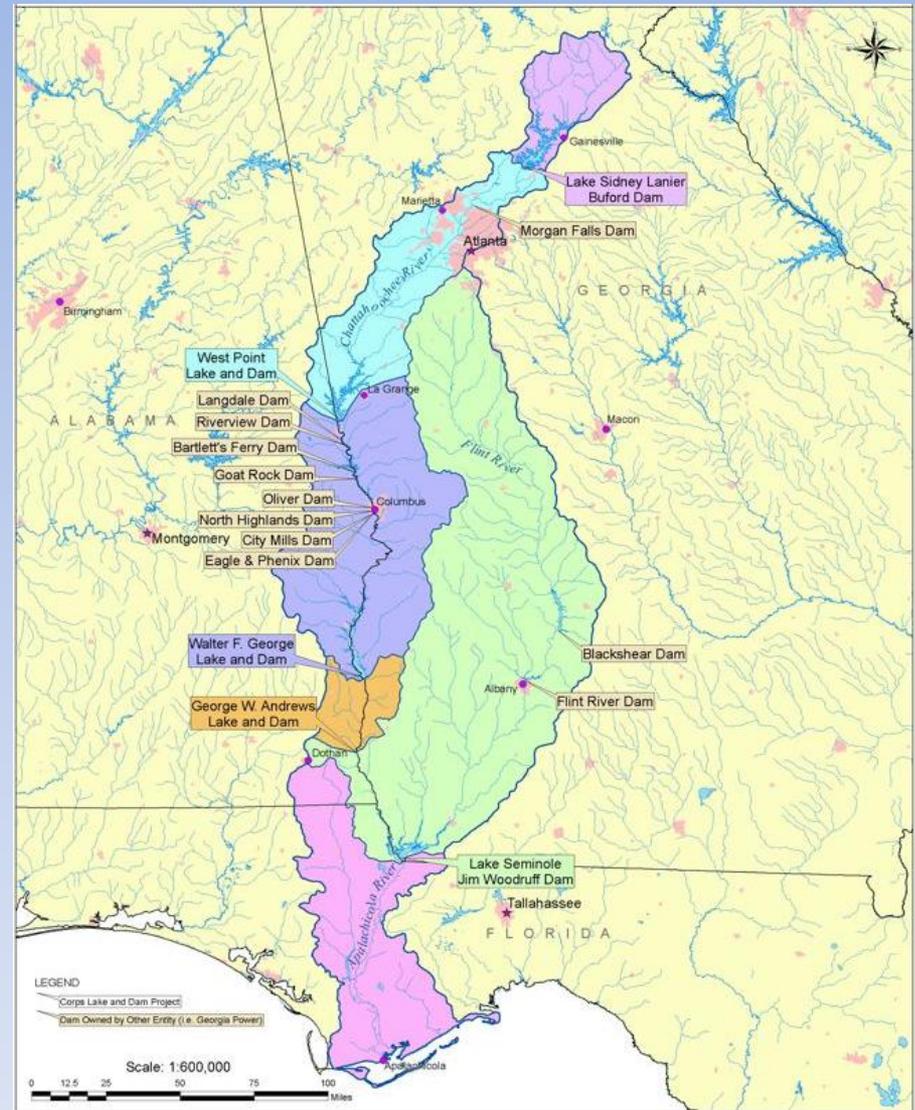
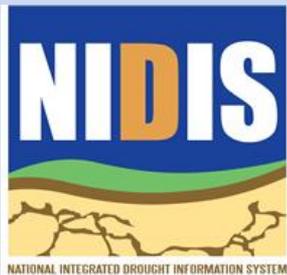


National Integrated Drought Information System

Southeast US Pilot for Apalachicola-Flint-Chattahoochee River Basin

12 July 2011



Current drought status from Drought Monitor

U.S. Drought Monitor

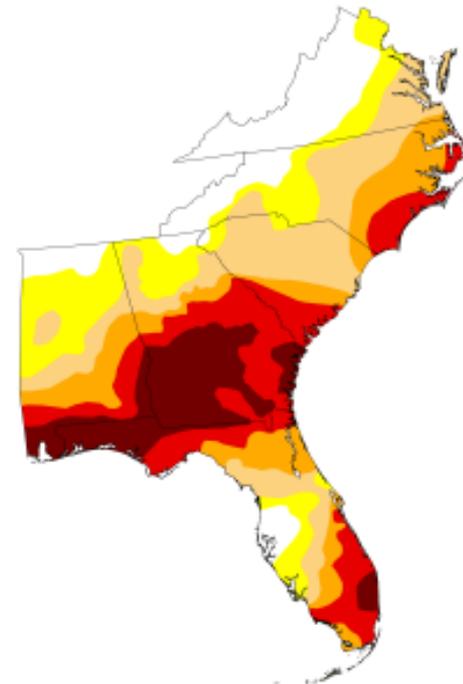
July 5, 2011

Valid 7 a.m. EST

Southeast

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	15.45	84.55	67.81	45.93	31.27	13.56
Last Week (06/28/2011 map)	15.61	84.39	62.63	44.22	29.11	14.73
3 Months Ago (04/05/2011 map)	28.48	71.52	49.77	14.63	4.44	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 (06/29/2010 map)	75.34	24.66	0.07	0.00	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.

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



Released Thursday, July 7, 2011

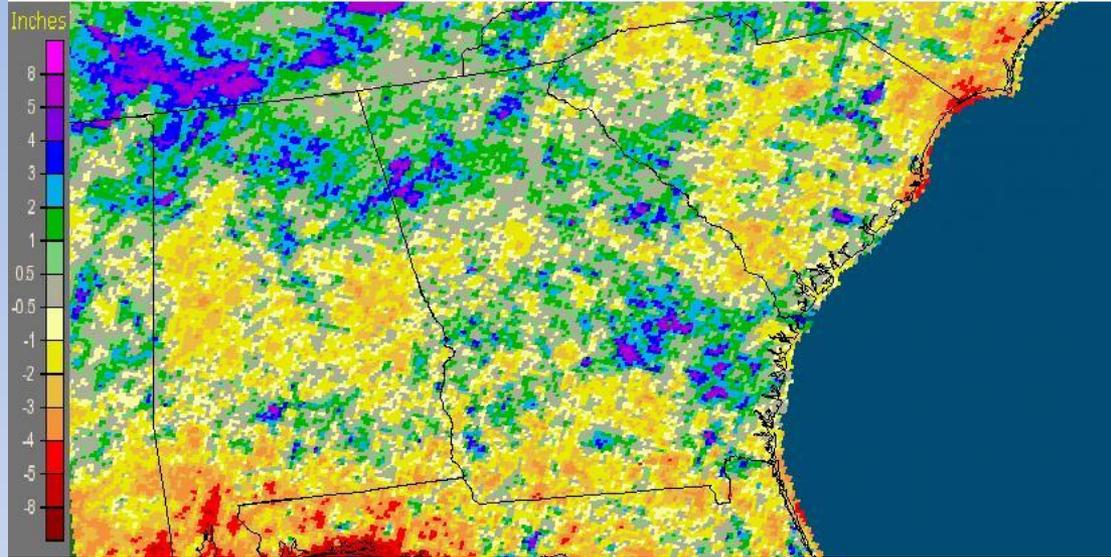
Richard Heim, NOAA/NESDIS/National Climatic Data Center

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

Cumulative Rainfall Deficits

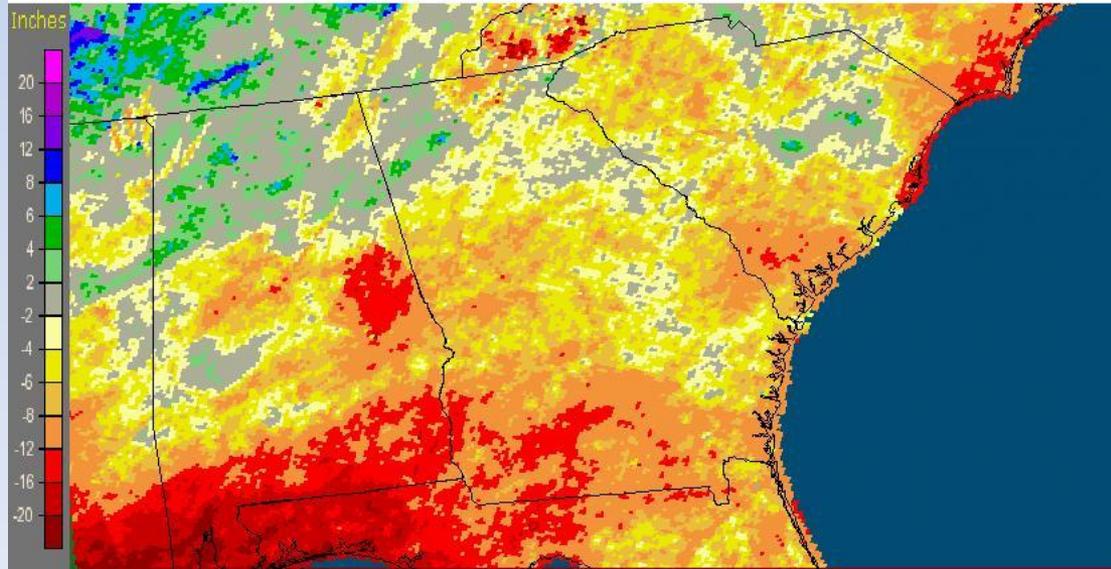
Past 30 days

Georgia: Current 30-Day Departure from Normal Precipitation
Valid at 7/11/2011 1200 UTC- Created 7/12/11 0:07 UTC



Past 180 days

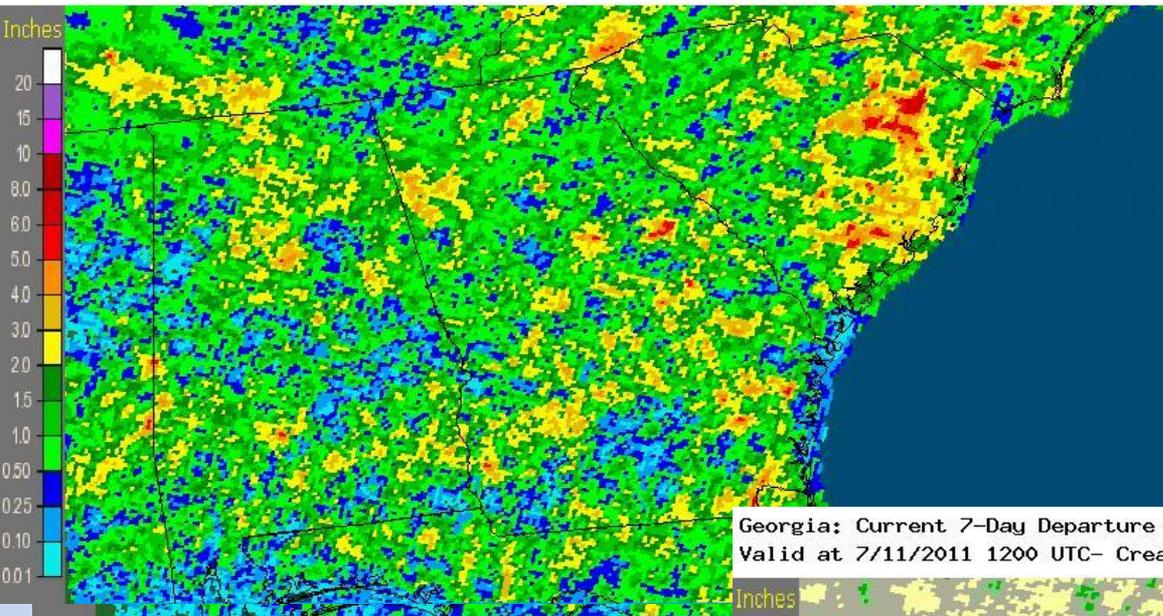
Georgia: Current 180-Day Departure from Normal Precipitation
Valid at 7/11/2011 1200 UTC- Created 7/12/11 0:21 UTC



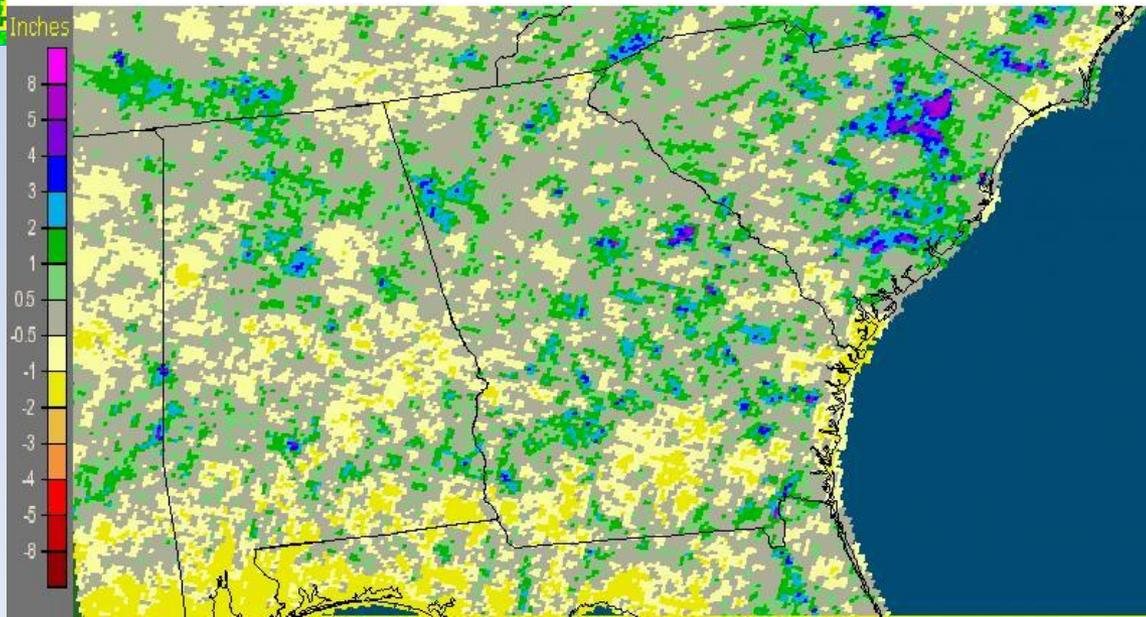
<http://water.weather.gov/precip/>

7-day Rainfall Totals

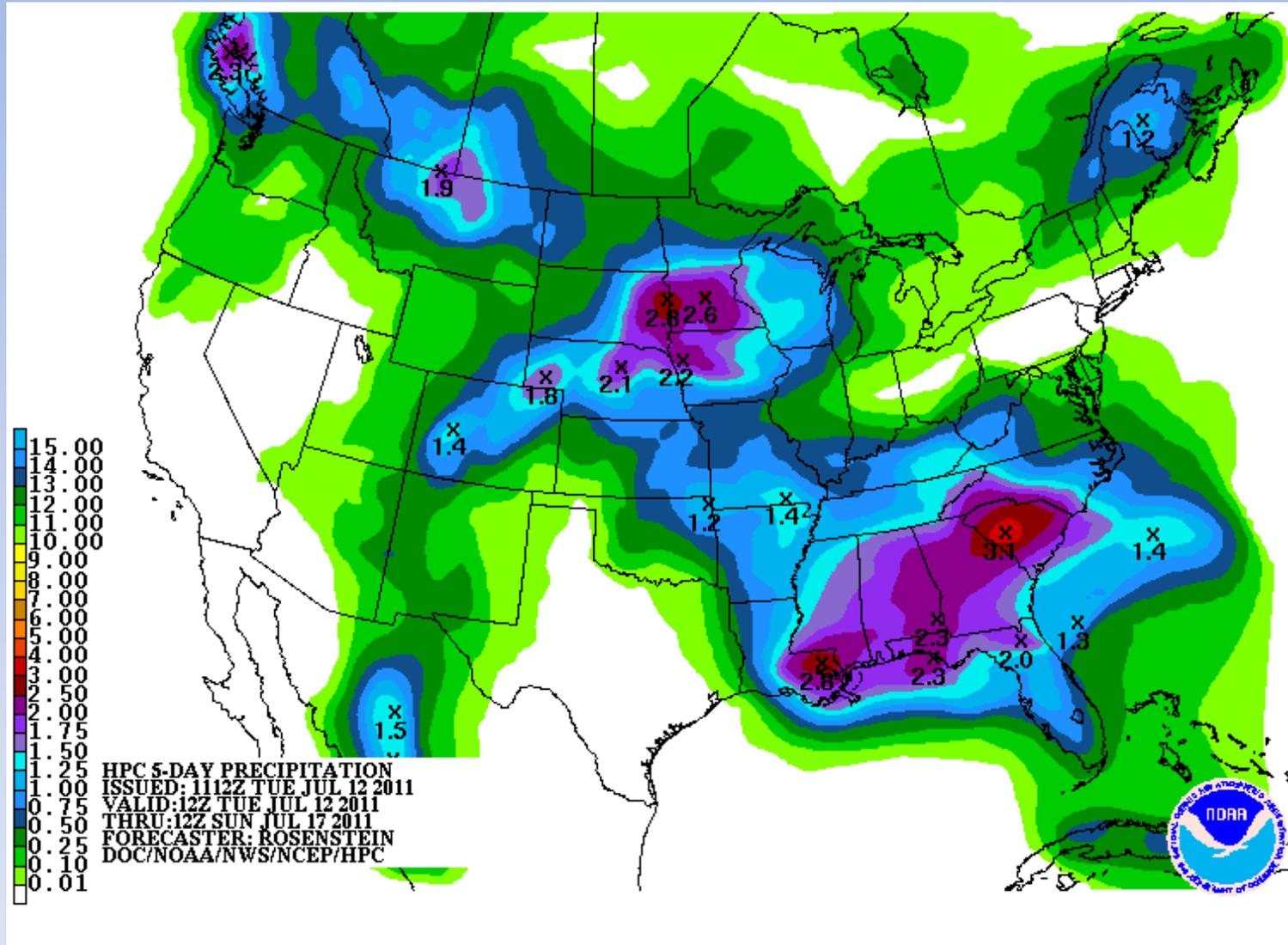
Georgia: Current 7-Day Observed Precipitation
Valid at 7/11/2011 1200 UTC- Created 7/11/11 23:56 UTC



Georgia: Current 7-Day Departure from Normal Precipitation
Valid at 7/11/2011 1200 UTC- Created 7/11/11 23:58 UTC



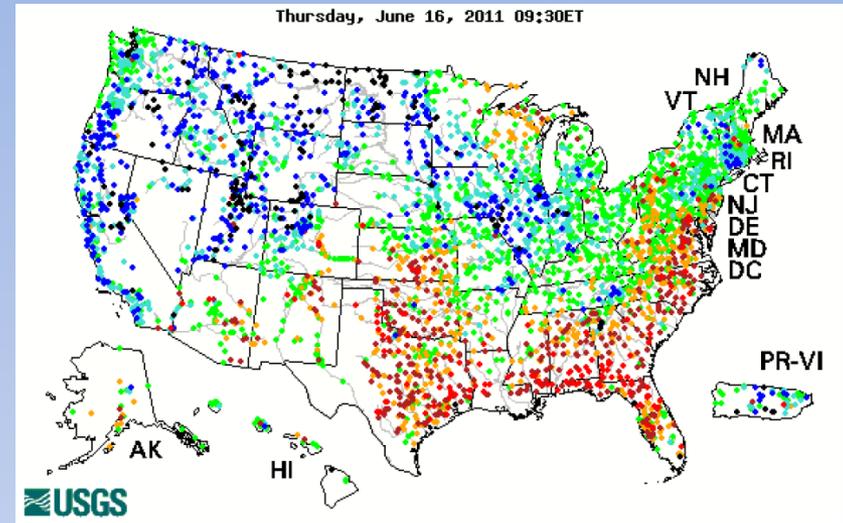
5-Day Precipitation Forecast



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

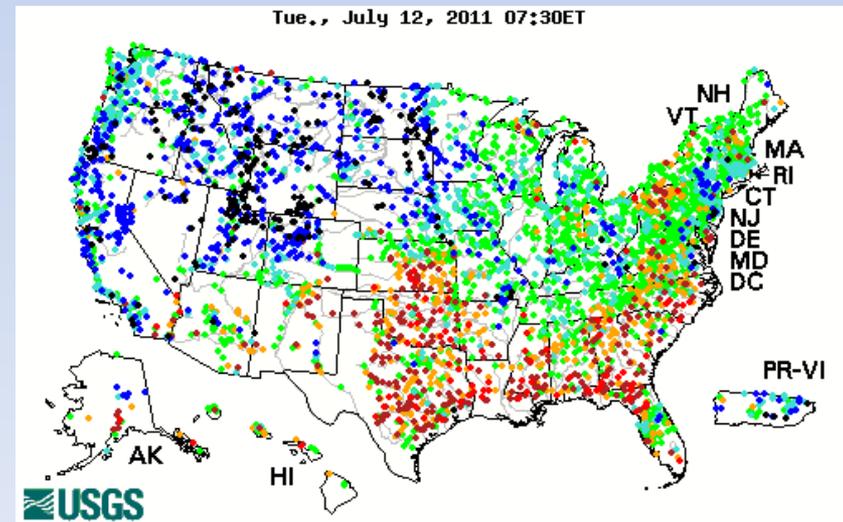
Realtime stream flow compared with historical averages

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>

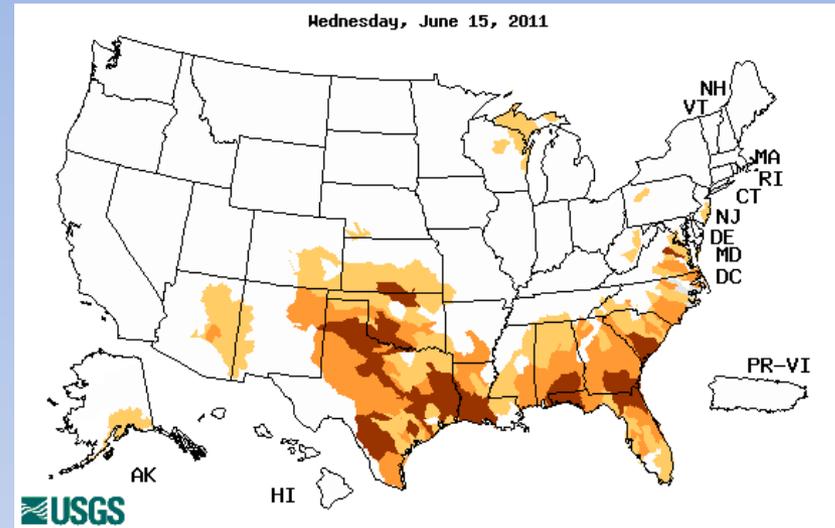
Below Normal 7-day Average Streamflows

Previous month:

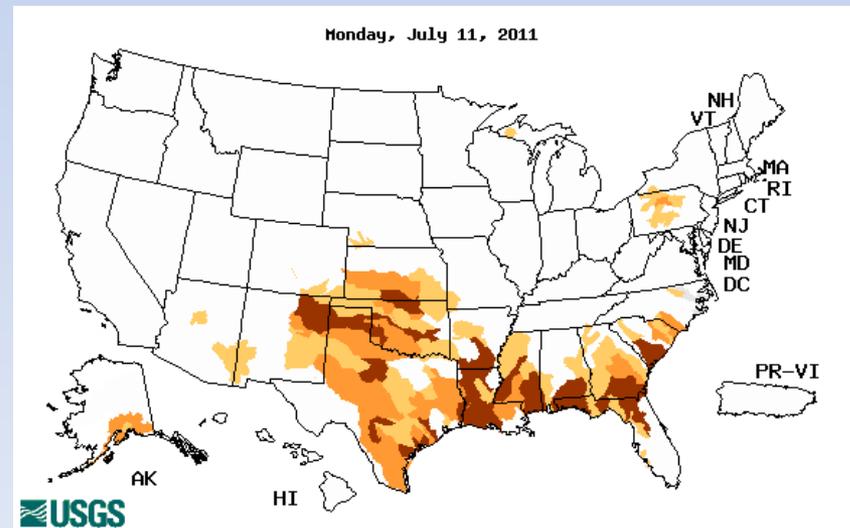
Below normal 7-day average streamflow as compared with historical streamflow for day shown

Current:

<http://waterwatch.usgs.gov>



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



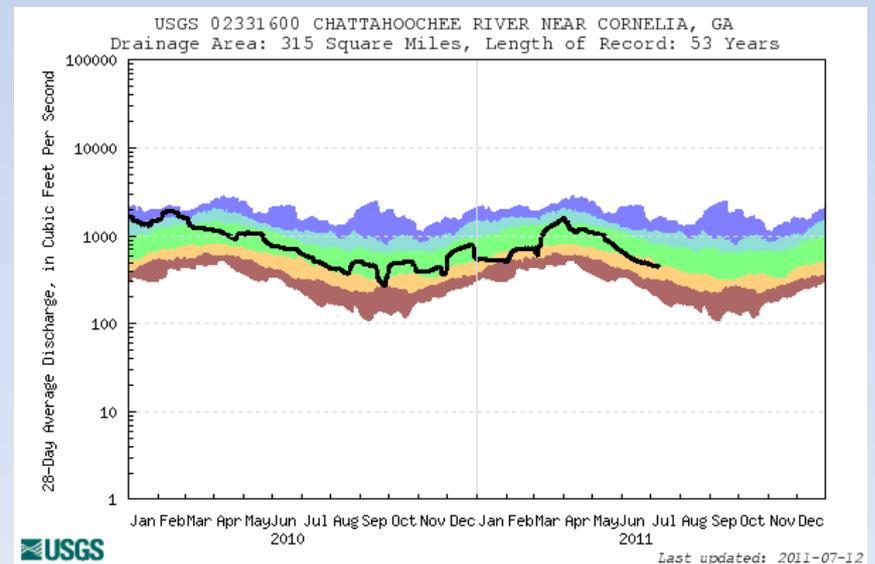
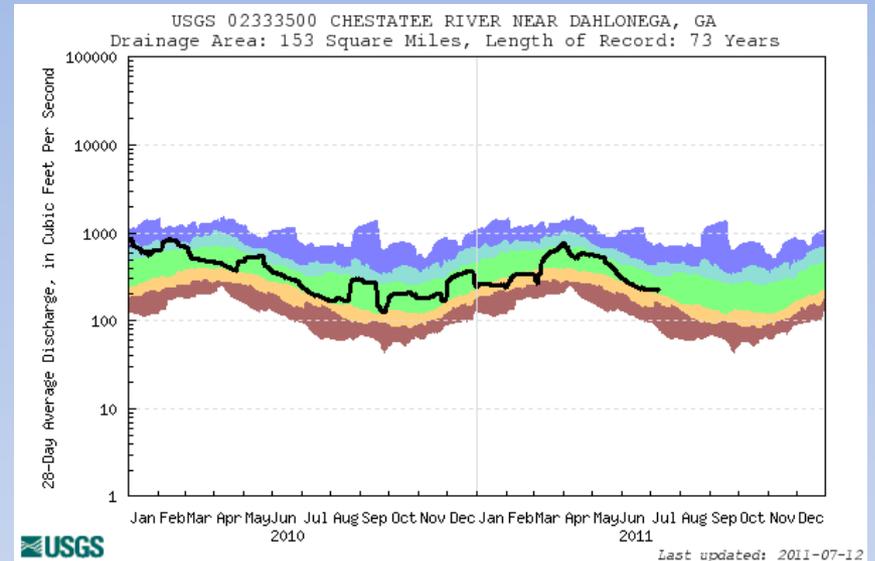
Lake Lanier Inflows

Chestatee near
Dahlonega
(02333500)

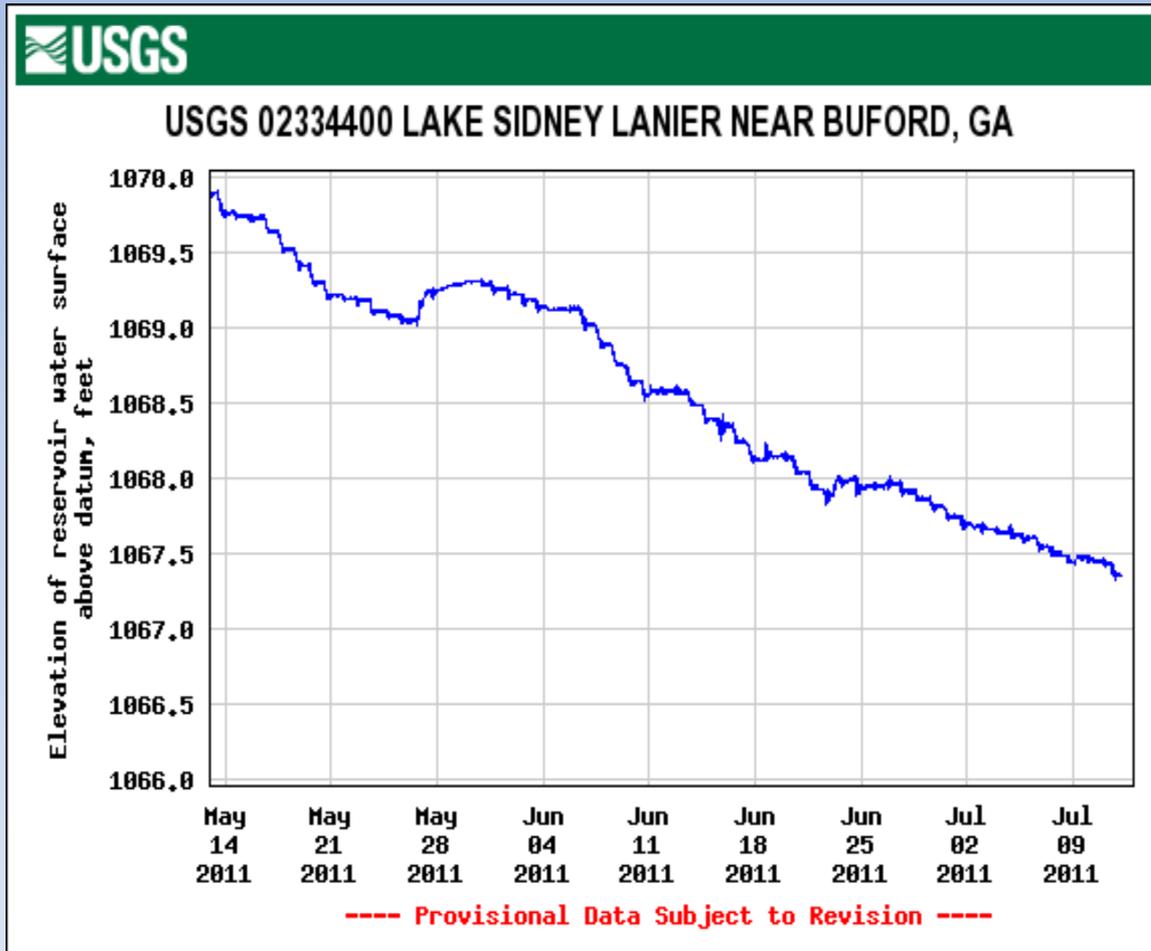
<http://waterwatch.usgs.gov>

Chattahoochee near
Cornelia (02331600)

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



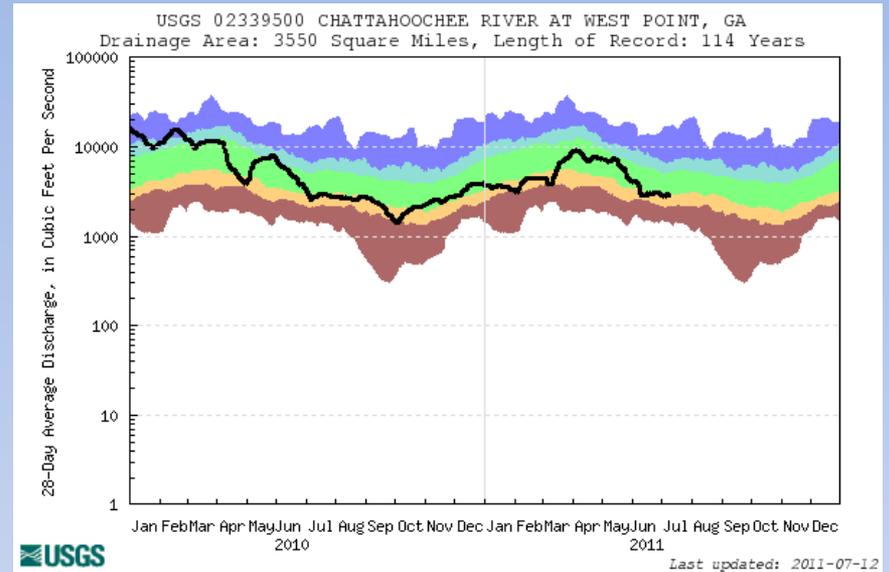
Lake Lanier Levels (02334400) for Previous 60 Days



Current Streamflows

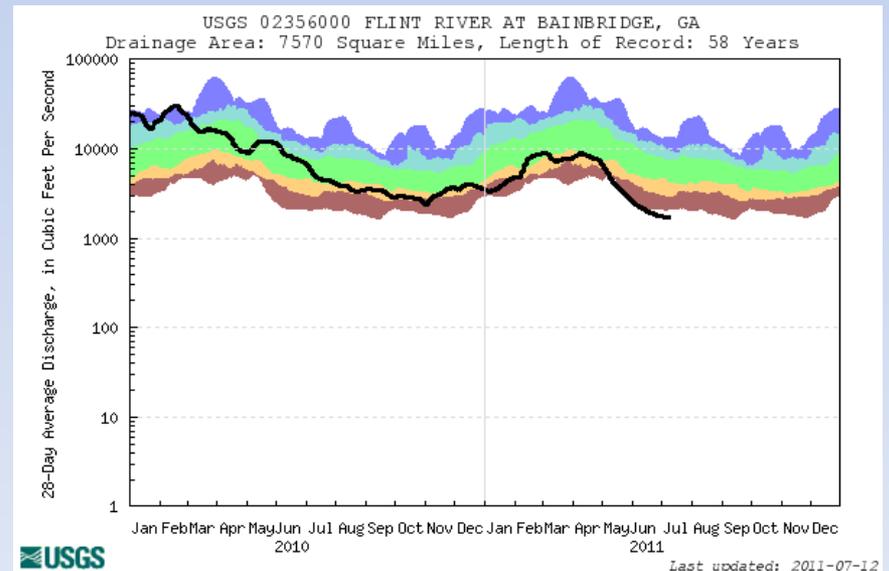
Chattahoochee at West Point (02339500)

<http://waterwatch.usgs.gov>



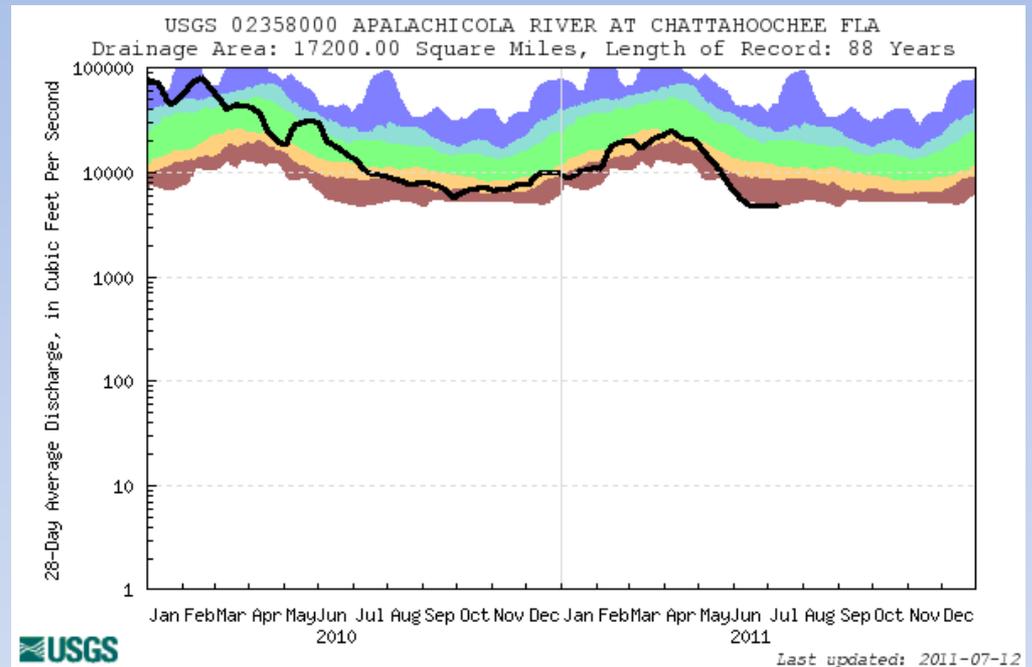
Flint at Bainbridge (02356000)

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

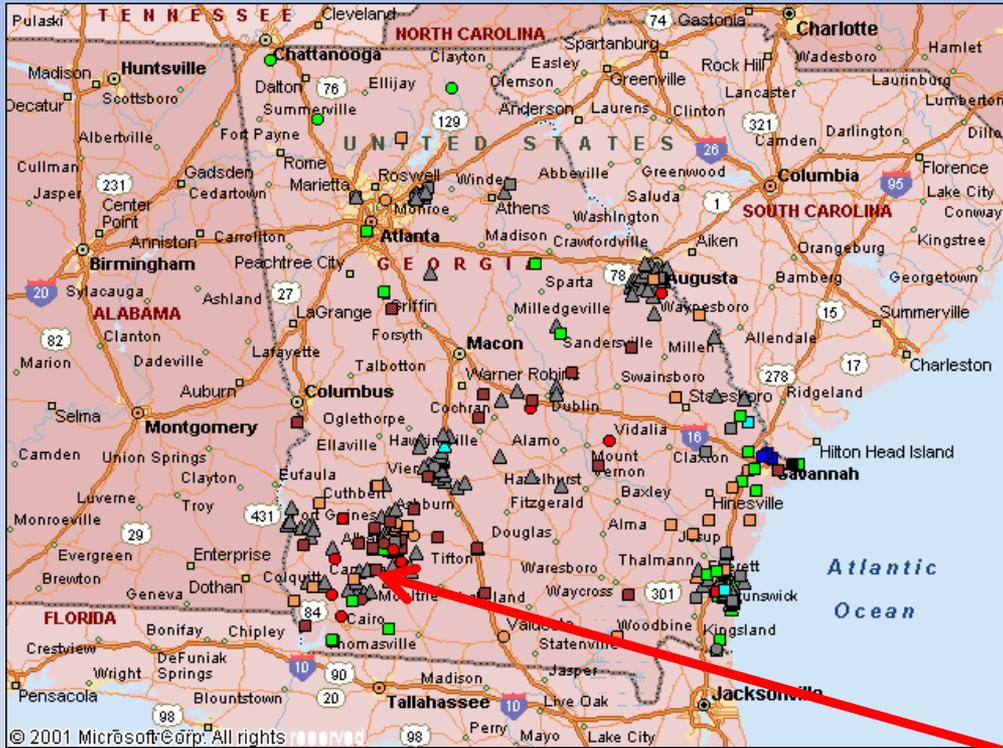
Apalachicola at Chattahoochee (02358000)



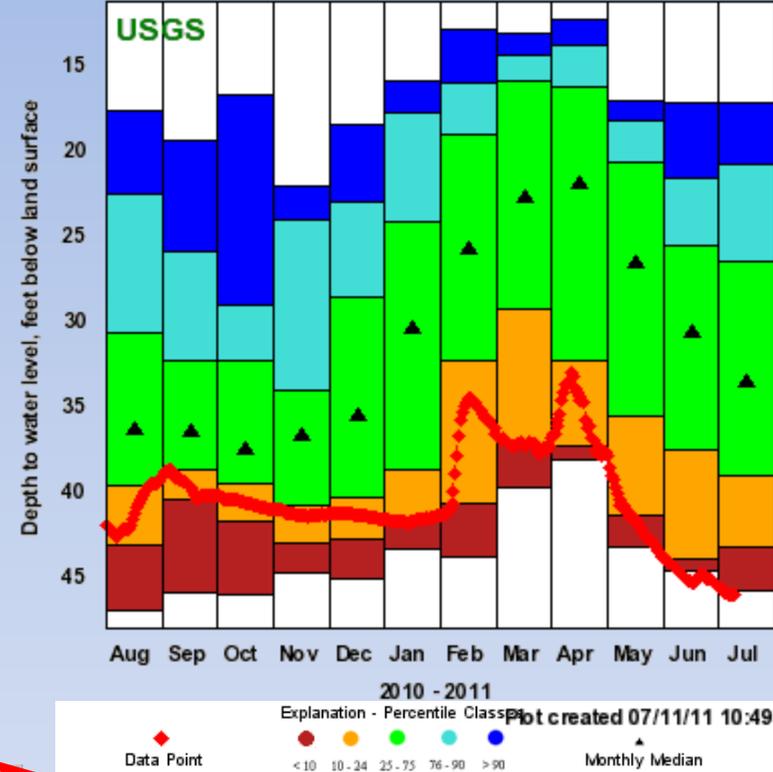
<http://waterwatch.usgs.gov>

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

Groundwater Status



310651084404 501 - 08G001



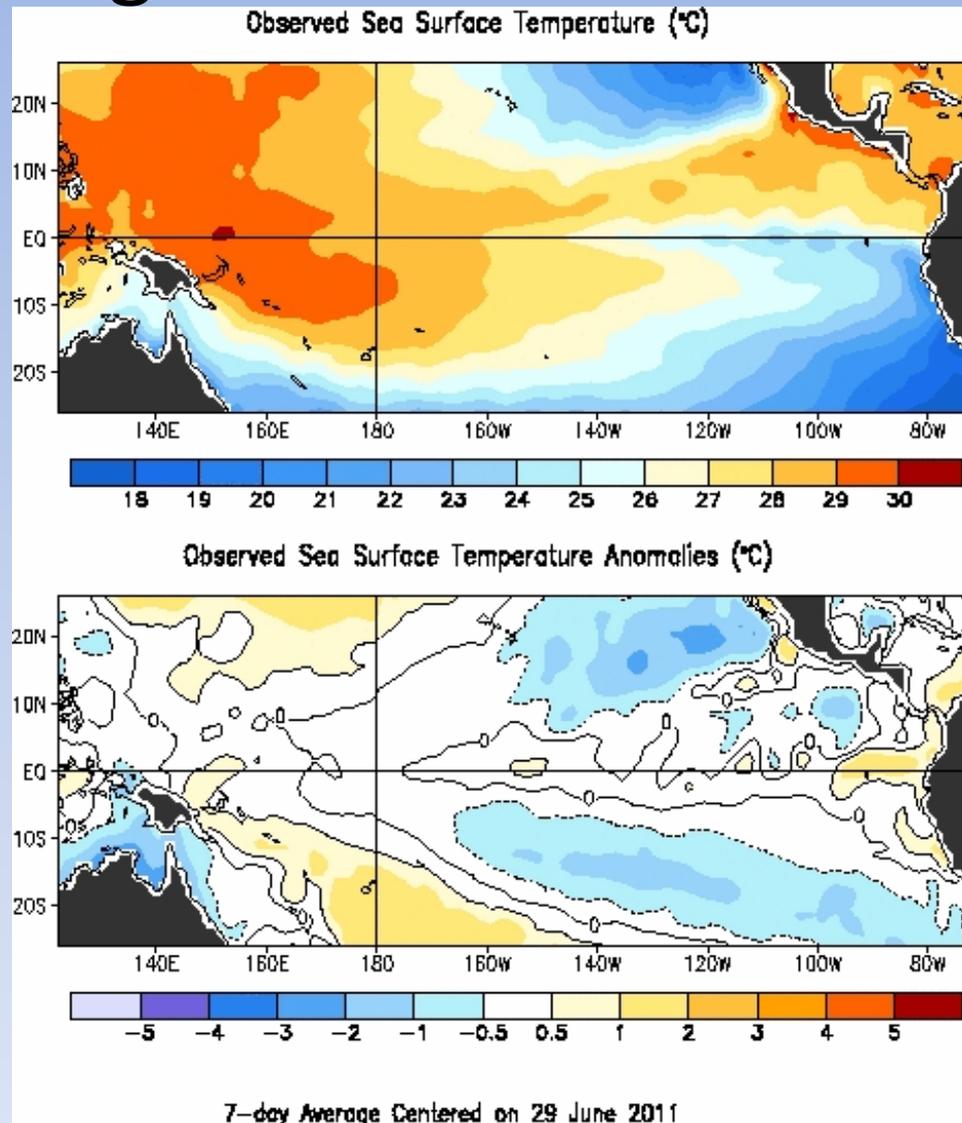
Explanation - Percentile classes (symbol color based on most recent measurement)		
●	●	●
Low	<10	10-24
	Much Below Normal	Below Normal

○	Real Time
□	Continuous
△	Periodic Measurements

Miller County, GA
(Upper Floridan Aquifer)

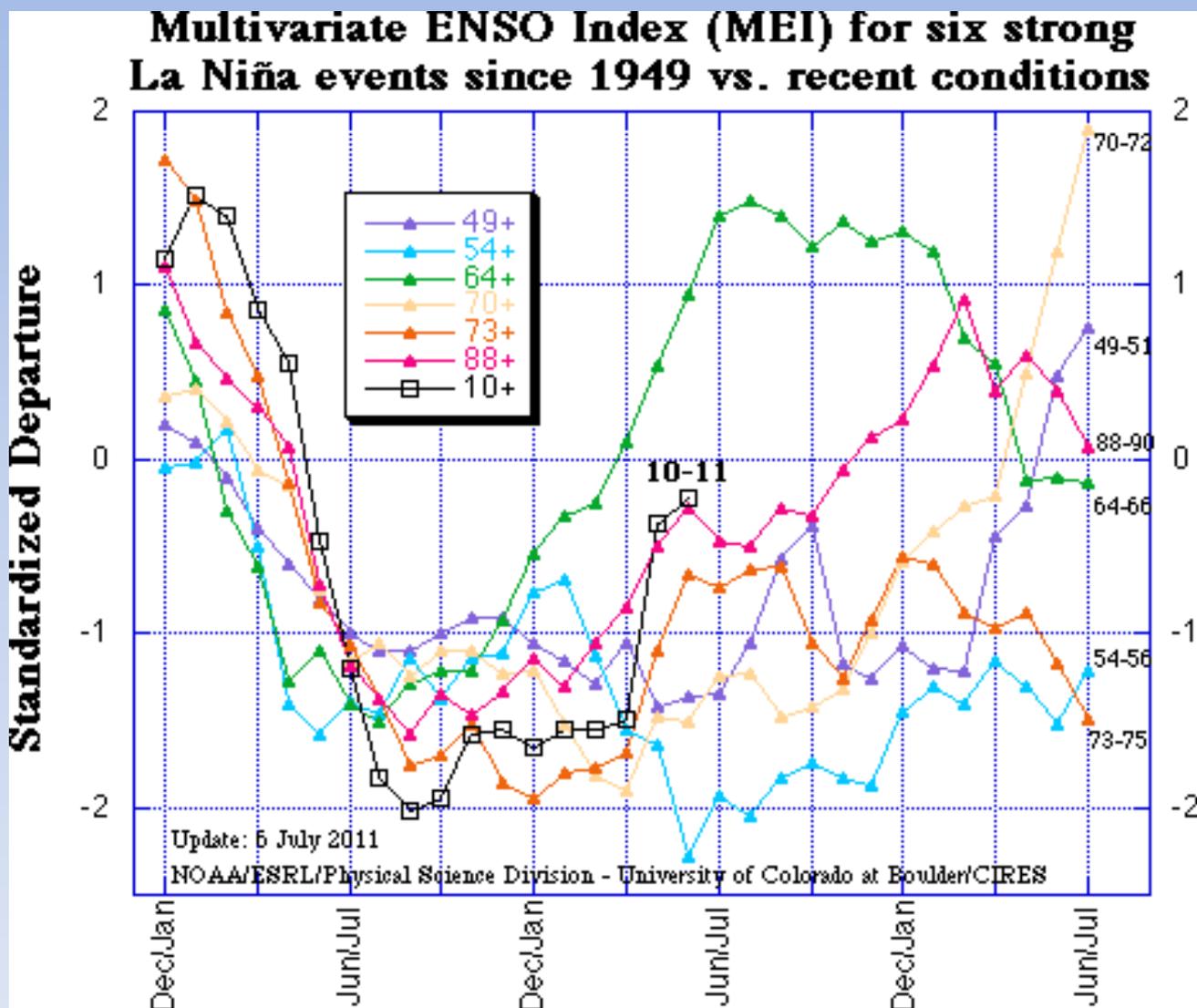
<http://groundwaterwatch.usgs.gov>

7-day average Pacific Ocean SST Anomalies



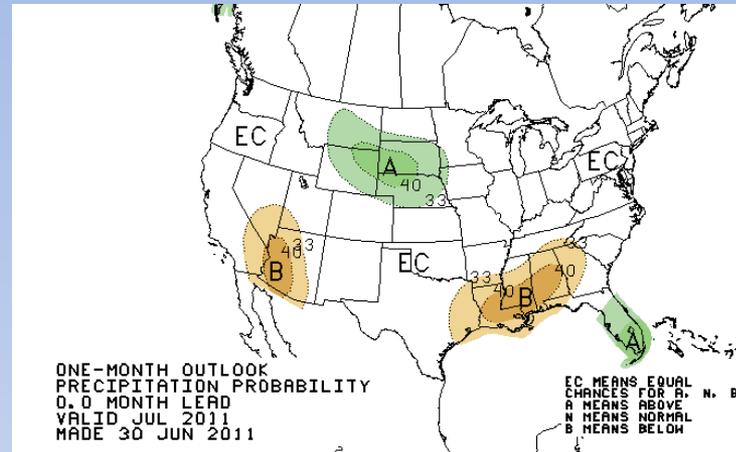
<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml>

Multivariate ENSO Index: recent and six strong La Niña events

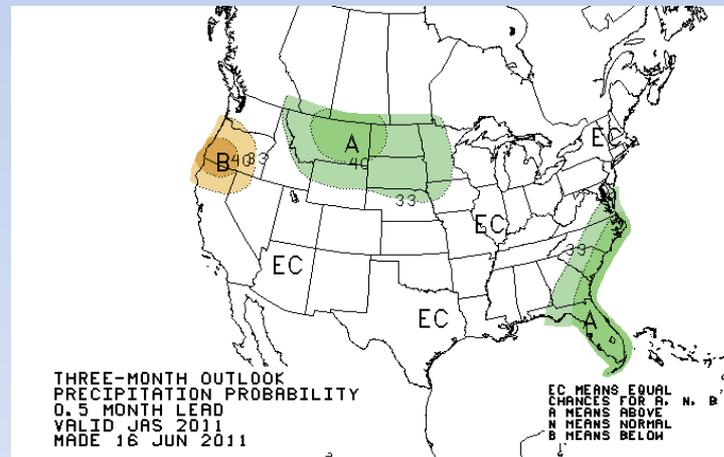


Precipitation Outlooks

1-month



3-month



1-Month Streamflow

Forecasts

Apalachicola Watershed

Southeast River Forecast Center

July 2011

-  Above Normal
-  Near Normal
-  Below Normal



3-Month Streamflow

Forecasts

Apalachicola Watershed

Southeast River Forecast Center

July – September 2011

-  Above Normal
-  Near Normal
-  Below Normal



Recent Drought Impacts

SE Alabama Spring Rainfall Rankings

From 4/1/2011 through Period Indicated

<i>Site</i>	<i>POR</i>	<i>Curr Total 7/11</i>	<i>Curr Rank 7/11</i>	<i>Prev Total 6/14</i>	<i>Prev Rank 6/14</i>
Dothan	3/01/2003	8.07	1 st	3.92	1 st
Enterprise 2W	6/01/1966	10.14	7 th	2.53	2 nd
Geneva #2	5/01/1976	9.11	6 th	5.34	6 th
Headland	4/01/1950	5.36	2 rd	3.28	3 rd

SE Alabama Water Year (WY) and Calendar Year (CY) Rankings

Through 7/11/2011

<i>Site</i>	<i>POR</i>	<i>WY Total</i>	<i>WY Rank</i>	<i>CY Total</i>	<i>CY Rank</i>
Dothan	3/01/2003	24.26	1 st	19.32	1 st
Enterprise 2W	6/01/1966	31.70	7 th	23.84	6 th
Geneva #2	5/01/1976	27.90	2 nd	22.50	5 th
Headland	4/01/1950	23.33	1 st	17.23	1 st

Impacts – Late June

- Hot temps (day ~100s, night 75/80)
- Hard baked soils
- Peanuts mostly planted, but not sprouting
- Corn stunted
- Cotton skimpy
- Grazing – nearly nonexistent
- Cattle – Going to feedlots or sale
- City wells went dry in Doe Run and Dawson, GA

Impacts – Early July

- Alabama Requests Federal Drought Emergency
- Corn crop a disaster
- Cotton crop not much better, Some recovery
- Most peanuts have recovered in Coffee, Co but may not be as good in other counties in SE AL
- Never as dry as this so early
- Drought impact has been long term
- Rain too late for most

http://www.forbes.com/feeds/ap/2011/07/01/business-us-alabama-drought-alabama_8545395.html

David Garrett – Coffee County Extension Office

Comparisons

Old timers compare this drought to 1954

Brandon Dillard Ag Agent – Worst he has seen.

Need Gulf Moisture to salvage the crop.



FL Panhandle

- The only streamflows still in the 2% range are the big rivers
- Farmers are taking advantage of the rain and trying salvage peanut, cotton, and soybean crops
- Continued rain might avoid a completely disastrous year, but no crop is going to give great yields
- Corn yields were way down from the drought and the heat, even in fields with irrigation

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

 **Nebraska**
Lincoln

Summary

- Exceptional drought continues in most of the southern portion of the basin and dry conditions persist in the rest of the basin
- Streamflows in the northern part of the basin are near the bottom of the normal range
- Streamflows in the southern part of the basin remain extremely low and ground water remains below the bottom range of historical observations
- Throughout the basin, stream flows are forecast to be below normal
- Recent and forecast rains provide some relief, but they are insufficient to meet plant needs
- Near and longer term outlooks show that drought is likely to continue

References

Speakers

David Zierden, FSU

Chris Smith, USGS

Rob Erhardt, USACE

Jeffrey Dobur, SERFC

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>