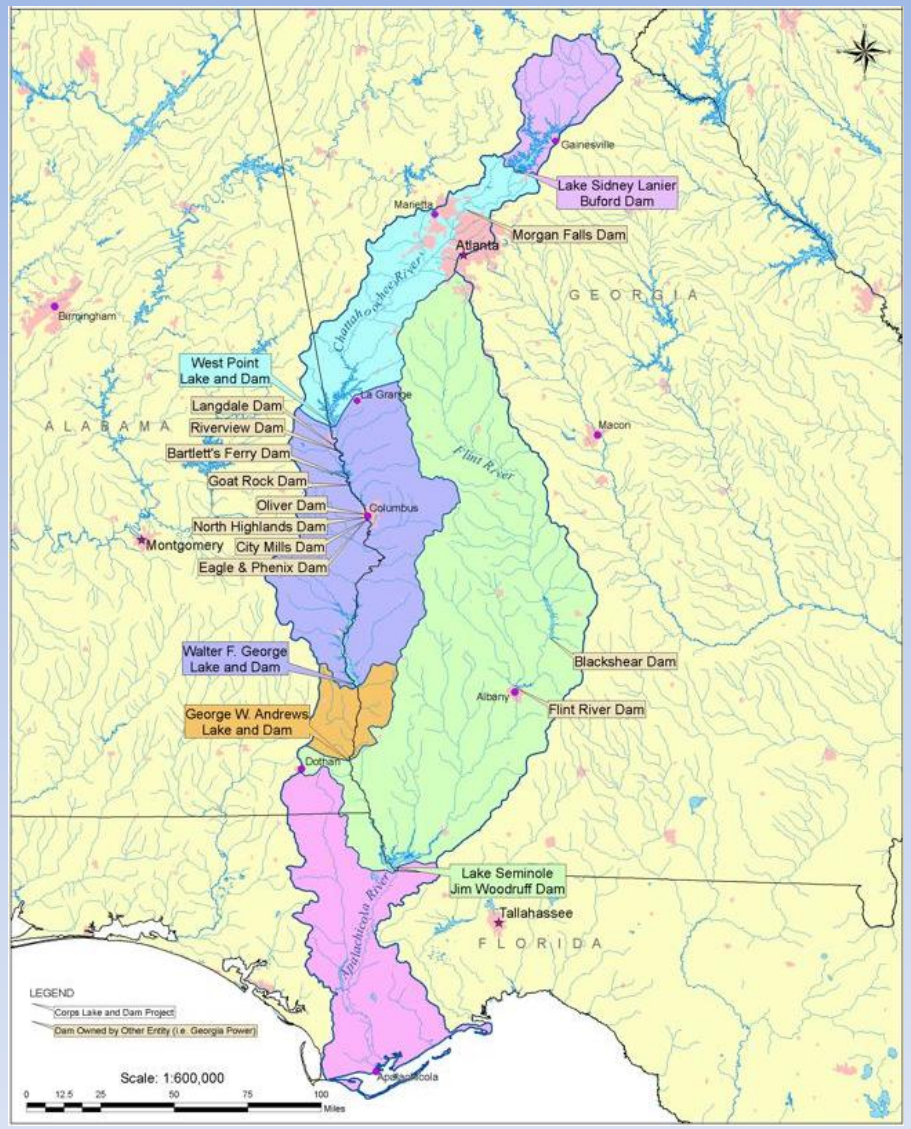
National Integrated Drought Information System

Southeast US Pilot for Apalachicola-Flint-Chattahoochee River Basin

20-March-2012



Current drought status from Drought Monitor

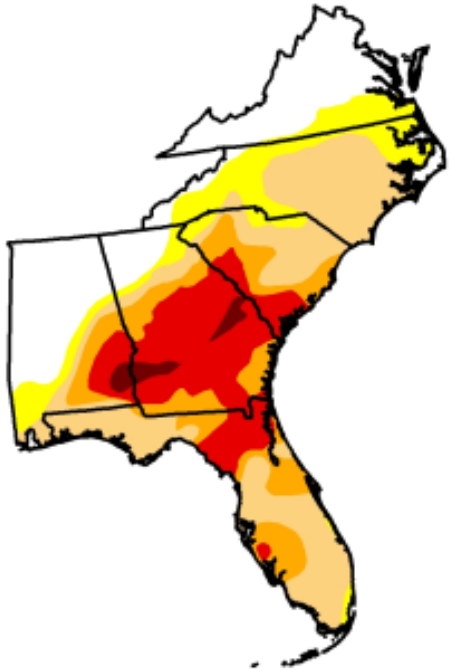
U.S. Drought Monitor

March 13, 2012
Valid 7 a.m. EST

Southeast

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.99	75.01	61.33	33.00	19.04	1.62
Last Week (03/06/2012 map)	26.24	73.76	59.02	32.47	19.04	1.62
3 Months Ago (12/13/2011 map)	42.09	57.91	42.28	30.20	18.08	0.00
Start of Calendar Year (12/27/2011 map)	40.38	59.62	43.05	28.62	18.71	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 (03/08/2011 map)	10.94	89.06	68.98	22.79	4.81	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://droughtmonitor.unl.edu

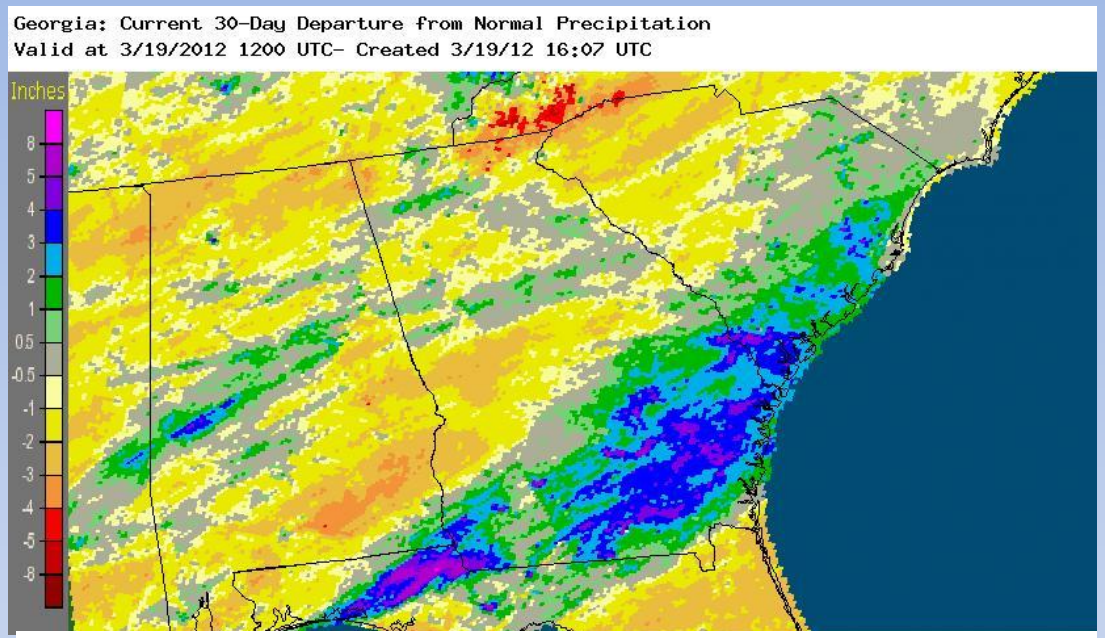
USDA National Drought Mitigation Center

Released Thursday, March 15, 2012
Michael Brewer, National Climatic Data Center, NOAA

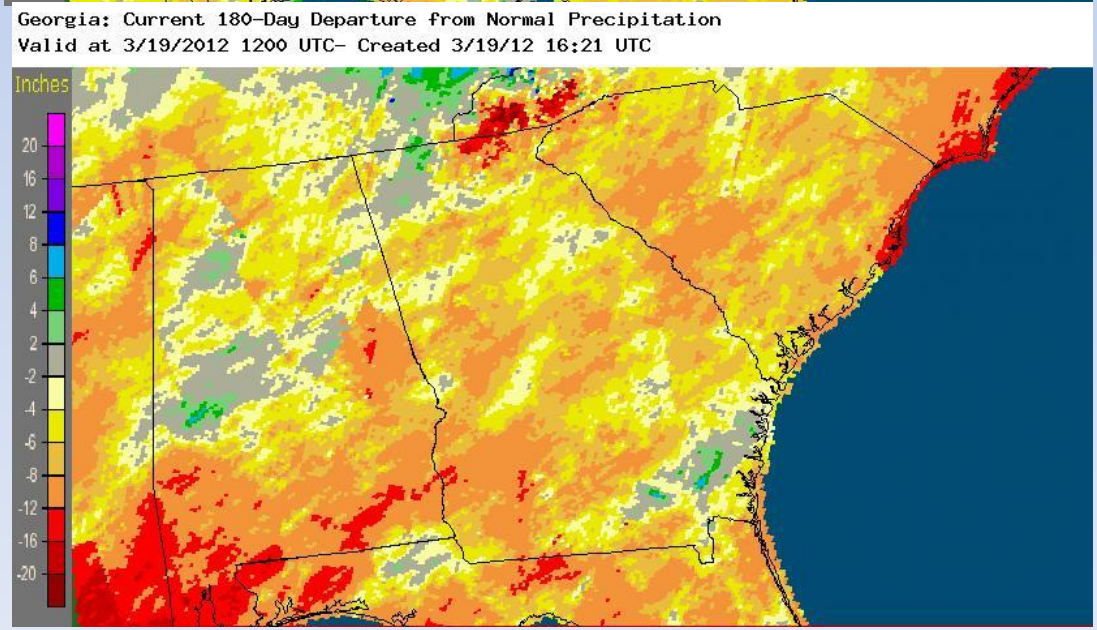
http://www.drought.unl.edu/dm/monitor.html

Cumulative Rainfall Deficits

Past 30 days

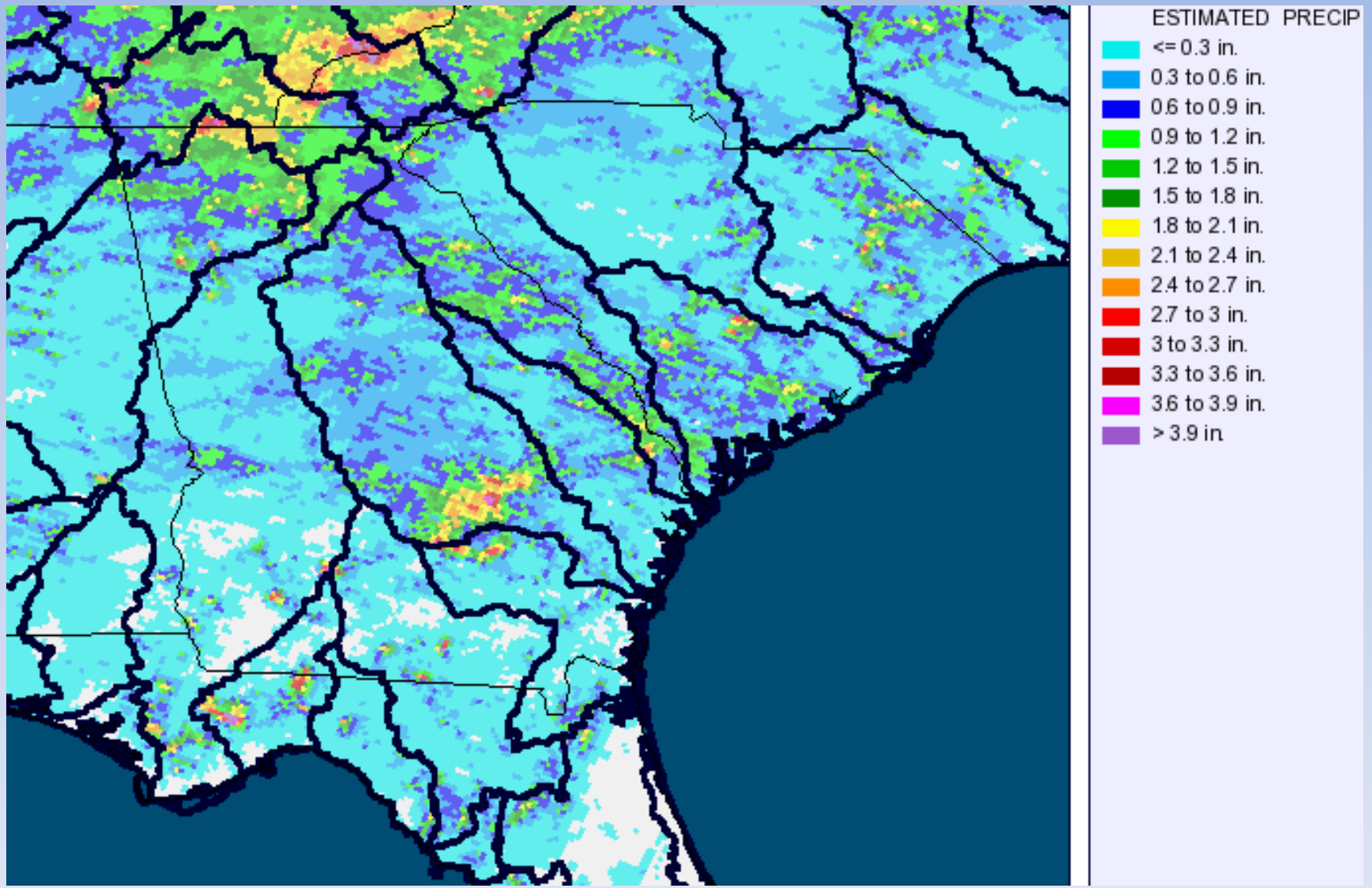


Past 180 days



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

7-day Rainfall Totals

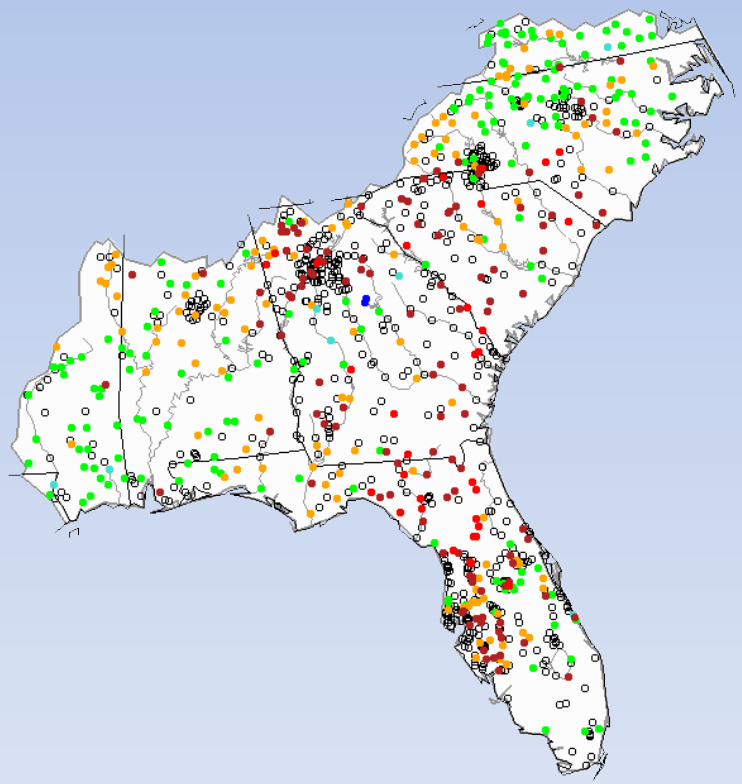


http://sewater2.engr.uga.edu/

Realtime stream flow compared with historical monthly averages

Previous Month:

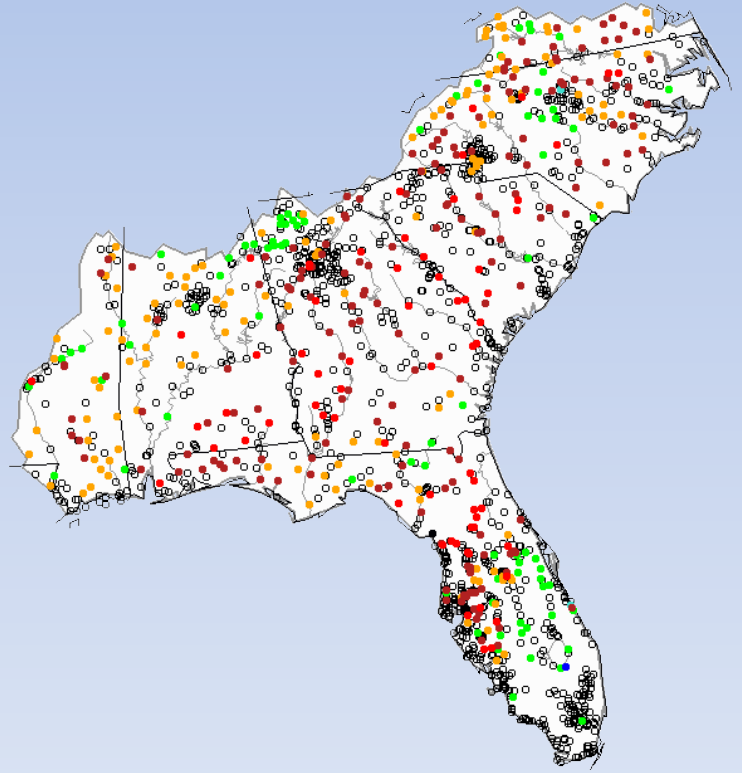
Sunday, February 26, 2012



USGS

Current:

Tuesday, March 20, 2012 07:30ET



USGS

http://waterwatch.usgs.gov

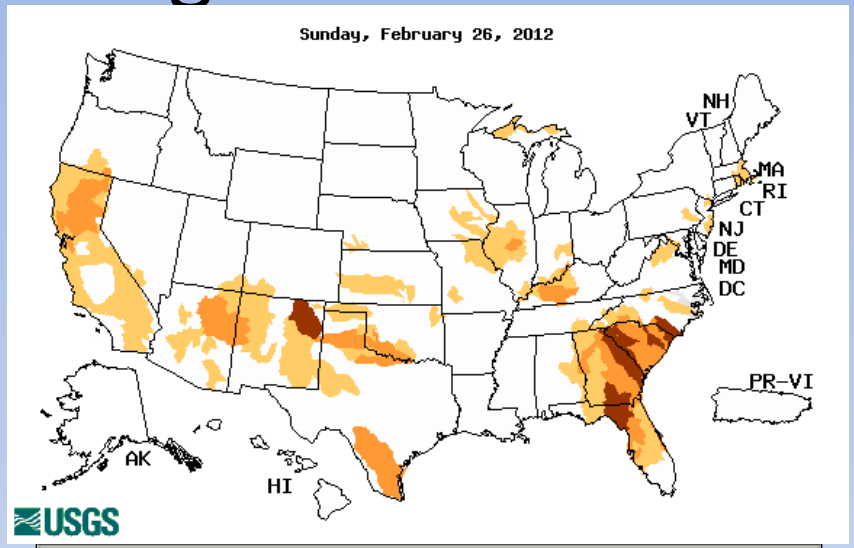
Below Normal 7-day Average Streamflows

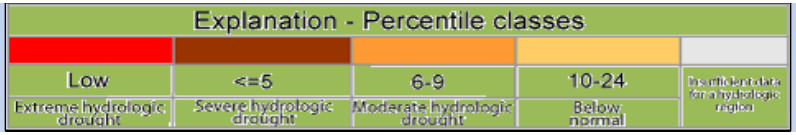
Previous month:

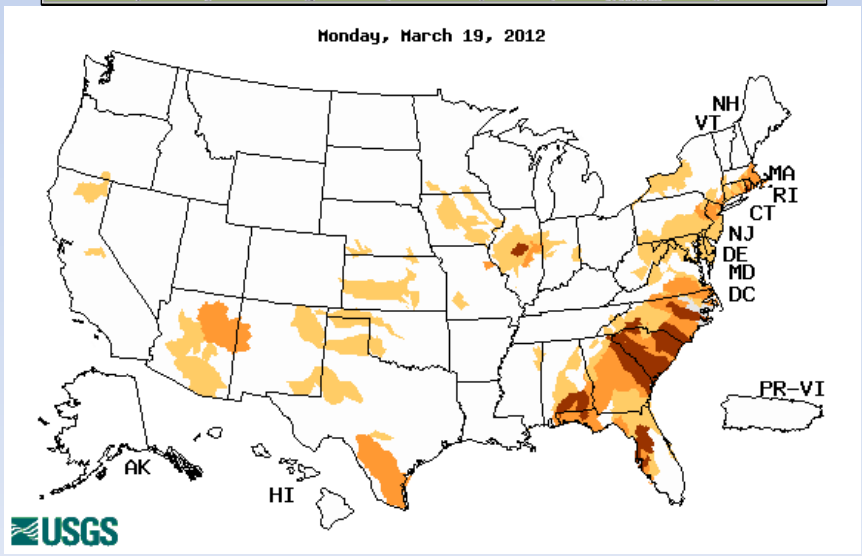
Below normal 7-day average streamflow as compared with historical streamflow for day shown

Current:

http://waterwatch.usgs.gov





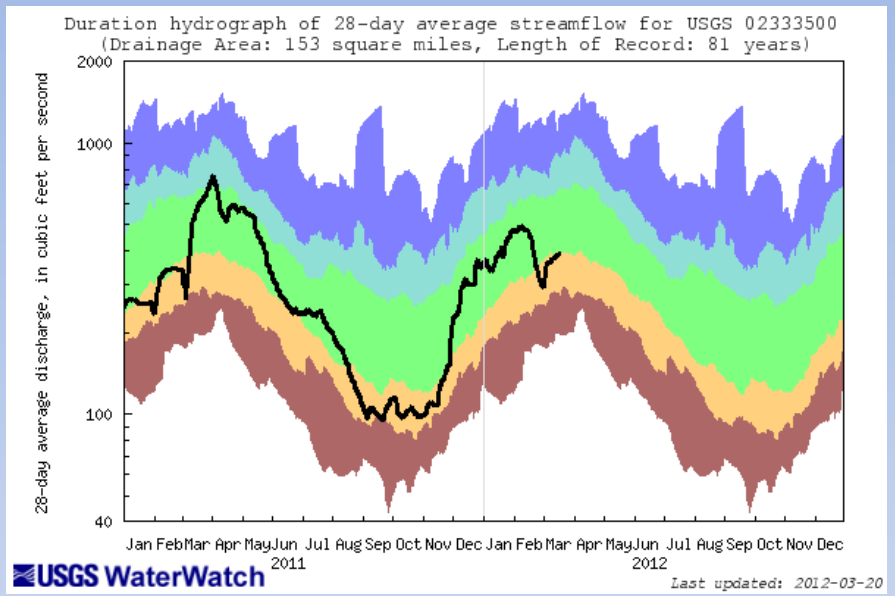


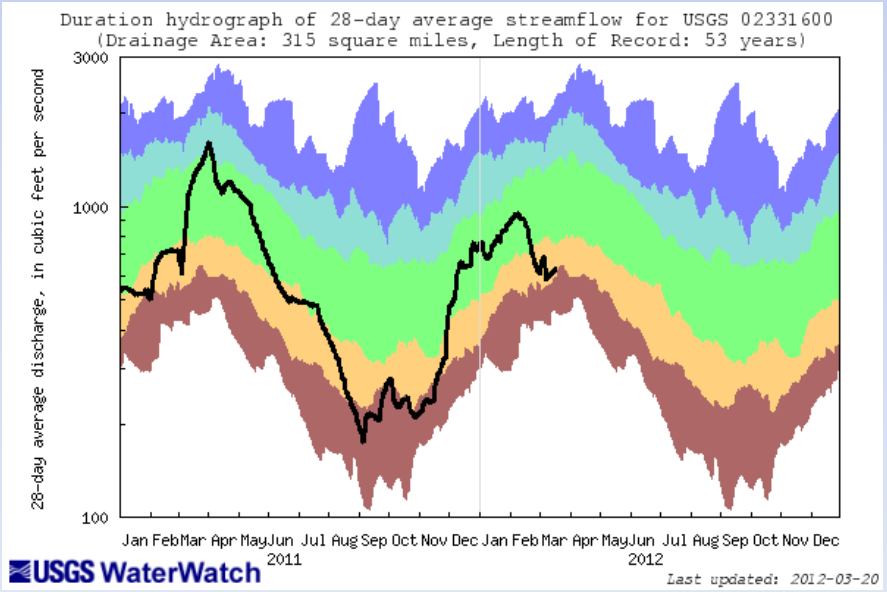
Lake Lanier Inflows

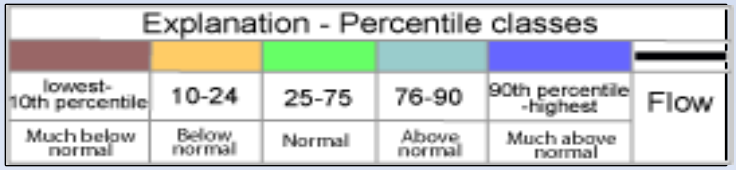
Chestatee near Dahlonega (02333500)

http://waterwatch.usgs.gov

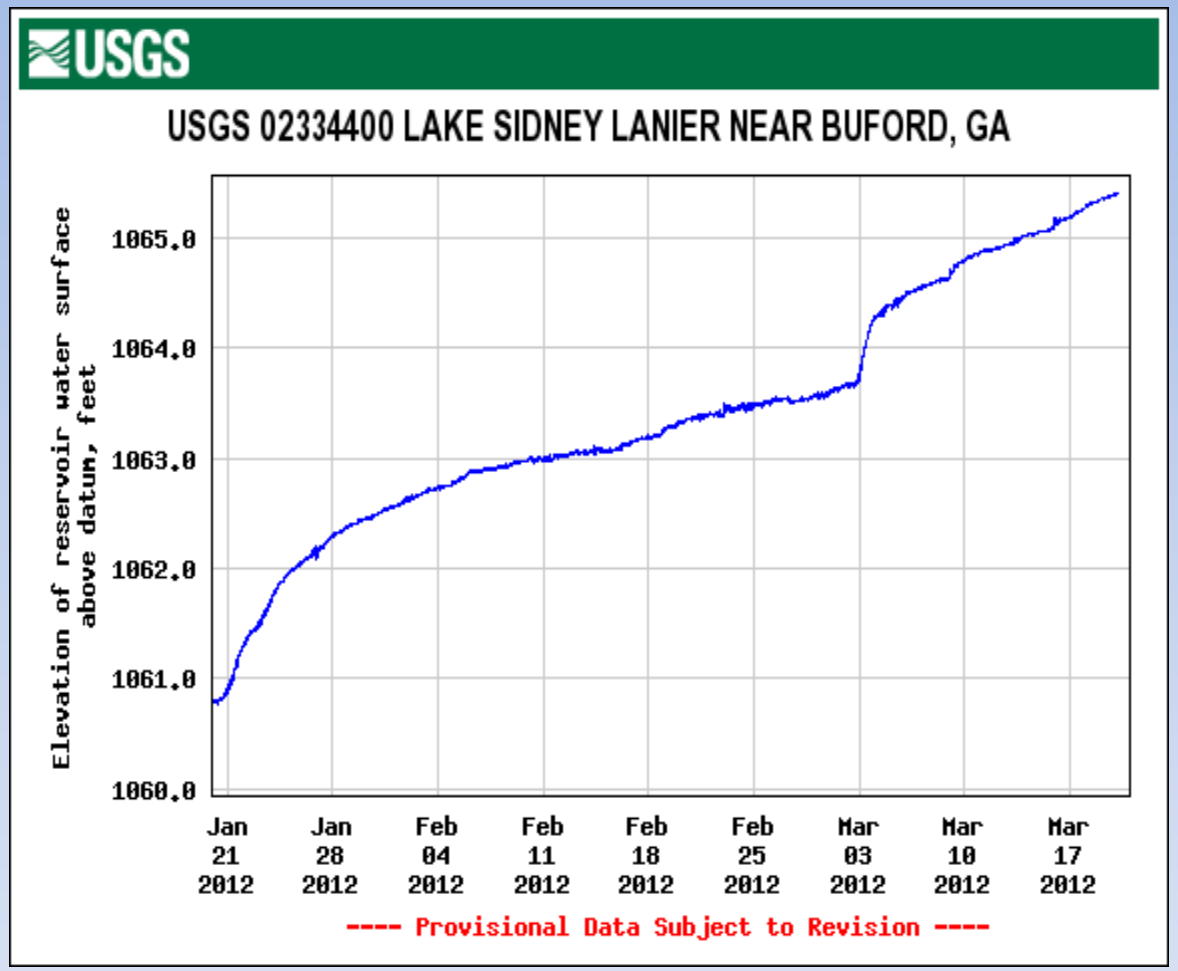
Chattahoochee near Cornelia (02331600)





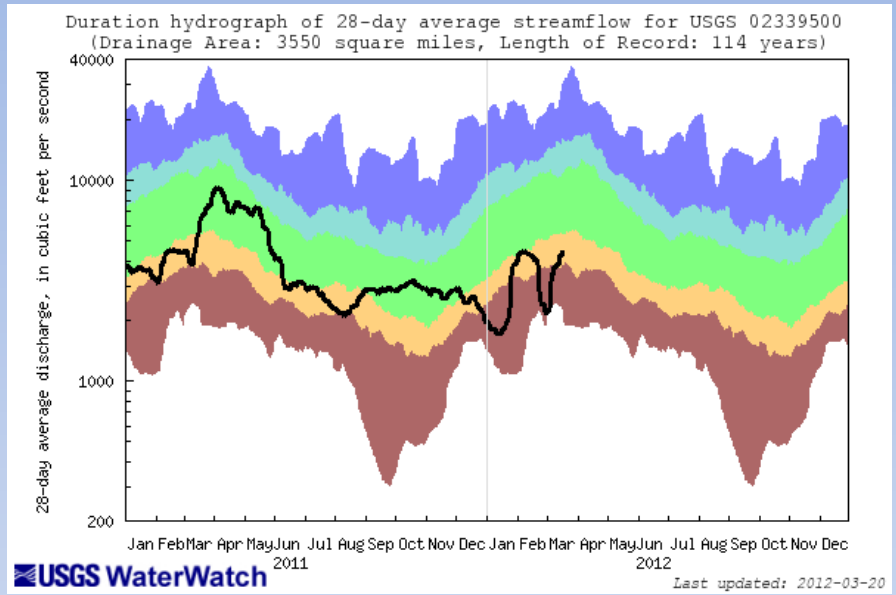


Lake Lanier Levels (02334400) for Previous 60 Days



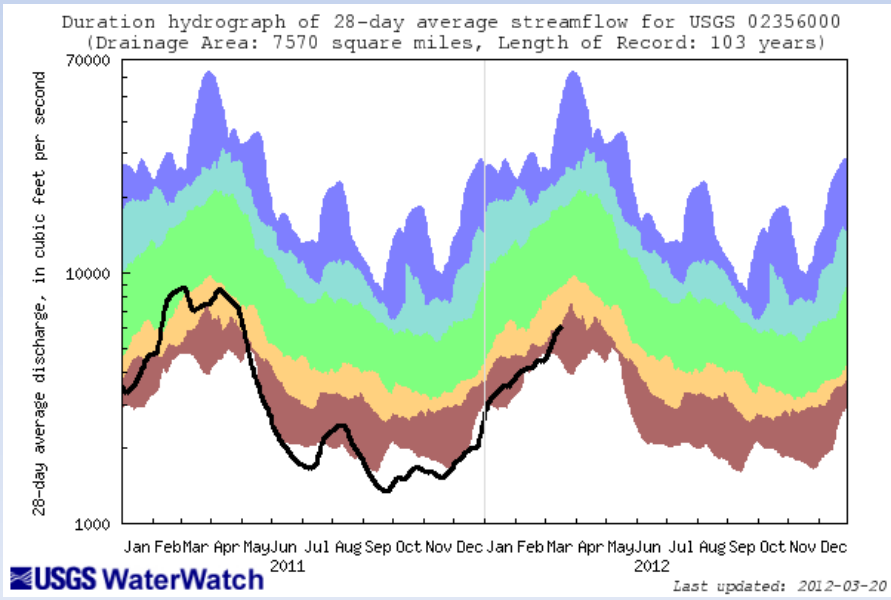
Current Streamflows

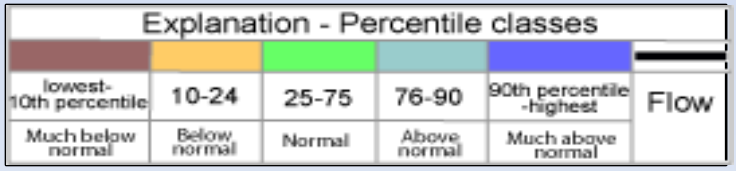
Chattahoochee at West Point (02339500)



http://waterwatch.usgs.gov

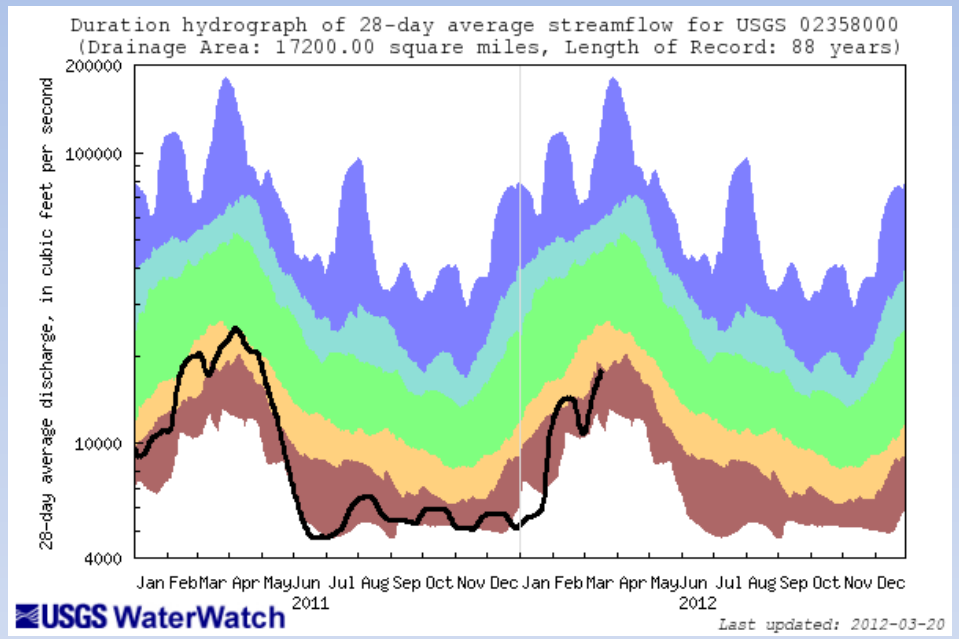
Flint at Bainbridge (02356000)

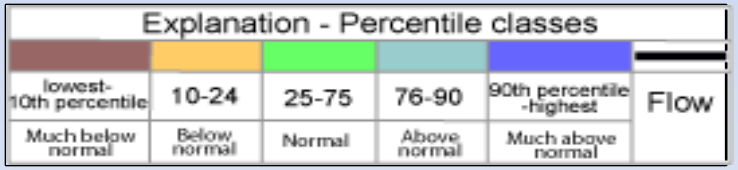




Streamflows

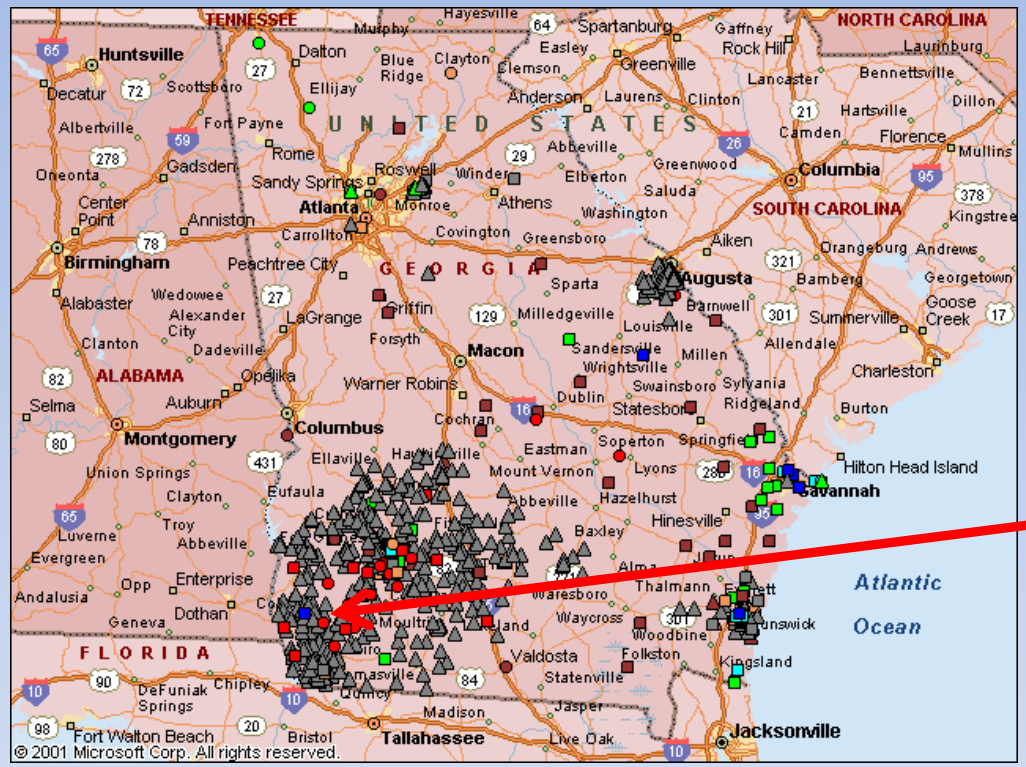
Apalachicola at Chattahoochee (02358000)

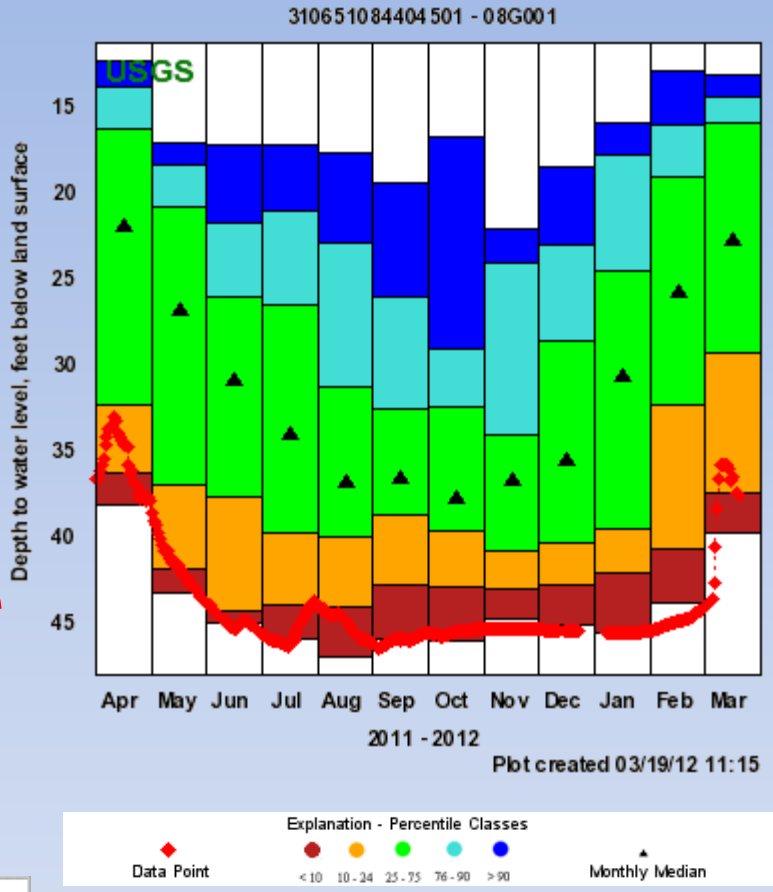


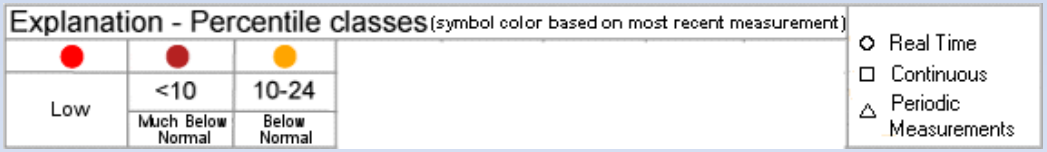


http://waterwatch.usgs.gov

Groundwater Status







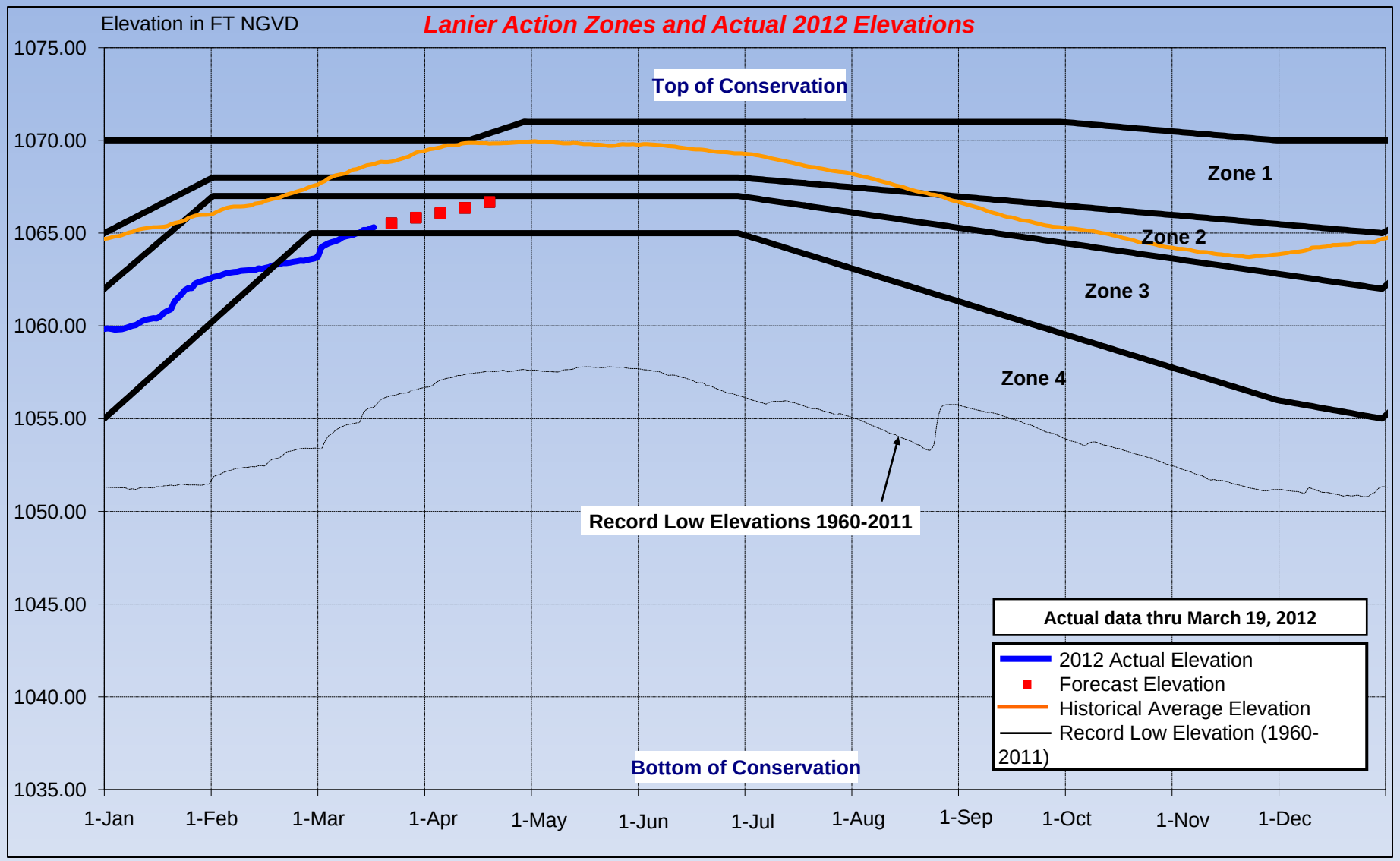
Miller County, GA
(Upper Floridan Aquifer)

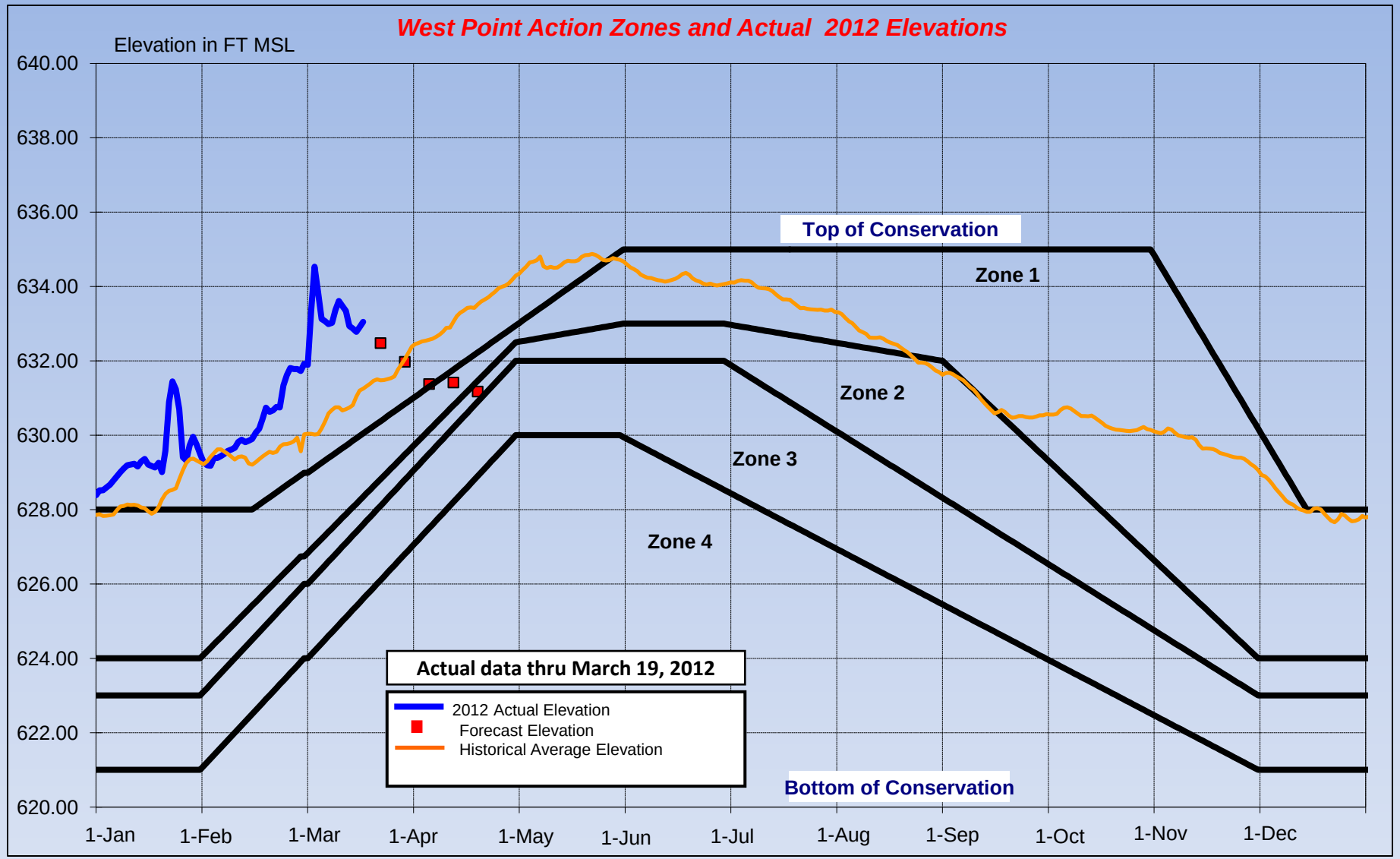
http://groundwaterwatch.usgs.gov

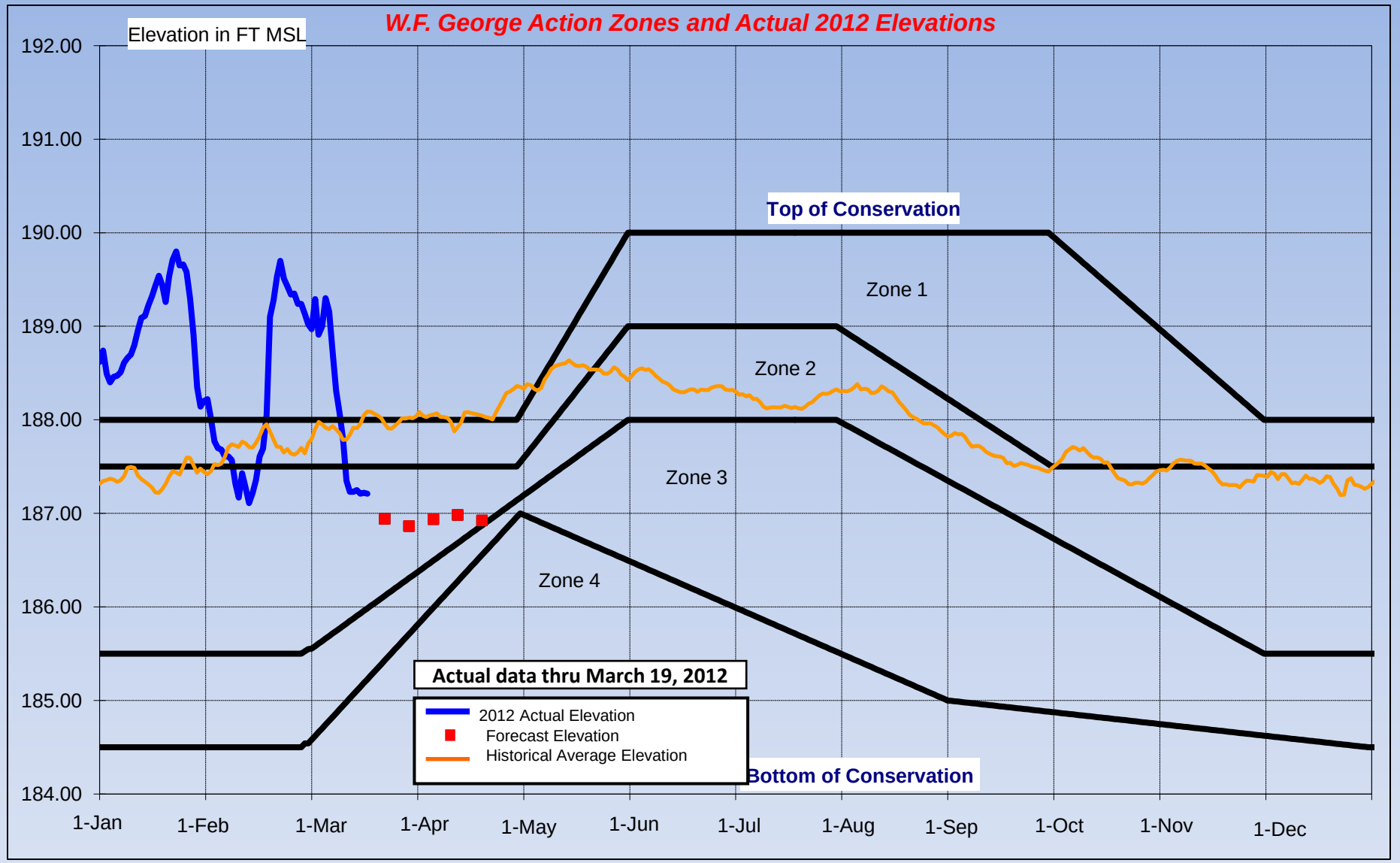
USACE – ACF Reservoir Forecasts (March 2012)

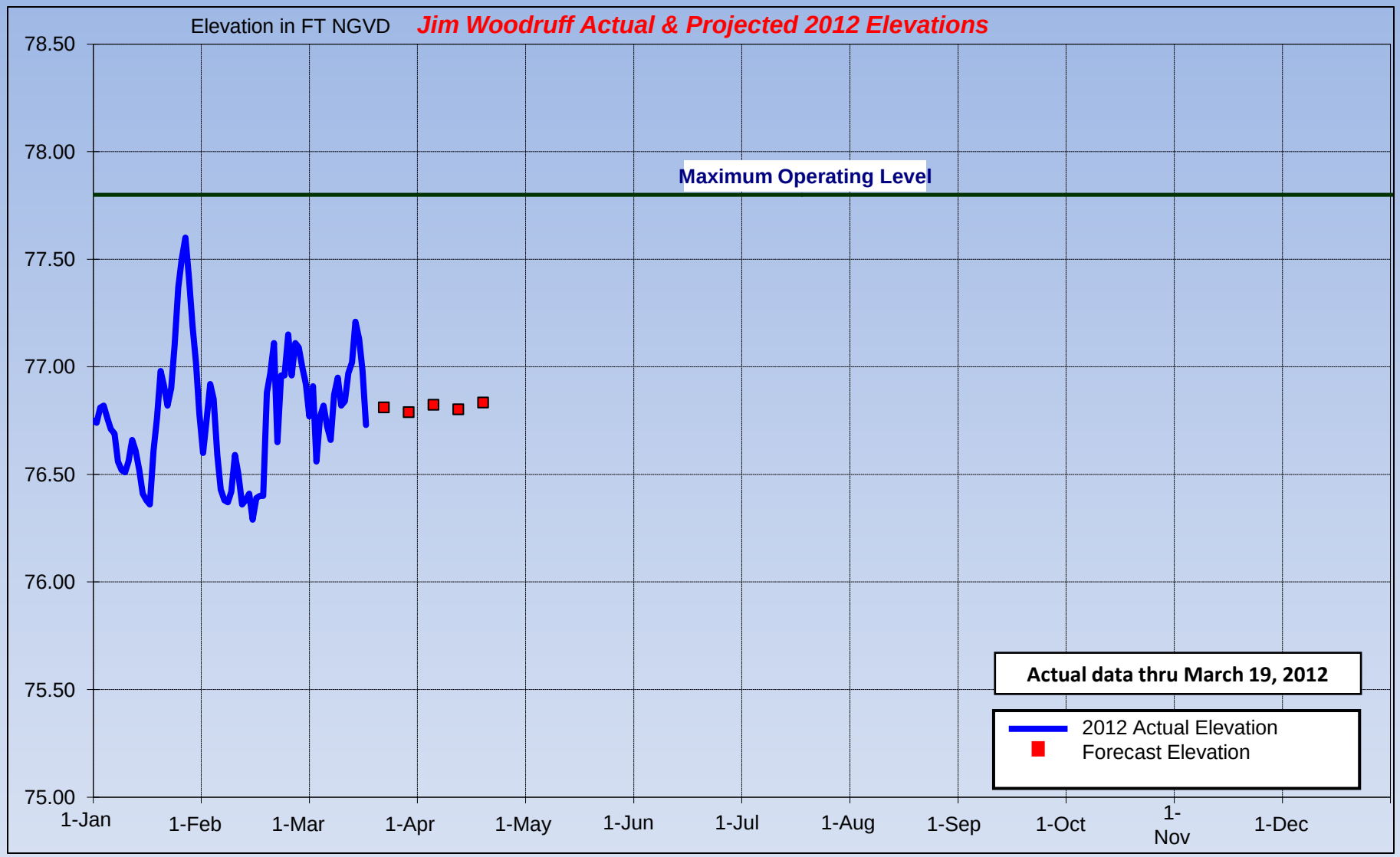
Water Management

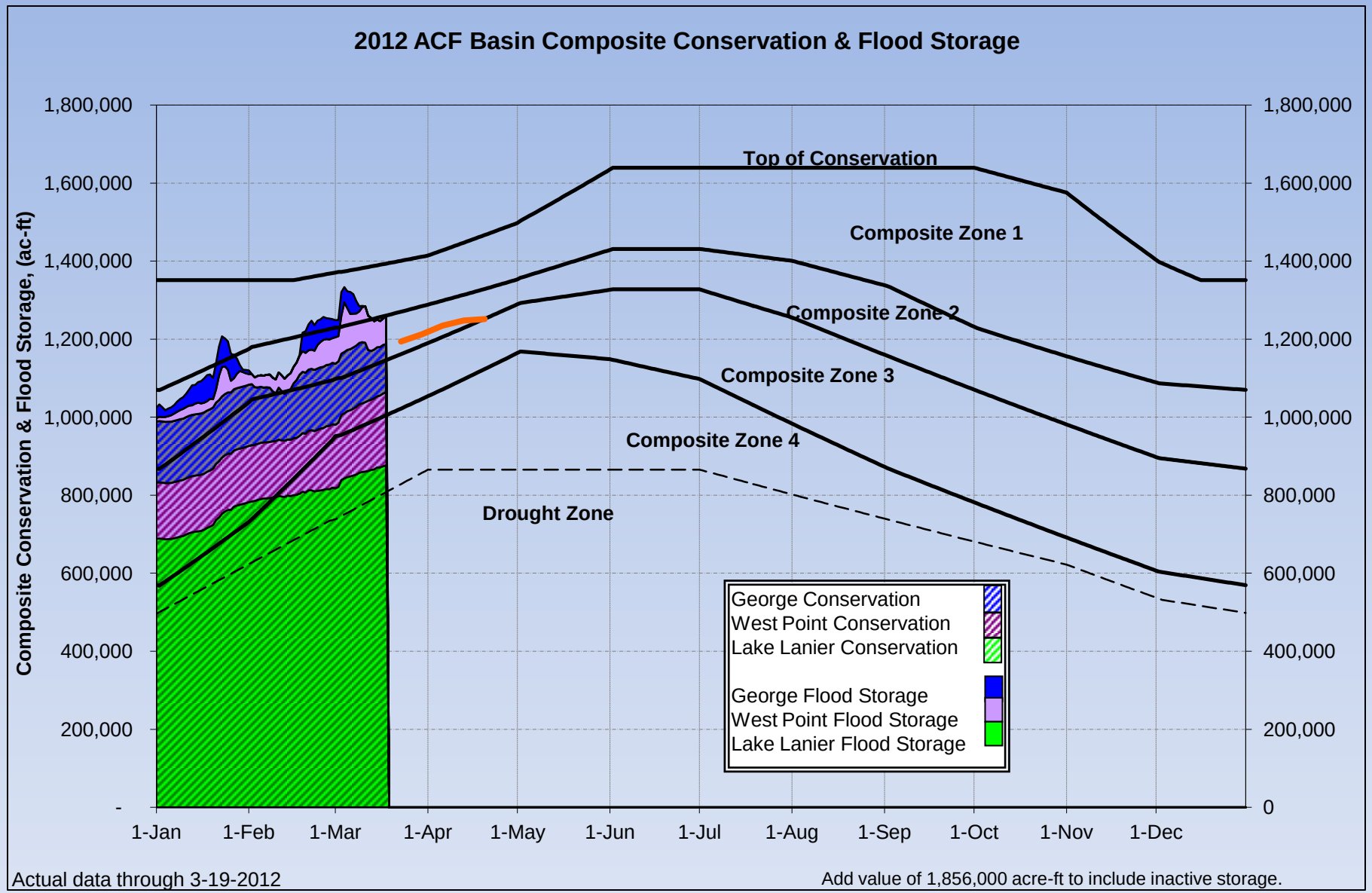
USACE, Mobile District


Elevation in FT NGVD
Lanier Action Zones and Actual 2012 Elevations
1075.00
1070.00
1065.00
1060.00
1055.00
1050.00
1045.00
1040.00
1035.00
Top of Conservation
Zone 1
Zone 2
Zone 3
Zone 4
Record Low Elevations 1960-2011
Bottom of Conservation
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
1-Oct
1-Nov
1-Dec
Actual data thru March 19, 2012
2012 Actual Elevation
Forecast Elevation
Historical Average Elevation
Record Low Elevation (1960-2011)


West Point Action Zones and Actual 2012 Elevations
Elevation in FT MSL
640.00
638.00
636.00
634.00
632.00
630.00
628.00
626.00
624.00
622.00
620.00
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
1-Oct
1-Nov
1-Dec
Top of Conservation
Zone 1
Zone 2
Zone 3
Zone 4
Bottom of Conservation
Actual data thru March 19, 2012
2012 Actual Elevation
Forecast Elevation
Historical Average Elevation


W.F. George Action Zones and Actual 2012 Elevations
Elevation in FT MSL
192.00
191.00
190.00
189.00
188.00
187.00
186.00
185.00
184.00
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
1-Oct
1-Nov
1-Dec
Top of Conservation
Zone 1
Zone 2
Zone 3
Zone 4
Bottom of Conservation
Actual data thru March 19, 2012
2012 Actual Elevation
Forecast Elevation
Historical Average Elevation

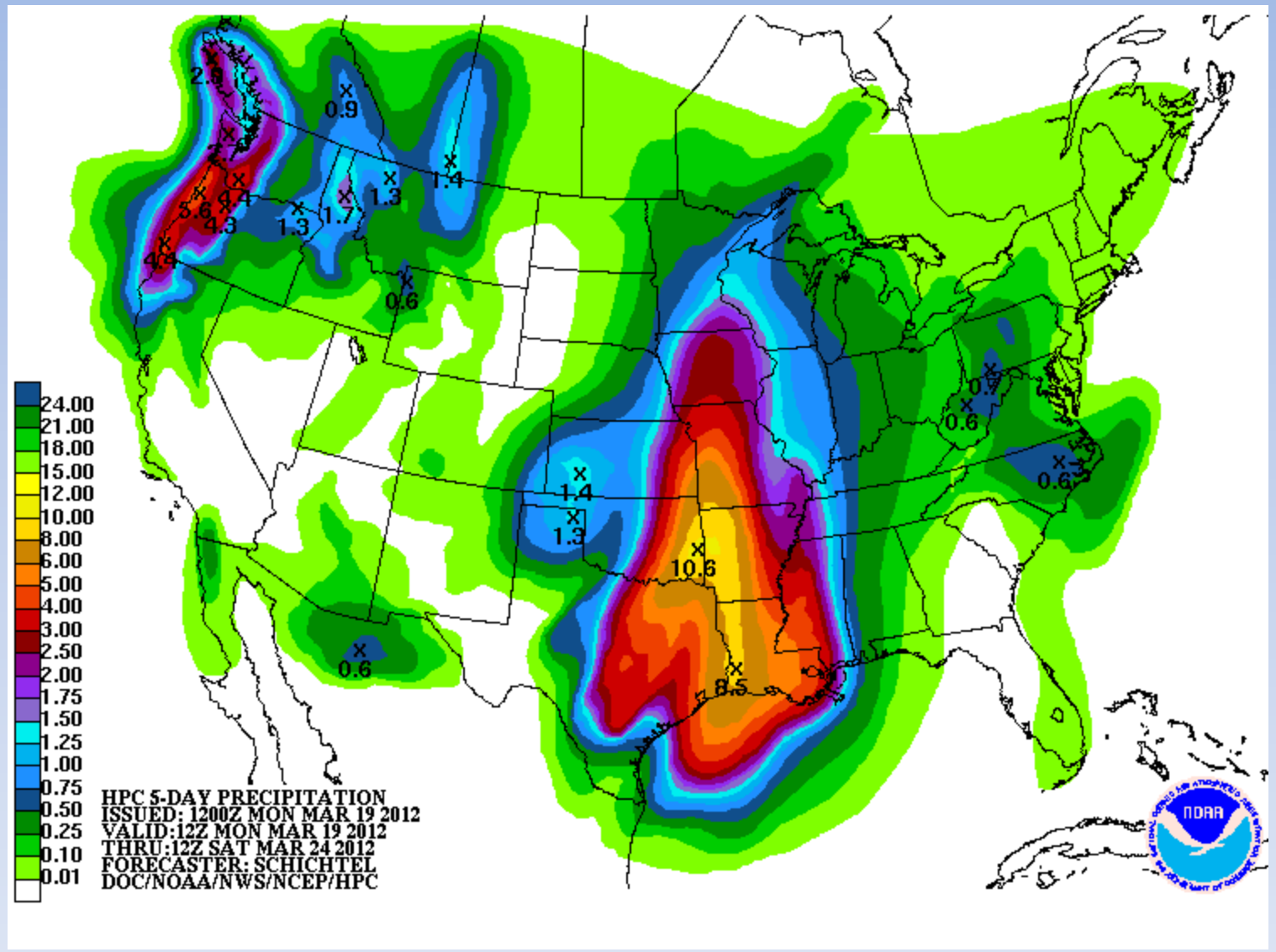

Elevation in FT NGVD
Jim Woodruff Actual & Projected 2012 Elevations
78.50
78.00
77.50
77.00
76.50
76.00
75.50
75.00
Maximum Operating Level
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
1-Oct
1-Nov
1-Dec
Actual data thru March 19, 2012
2012 Actual Elevation
Forecast Elevation



Actual data through 3-19-2012

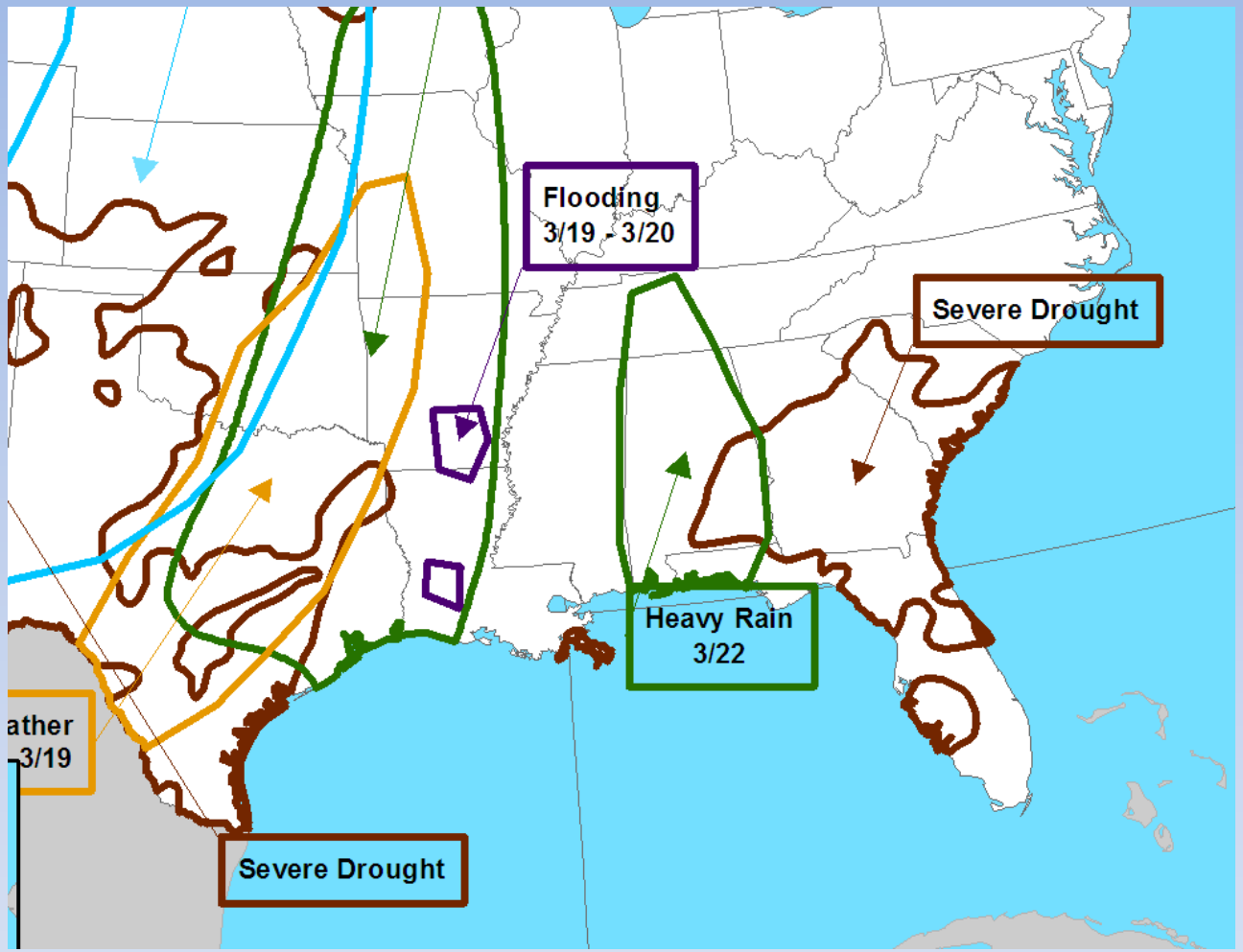
Add value of 1,856,000 acre-ft to include inactive storage.

5-Day Precipitation Forecast



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

Precipitation Outlook (3-7 days)

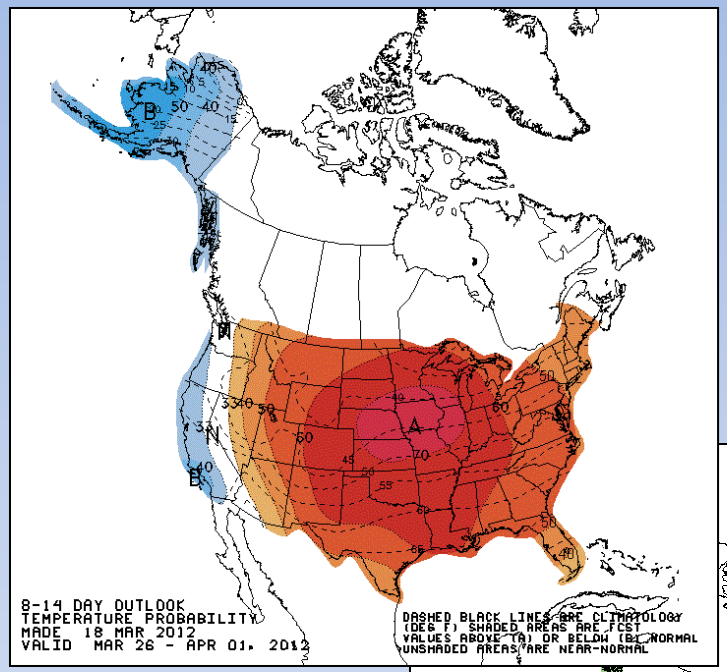


NWS
Day 3-7 U.S. Hazards Outlook
Made: 03/16/2012 3PM EDT
Valid: 03/19/2012-03/23/2012

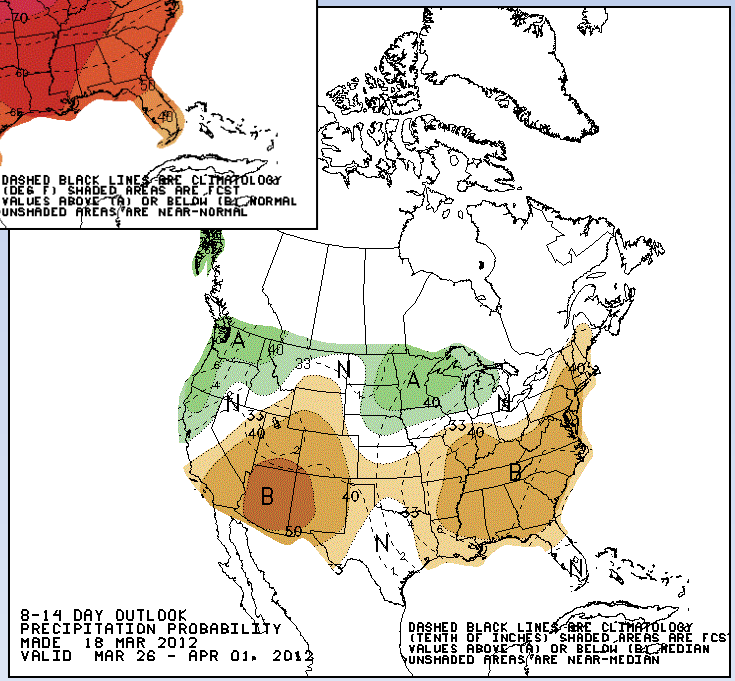
http://www.cpc.ncep.noaa.gov/

Temp and Precip Outlook (8-14 days)

8-14 day Temperature Outlook

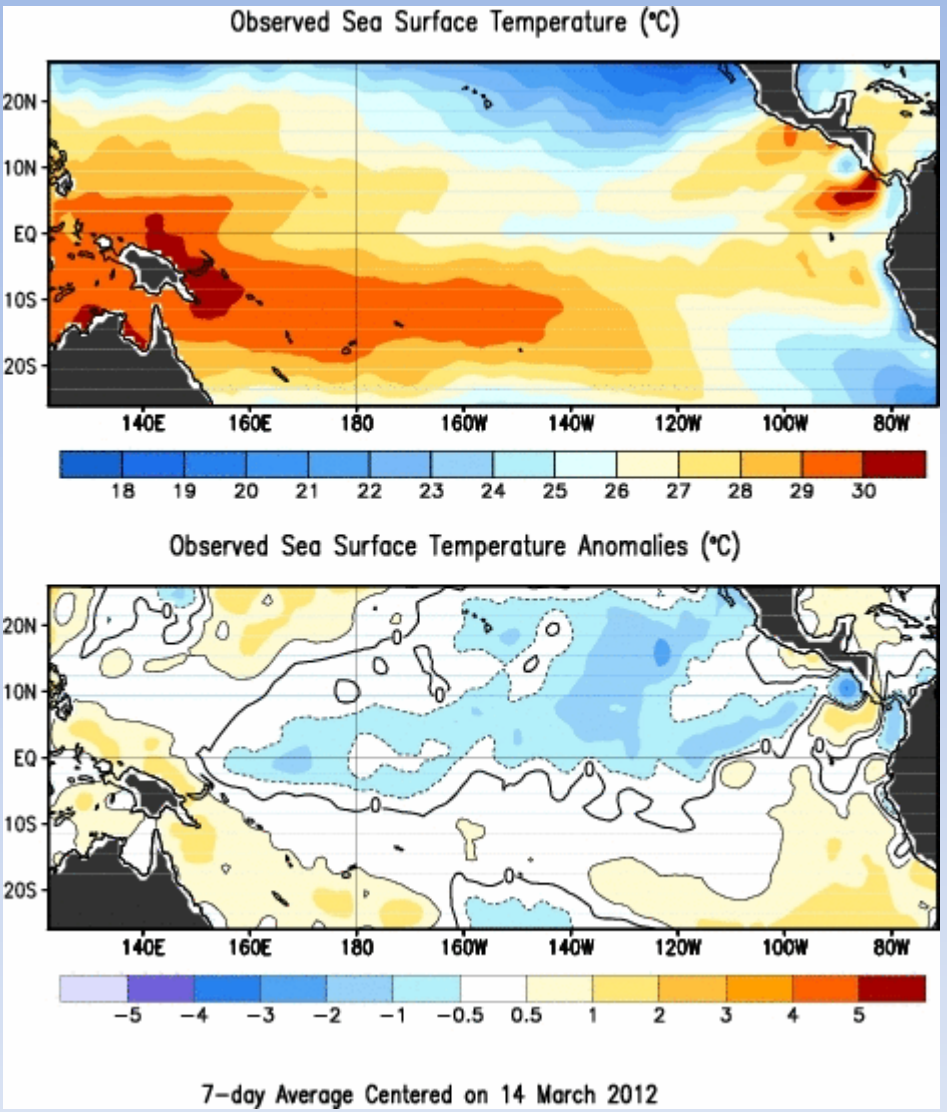


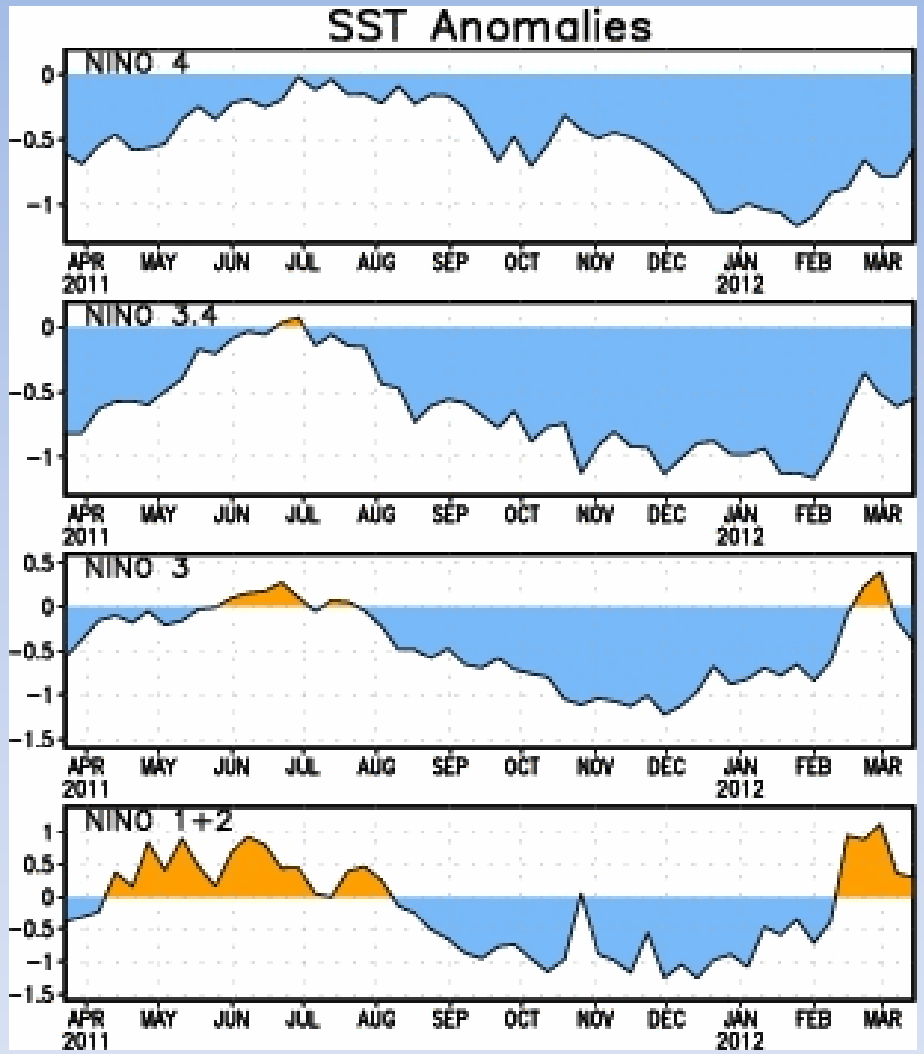
8-14 day Precip



http://www.cpc.ncep.noaa.gov/

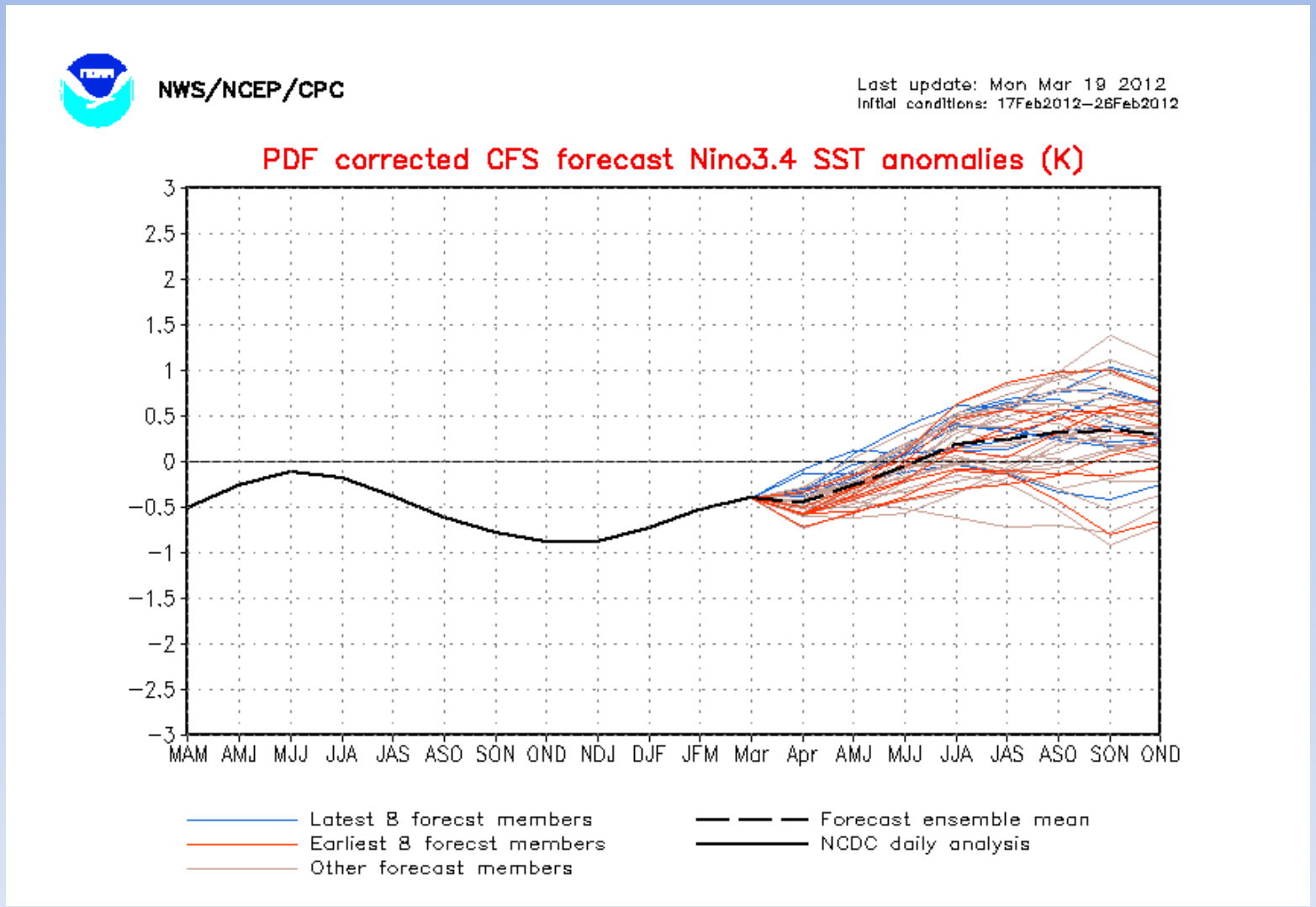
7-day average Pacific Ocean SST Anomalies





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

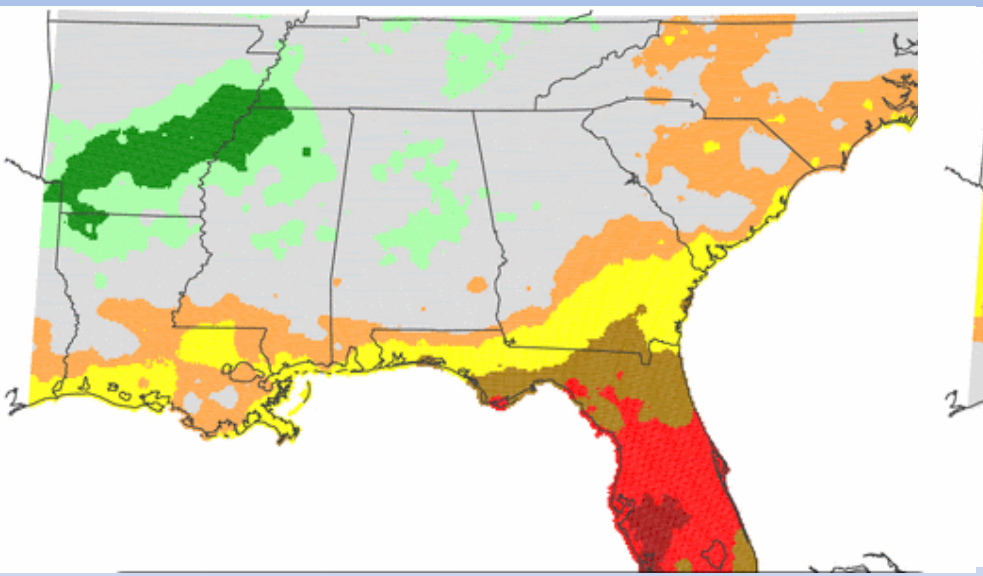
El Niño forecast

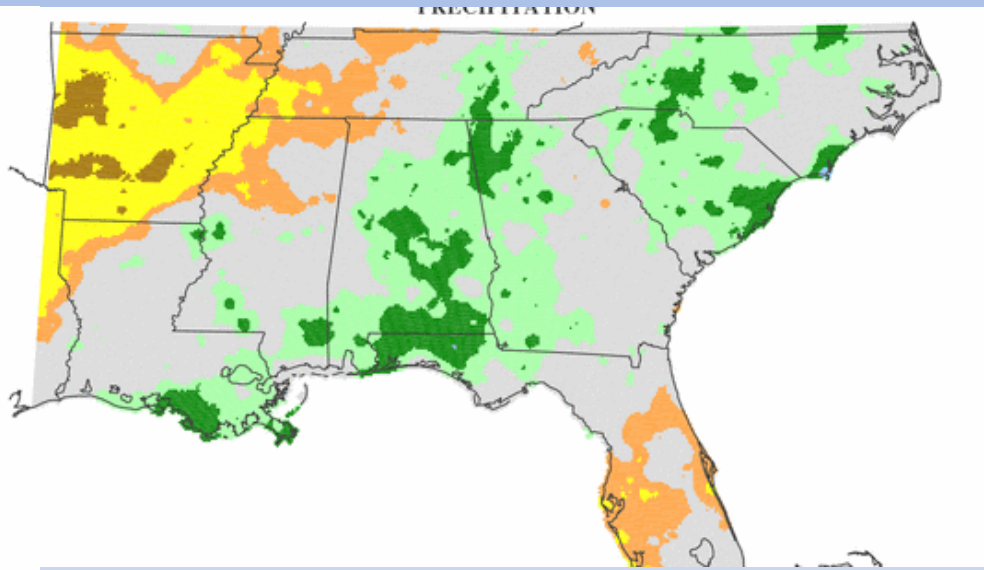


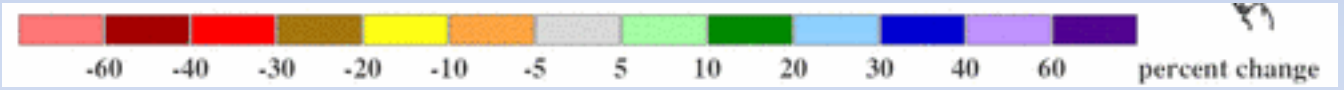
La Niña Composites

March

June

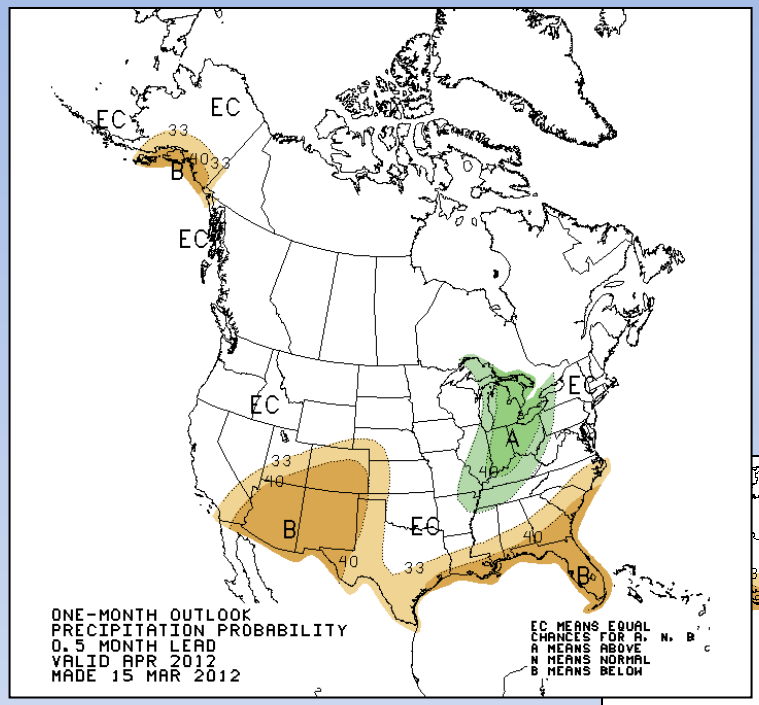




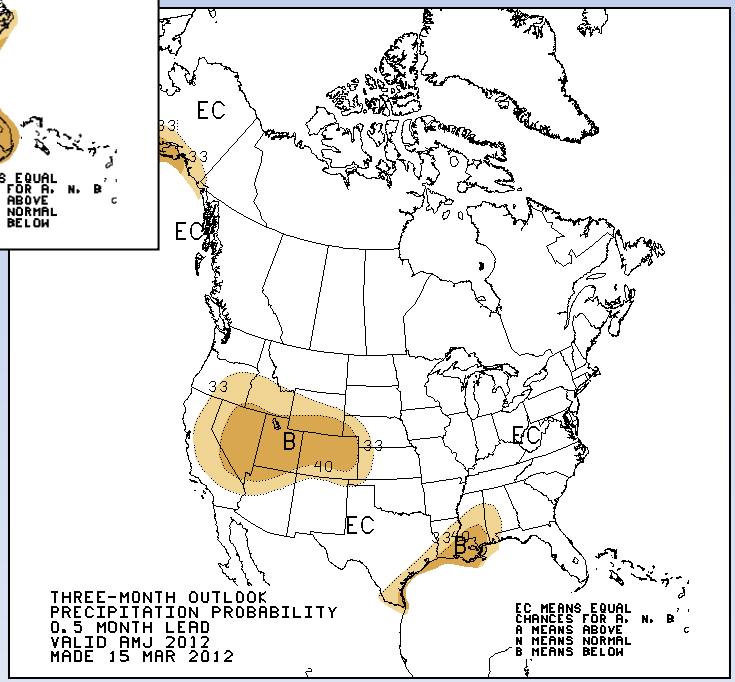


Precipitation Outlook

1-month



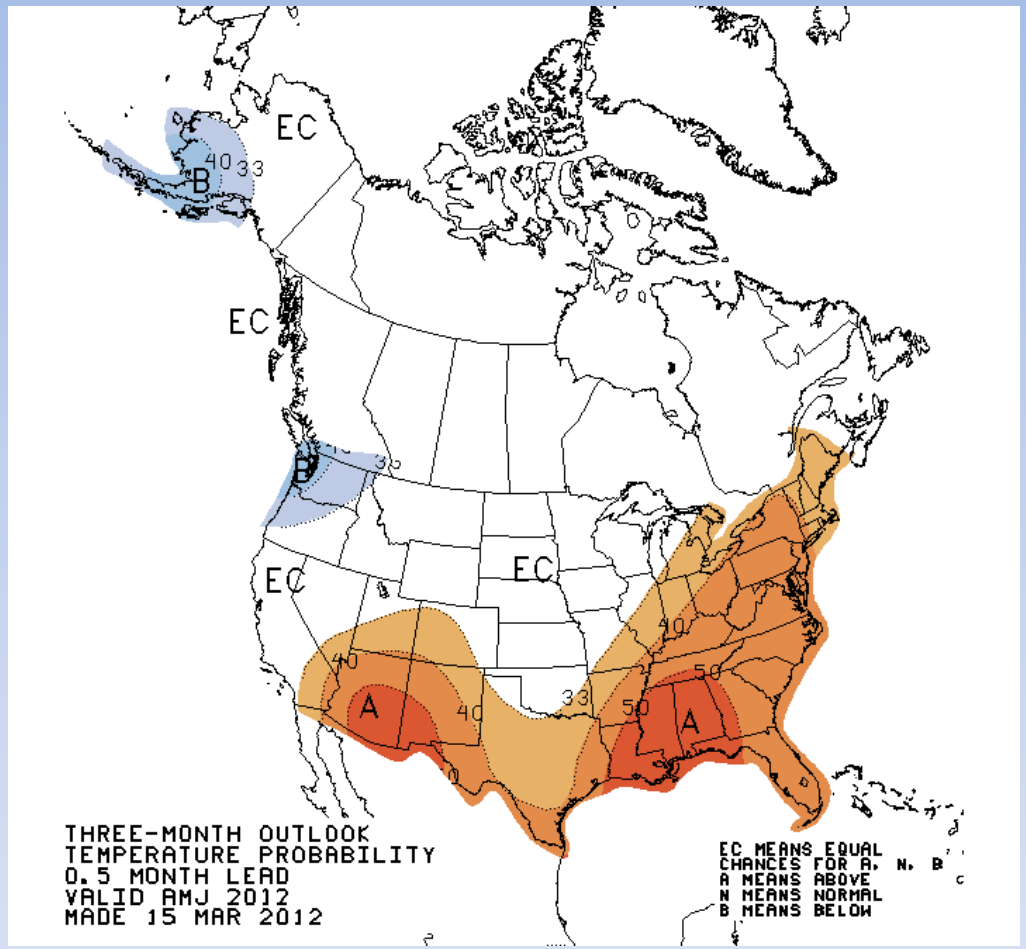
3-month (AMJ)



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

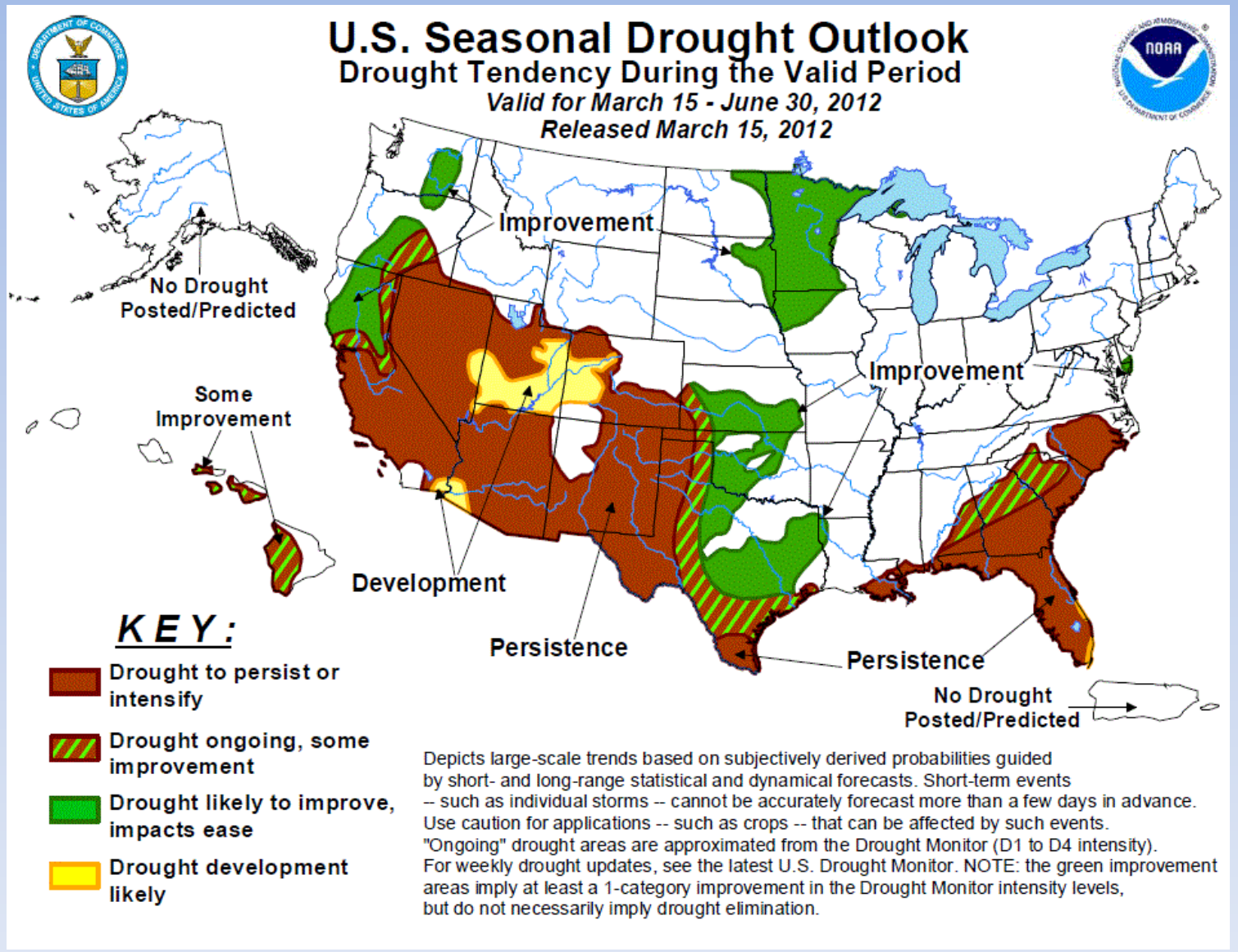
Temperature Outlook

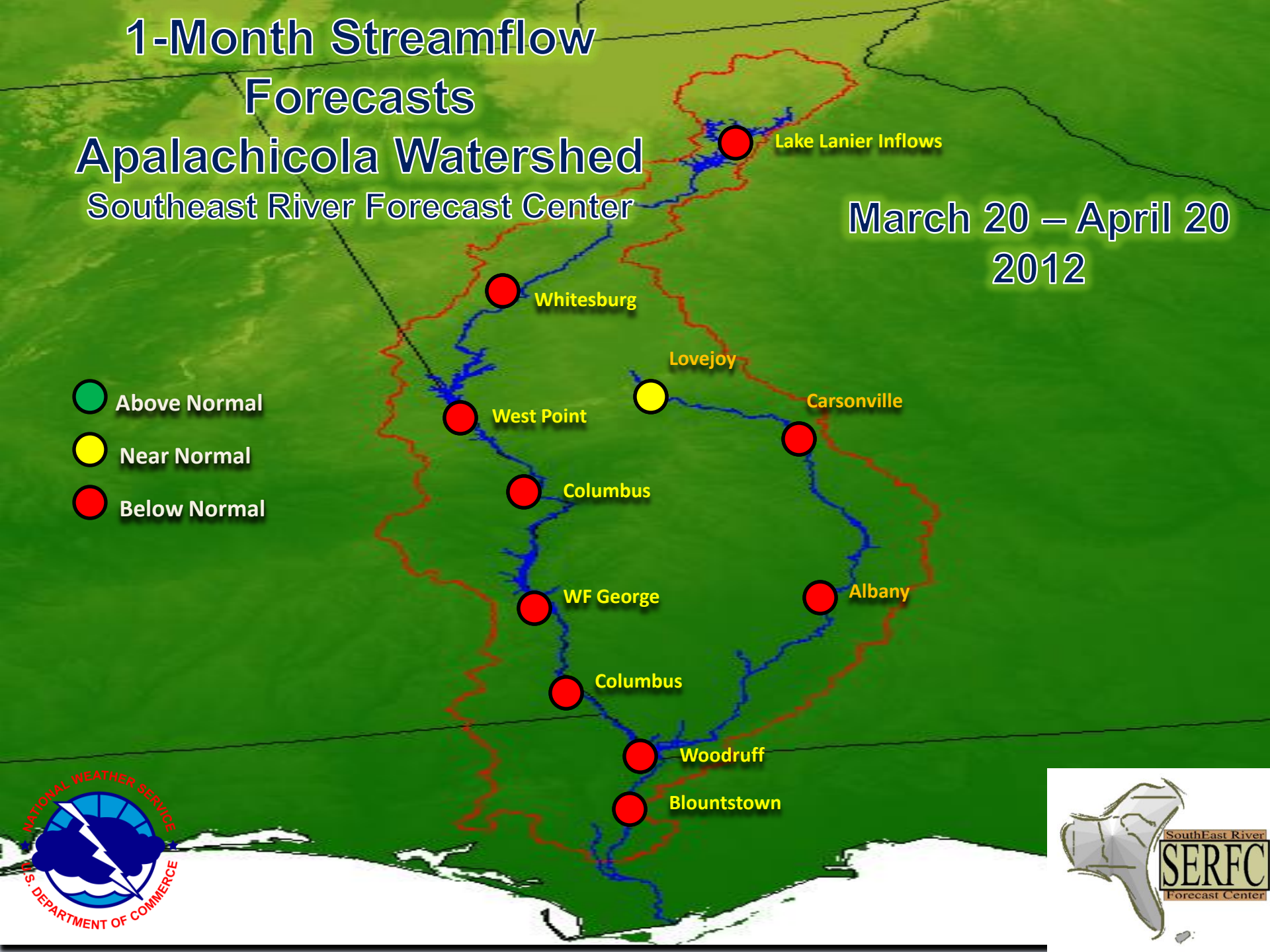
3-month (AMJ)



http://www.cpc.ncep.noaa.gov/

U.S. Drought Outlook

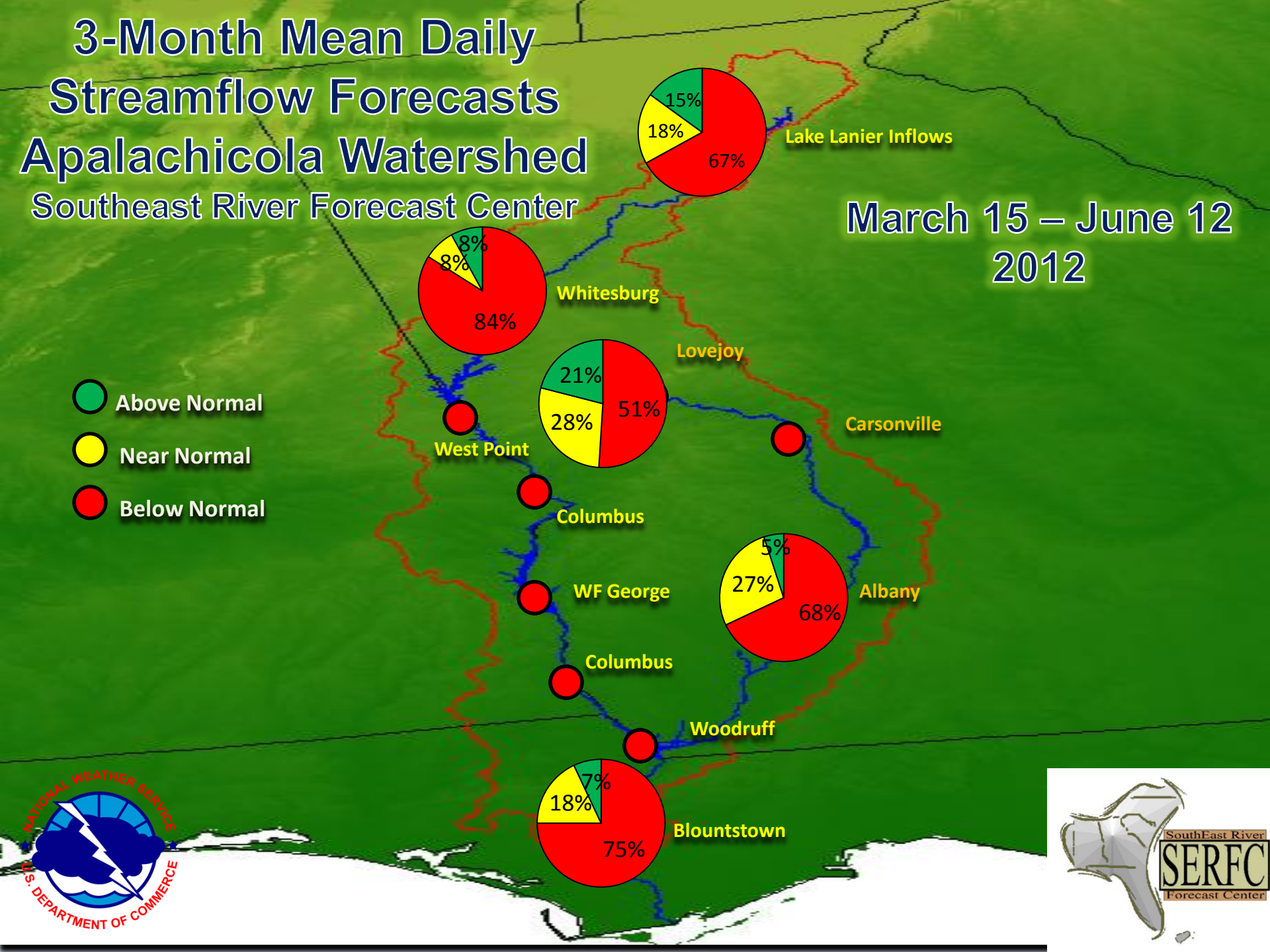



1-Month Streamflow Forecasts
Apalachicola Watershed
Southeast River Forecast Center
March 20 – April 20 2012
Above Normal
Near Normal
Below Normal
Lake Lanier Inflows
Whitesburg
Lovejoy
Carsonville
West Point
Columbus
WF George
Albany
Columbus
Woodruff
Blountstown
NATIONAL WEATHER SERVICE
U.S. DEPARTMENT OF COMMERCE
SouthEast River
SERFC
Forecast Center

3-Month Mean Daily Streamflow Forecasts Apalachicola Watershed

Southeast River Forecast Center

March 15 – June 12 2012



Summary

- Rains during the past 7 days have totaled less than 0.5 inches for most of the basin, with only the northern tip receiving more than 1.5 inches
- Drought conditions persist through most of the basin, with exceptional and extreme drought in the coastal plain and less severe drought in the panhandle and above the fall line
- Streamflows have recovered to normal or 10 to 24% of normal levels in the northern part of the basin, but remain very low to the south
- Lake Lanier levels are at the bottom of action zone 3, but is projected to increase to the top of zone 3 by mid April
- Composite storage for the basin is near the top of action zone 2, but only West Point has any flood storage

Summary

- La Niña conditions have diminished and the forecast is for neutral conditions to continue through December
- We should keep in mind, however, that there is a small probability that La Niña will return
- The near term precipitation outlook is for heavy rain on the western portion of the basin and continuing severe drought for the eastern part
- One- to three-month outlooks suggest persistent drought and above normal temperatures throughout the basin
- Streamflow forecasts are for 50 to 85% probabilities of below normal levels for the next three months

References

Speakers

Pam Knox, UGA

Brian McCallum, USGS

Bailey Crane, US ACE

Jeffry Dobur, SERFC

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

Next Briefings

Every 3 weeks

10 April

1 May

22 May


Thanks!