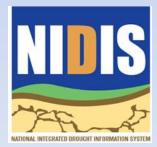
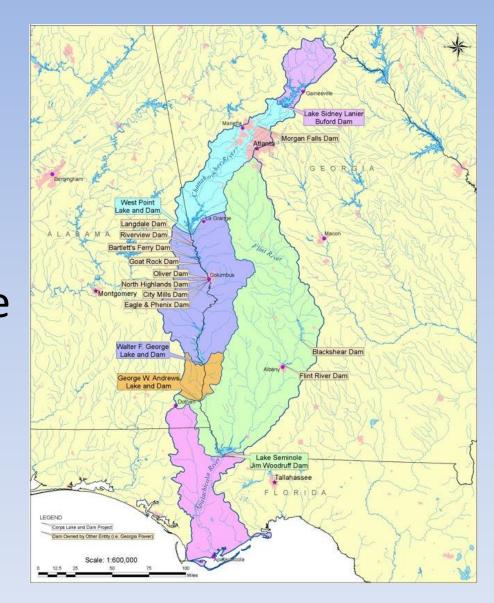
National Integrated **Drought Information System** Southeast US Pilot for Apalachicola-Flint-Chattahoochee **River Basin**

15 November 2011





Current drought status from Drought Monitor

U.S. Drought Monitor

	Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	40.77	59.23	46.58	34.06	22.99	0.00	
Last Week (11/01/2011 map)	41.84	58.16	44.93	32.80	21.45	0.00	
3 Months Ago (08/09/2011 map)	16.71	83.29	59.83	40.33	19.21	0.89	
Start of Calendar Year (12/28/2010 map)	23.01	76.99	51.84	23.55	5.63	0.00	
Start of Water Year (09/27/2011 map)	42.24	57.76	41.82	31.77	23.48	0.00	
One Year Ago (11/02/2010 map)	25.10	74.90	39.22	16.44	3.08	0.00	

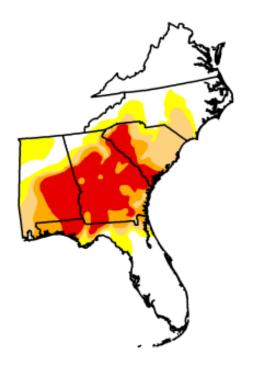
Intensity:



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

http://droughtmonitor.unl.edu

November 8, 2011 Valid 7 a.m. EST



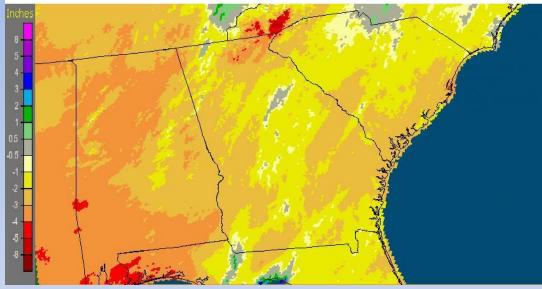


Released Thursday, November 10, 2011 Brian Fuchs, National Drought Mitigation Center

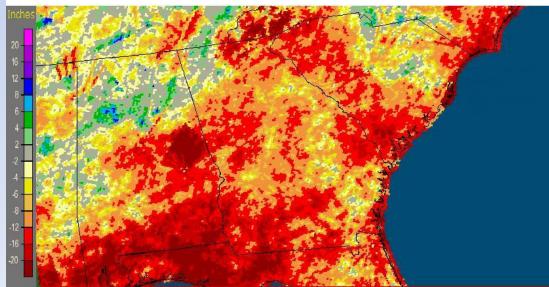
http://www.drought.unl.edu/dm/monitor.html

Cumulative Rainfall Deficits

Georgia: Yeserday's 30-Day Departure from Normal Precipitation Valid at 11/14/2011 1200 UTC- Created 11/15/11 0:07 UTC



Georgia: Yeserday's Year to Date Departure from Normal Precipitation Valid at 11/14/2011 1200 UTC- Created 11/14/11 23:48 UTC



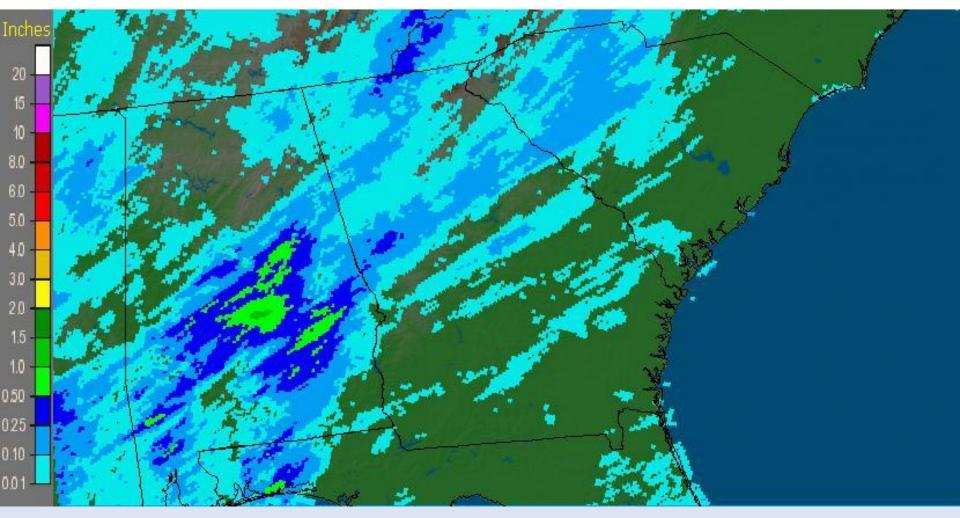
Past 30 days

Since Jan. 1st

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

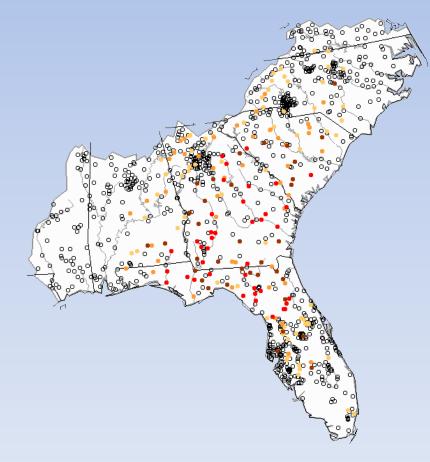
7-day Rainfall Totals

Georgia: Yeserday's 7-Day Observed Precipitation Valid at 11/14/2011 1200 UTC- Created 11/14/11 23:55 UTC



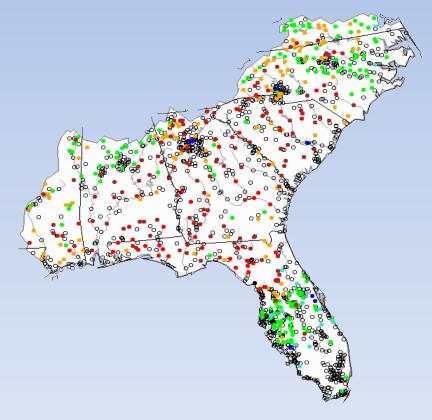
Realtime stream flow compared with historical monthly averages

Previous Month:



Current:

Tuesday, November 15, 2011 06:30ET



http://waterwatch.usgs.gov

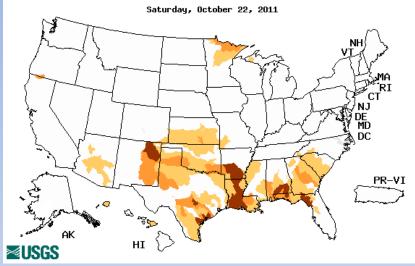
Below Normal 7-day Average Streamflows

Previous month:

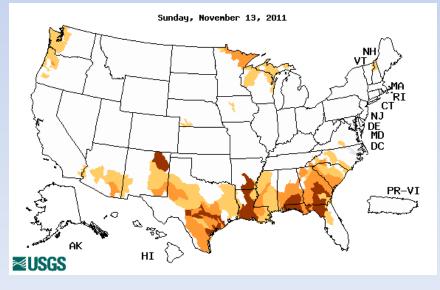
Below normal 7-day average streamflow as compared with historical streamflow for day shown

Current:

http://waterwatch.usgs.gov



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



Lake Lanier Inflows

Chestatee near Dahlonega (02333500)

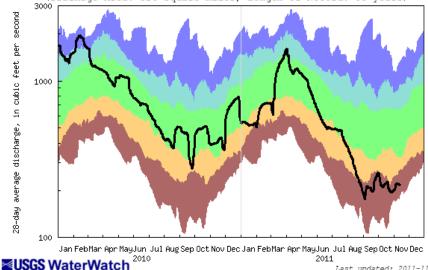
http://waterwatch.usgs.gov

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	Above normal	Much above normal	

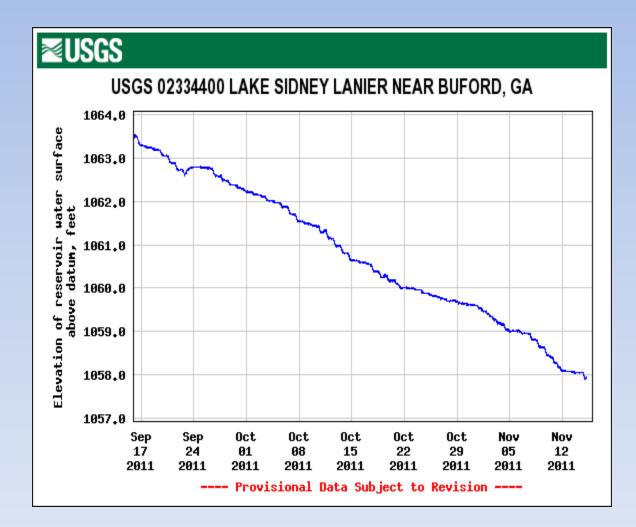
Duration hydrograph of 28-day average streamflow for USGS 02333500 (Drainage Area: 153 square miles, Length of Record: 81 years) 2000 second in cubic feet per 1000 28-day average discharge, 100 40 Jan FebMar Apr MayJun Jul Aug Sep Oct Nov Dec Jan FebMar Apr MayJun Jul Aug Sep Oct Nov Dec 2011 2010 **USGS** WaterWatch Last updated: 2011-11-15

Duration hydrograph of 28-day average streamflow for USGS 02331600 (Drainage Area: 315 square miles, Length of Record: 53 years)



Last updated: 2011-11-15

Lake Lanier Levels (02334400) for Previous 60 Days



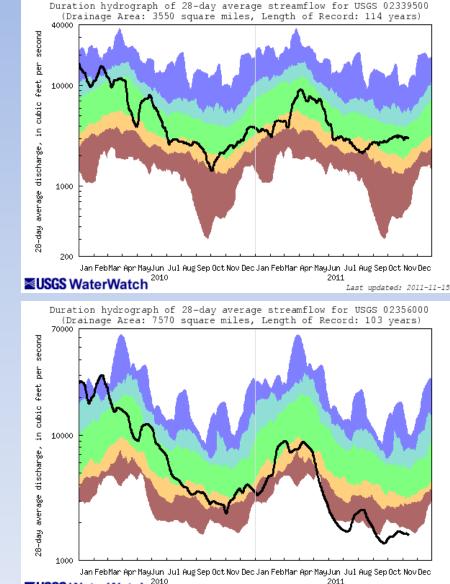
Current Streamflows

Chattahoochee at West Point (02339500)

http://waterwatch.usgs.gov

Flint at Bainbridge (02356000)

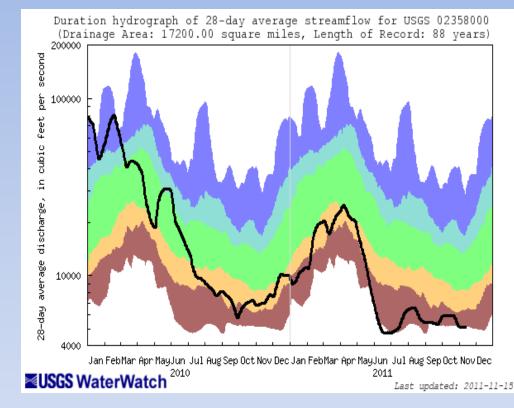
Explanation - Percentile classes					
lowest- 10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below	Normal	Above	Much above normal	



USGS WaterWatch

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	Above	Much above normal	

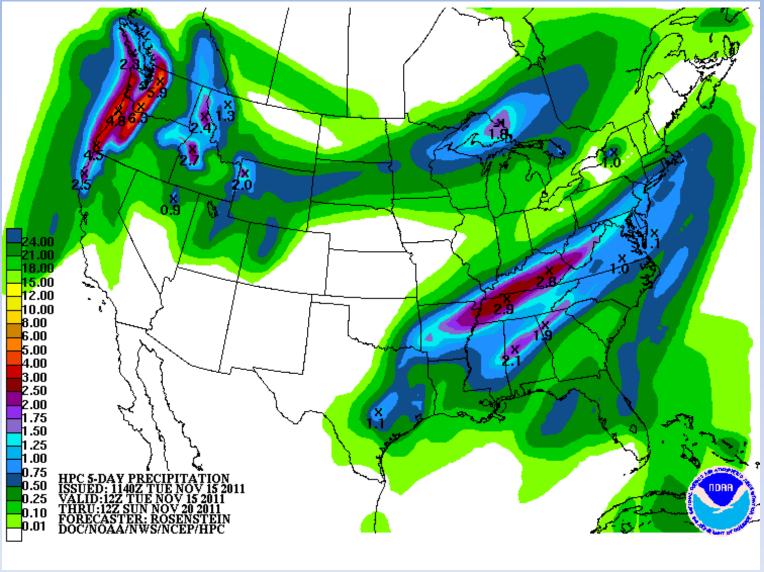
Groundwater Status

310651084404501 - 08G001

USGS 15 THE N N PASS S E Æ <u>/Clevelan</u>d= Pulaski 74 Gastonia Charlotte NORTH CAROLIN Spartanburg Hamlet Wadesboro Chattanooga feet below land surface Diautor Huntsville Easley Rock Hill Madison Greenville Laurinburg Dalton 76 Ellijay lemson. h Lancaster 20)ecatur⁰ Scottsboro Lumbertor Laurens Summerville Anderso 129 321 ▲ Darlington Fort Payne Diffa Albertville N-97 TE Camden * н. S S F Rome Cullman Florence Gadsder Greenwood Columbia 25 Winder 231 Marietta Jasper ▲ Cedartown ake City Saluda Cente ▲ Ath SOUTH CAROLINA Conway Washington Point ston^D Carrollton - Atlanta Madison Crawfordville Aiken Kingstree Orangeburg 30 Birmingham Peachtree City RGT G ΕQ . Sparta 78 Augusta ▲ Georgetown Bamberg Depth to water level, 20 Sylacauga 27 Ashland Frittin Milledgeville axpesboro ALABĂMA LaGrande 15 Summerville ▲ Clanton Forsyth Sanderselle Millen 82 Allendale 35 Macon ▲ Dadeville Marion Talbotton 17 Charleston ▲ ▲ ▲ Warner-Robir Swainsboro 278 ▲ Columbus Auburn Ridgeland Statesboro Selma Oglethorpe 40 Montgomerv Vidalia Alamo Hilton Head Island Camden Union Springs dount ernon annah Clayton azelhuist Baxley 45 Trov Hinesville 43 Monroeville Ima 29 Evergreen Enterprise Atlantic Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Brewton Dothar Waycross 💼 Geneva land unswick Ocean 2010 - 2011 FLORIDA aldosta Woodbine Bonifay Kingsland Chiple Plot created 11/14/11 11:24 Statenville Crestview DeFuniak Wright_(Springs Madison Jacksonville Pensacola Blountstown (20) Tallahassee 🔟 Live Dak 98 Explanation - Percentile Classes Perry Mayo © 2001 Microsoft Corp. All rights 98 Lake City Data Point Monthly Median 25.75 > 90 76 - 90 Explanation - Percentile classes(symbol color based on most recent measurement) O Real Time Miller County, GA Continuous <10 10-24 Periodic Δ Low Much Below Below Measurements (Upper Floridan Aquifer) Normal Normal

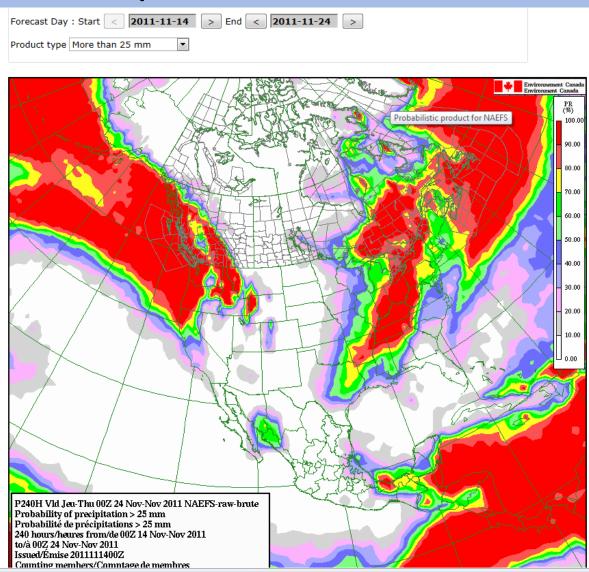
http://groundwaterwatch.usgs.gov

5-Day Precipitation Forecast

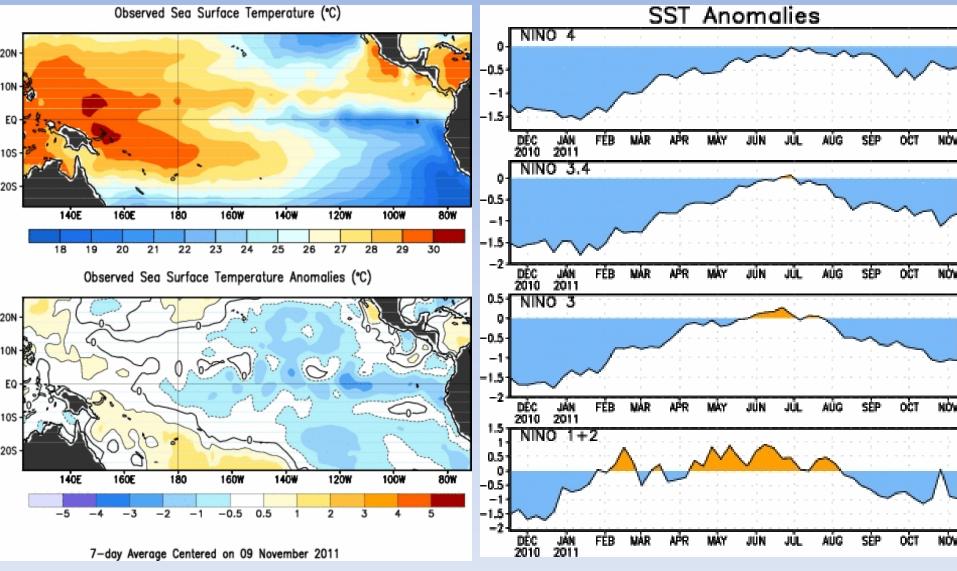


http://www.hpc.ncep.noaa.gov/qpf/day1-5.shtml

Probability of more than 1 inch rain in next 10 days, 14-24 Nov 2011

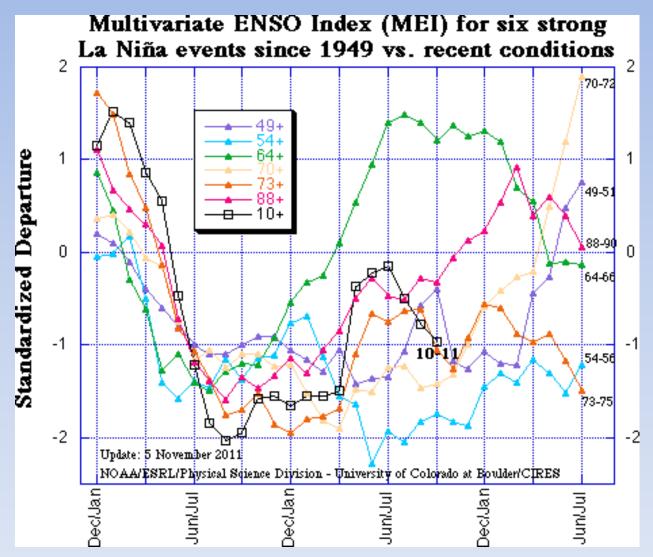


7-day average Pacific Ocean SST Anomalies



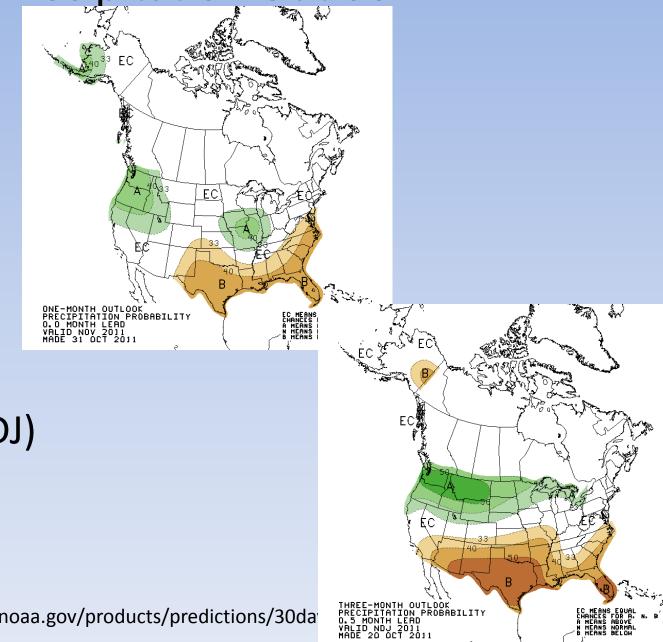
http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml

Multivariate ENSO Index: recent and six strong La Niña events



http://www.esrl.noaa.gov/psd/people/klaus.wolter/MEI/

Precipitation Outlook



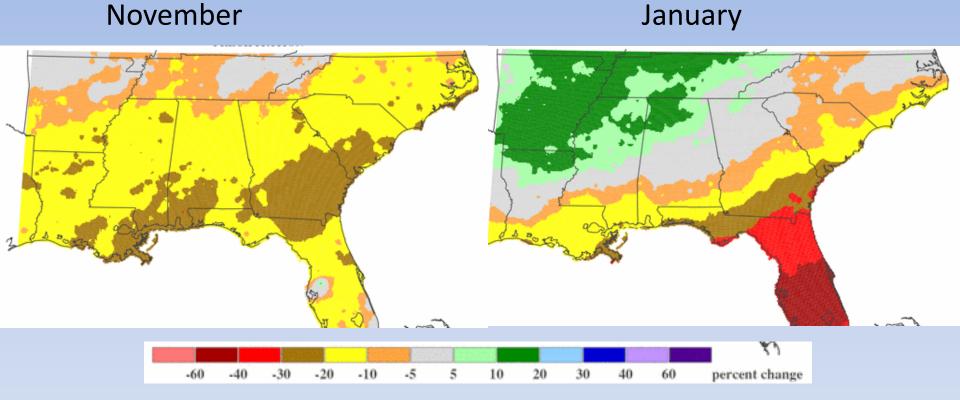
1-month

3-month (NDJ)

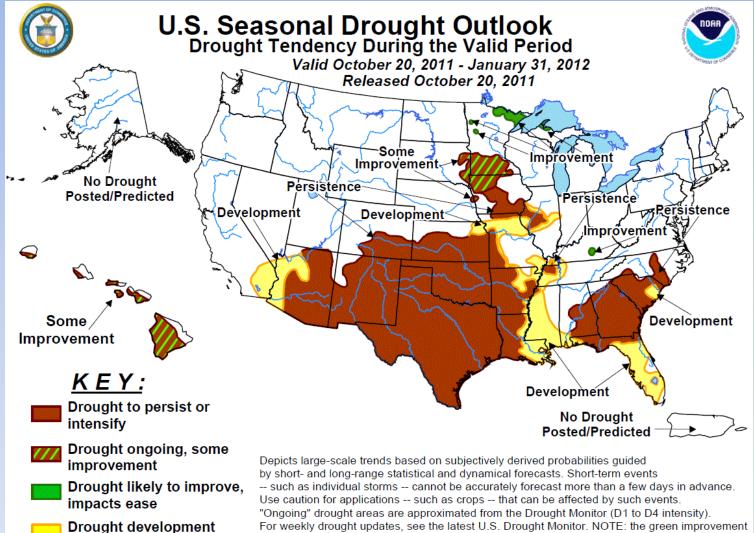
http://www.cpc.ncep.noaa.gov/products/predictions/30da

La Nina Composites

November

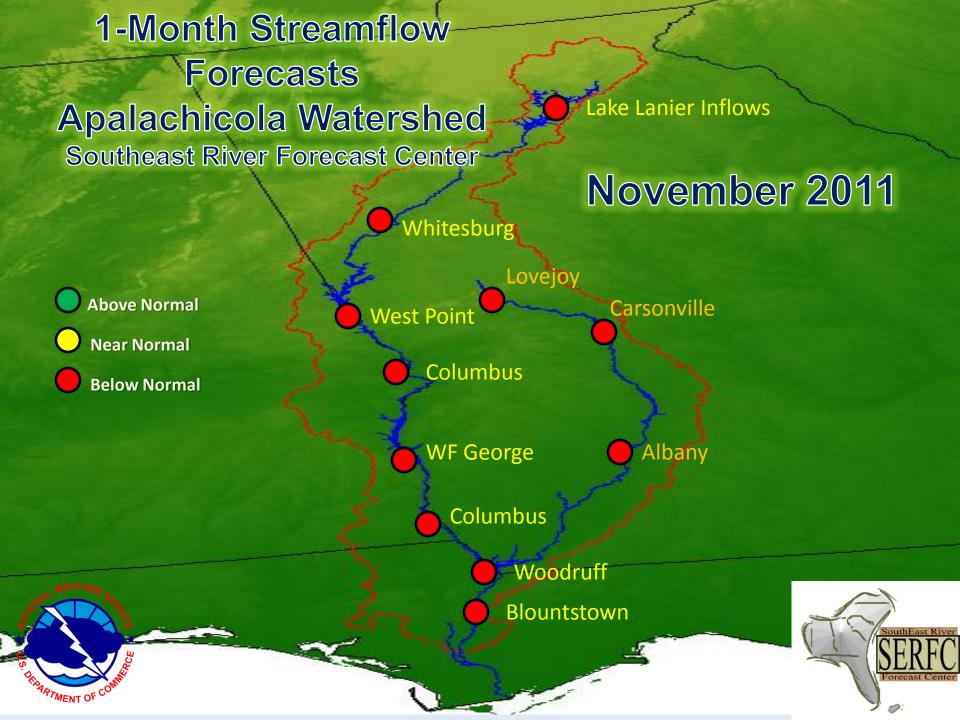


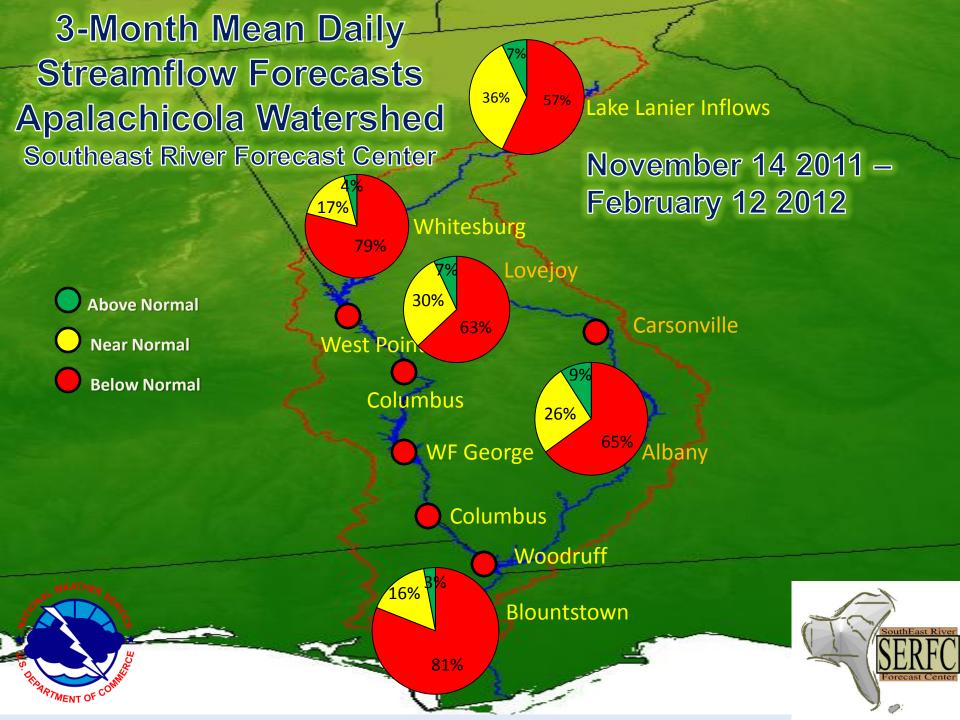
U.S. Drought Outlook



likely

For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.





Summary

- Extreme drought conditions continue through much of the basin
- Streamflows continue to be low and are below historic record lows in the southern part of the basin
- Depth to ground water is near historic record levels in the southern part of the basin
- No precipitation is forecast in the near term
- Streamflows are forecast to be below normal through the next three months
- La Niña conditions continue to strengthen, so drought is likely to continue over the next several months

Announcements

- What: ACF Outlook Forum
- When: 1-2 December 2011
- Where: Lake Lanier Islands Resort
- Contact: Lisa Darby [lisa.darby@noaa.gov]
- What: Prototype website for water managers

Where: <u>http://sewater.engr.uga.edu/</u>

Contact: Pam Knox [pknox@engr.uga.edu]

References

Speakers David Zierden, FSU Tony Gotvald, USGS Robert Allen, USACE Jeffrey Dobur, SERFC

Additional information

General drought information <u>http://drought.gov</u> <u>http://www.drought.unl.edu</u>

General climate and El Niño information <u>http://agroclimate.org/climate/</u>

Streamflow monitoring <u>http://waterwatch.usgs.gov</u>

Moderator Keith Ingram, SECC/UF

Groundwater monitoring <u>http://groundwaterwatch.usgs.gov</u>