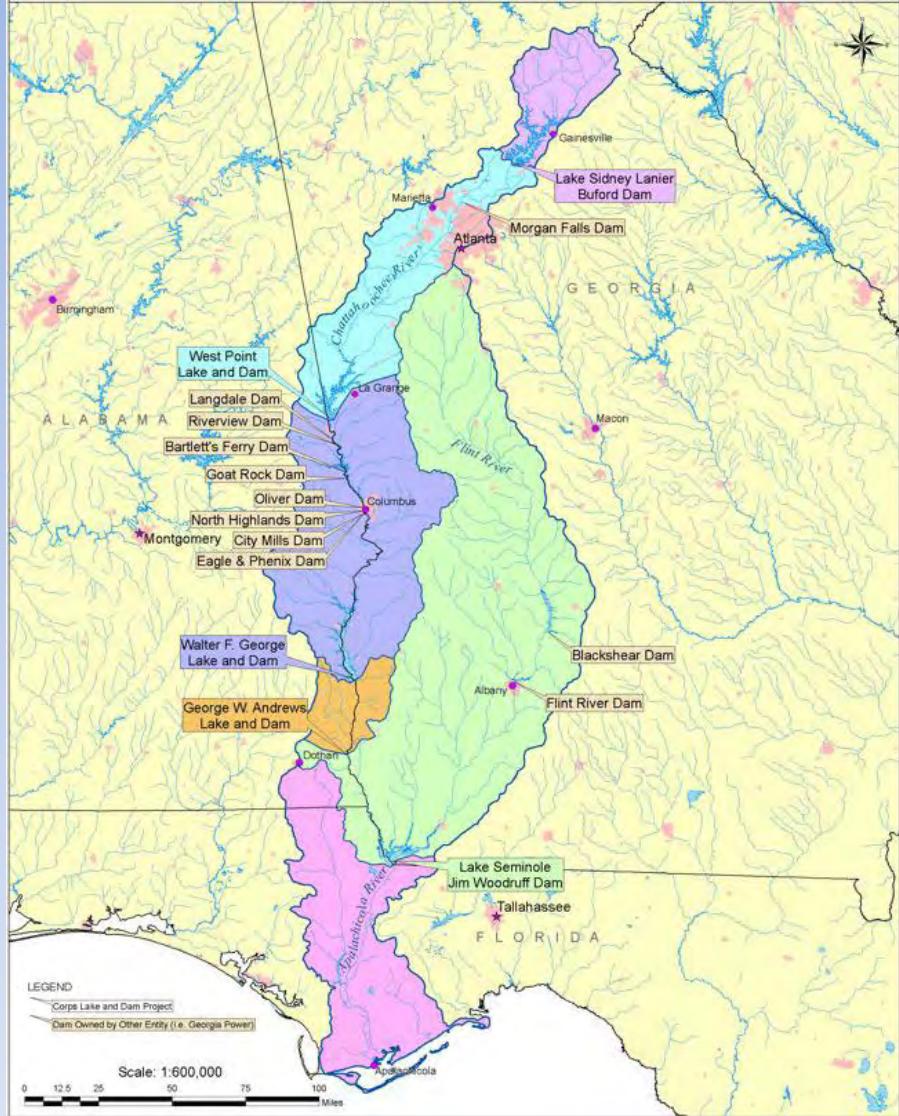
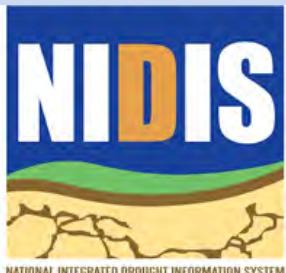


National Integrated Drought Information System

Southeast US Pilot for Apalachicola- Flint-Chattahoochee River Basin

5 February 2013



Outline

Welcome – Pam Knox, University of Georgia

Current drought status and how we got here – David Zierden, Florida Climate Center, FSU

Streamflows and groundwater – Chris Smith Gotvald, USGS

Reservoir status and projections – Bailey Crane, US ACE

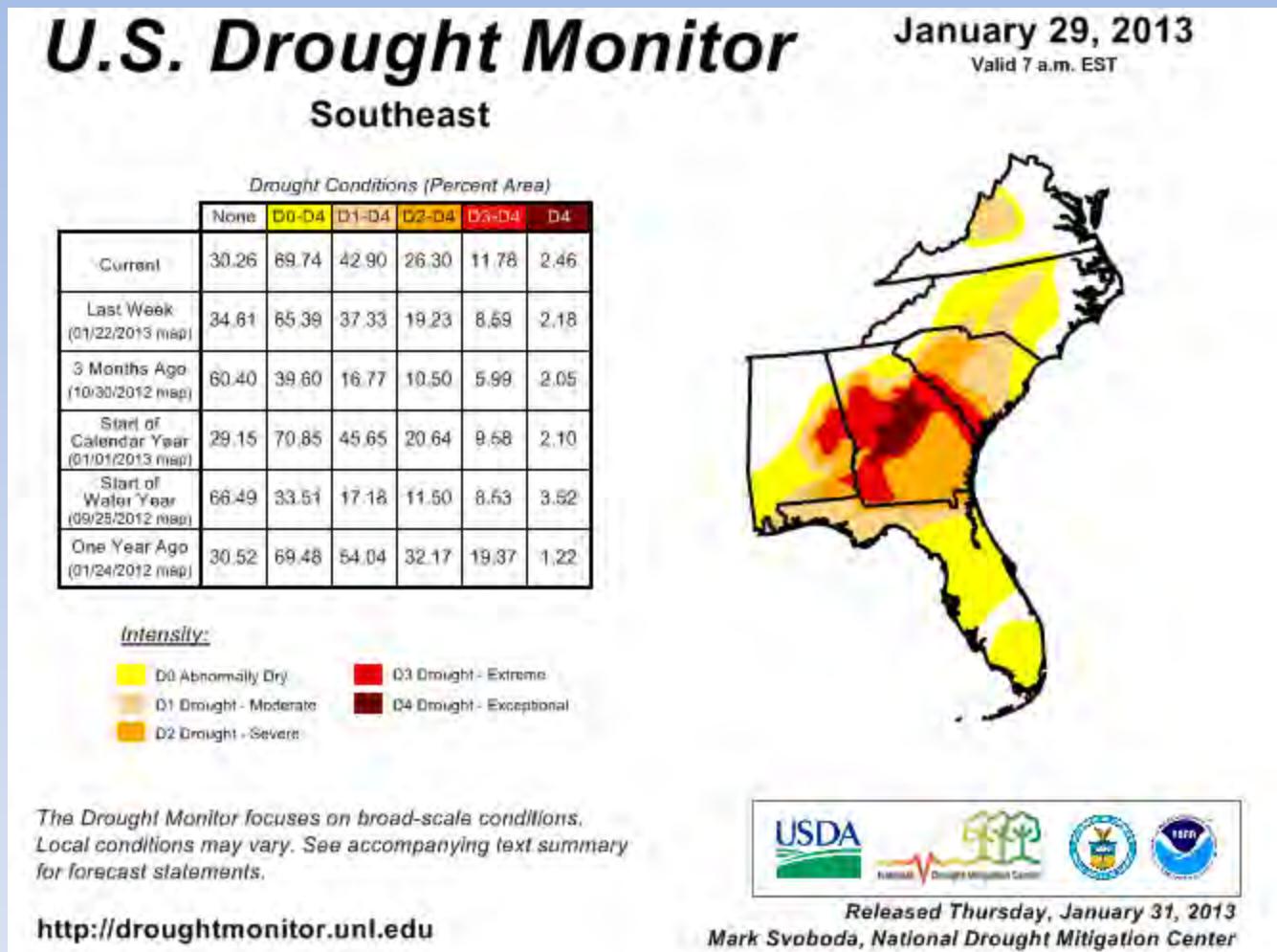
Apalachicola Bay Salinity – Jenna Harper, ANERR

Seasonal forecasts and outlooks – David Zierden, FSU

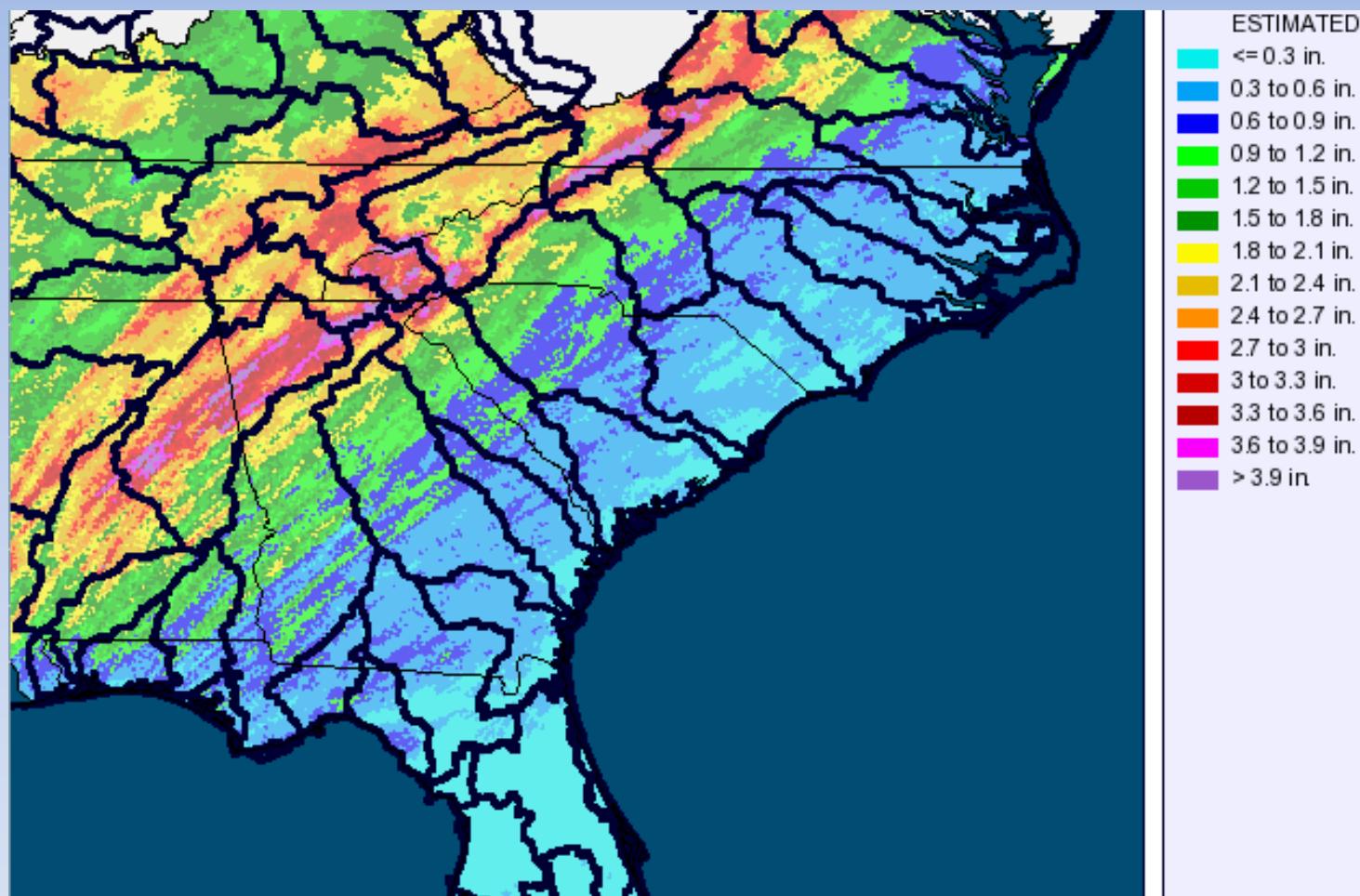
Streamflow forecasts – Todd Hamill, SE River Forecast Center, NOAA

Summary and Discussion – Pam Knox, UGA

Current drought status from Drought Monitor

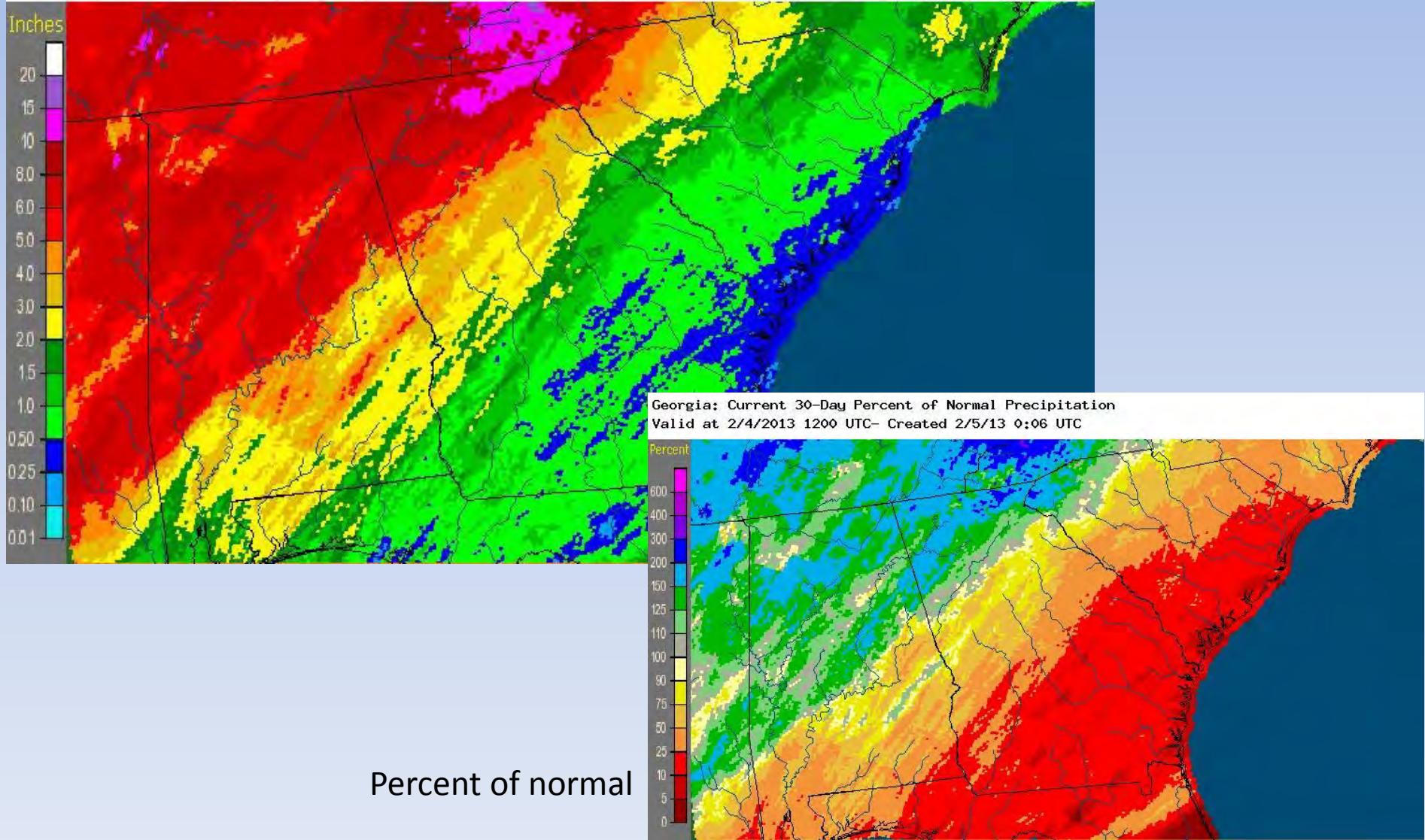


7 Day Precipitation Totals



30-Day Rainfall Totals

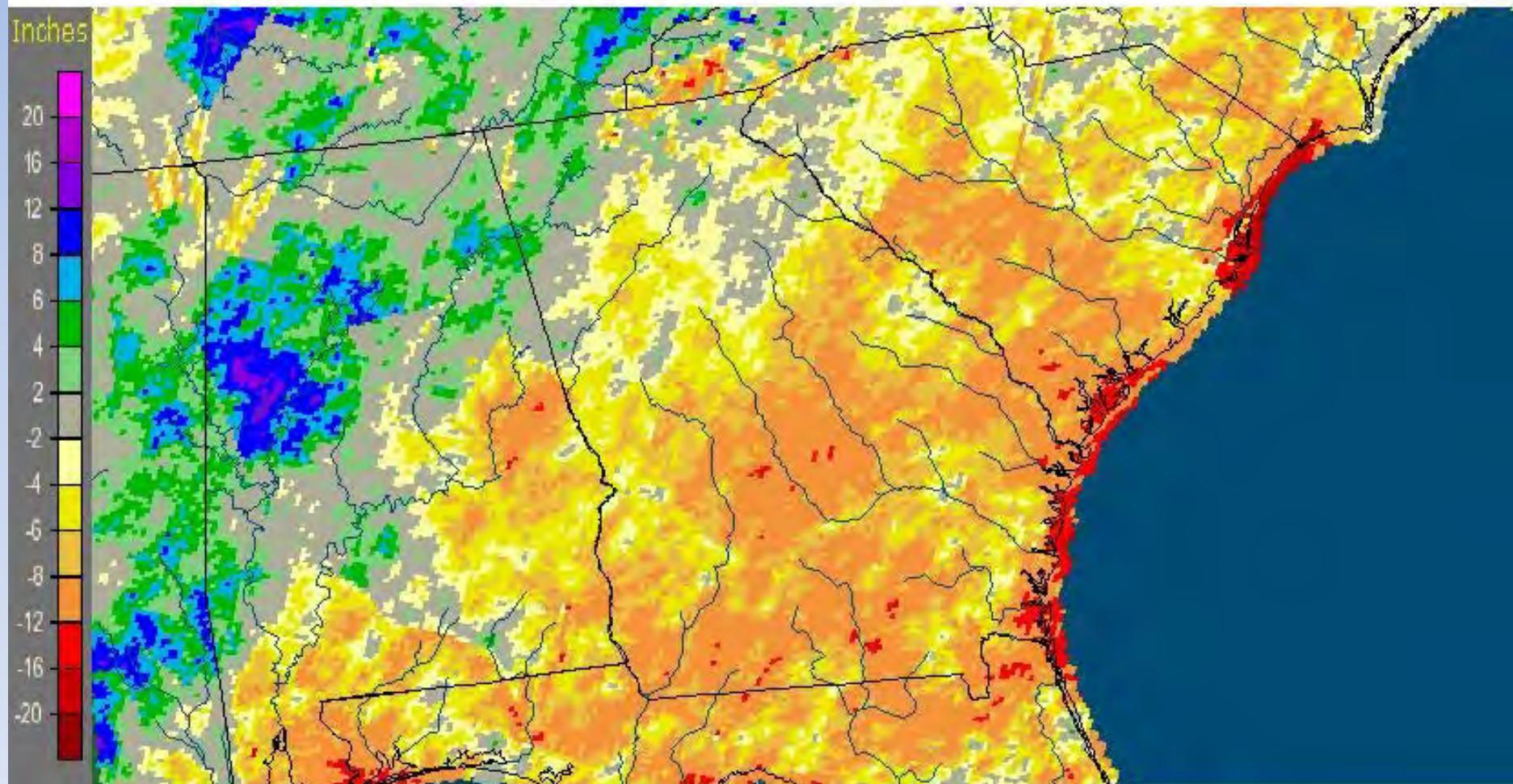
Georgia: Current 30-Day Observed Precipitation
Valid at 2/4/2013 1200 UTC- Created 2/5/13 0:04 UTC



180-day Rainfall Deficits

Georgia: Current 180-Day Departure from Normal Precipitation

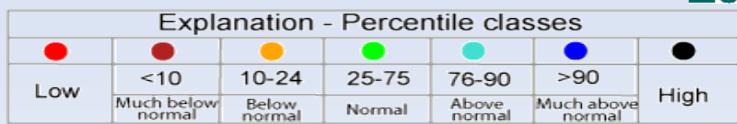
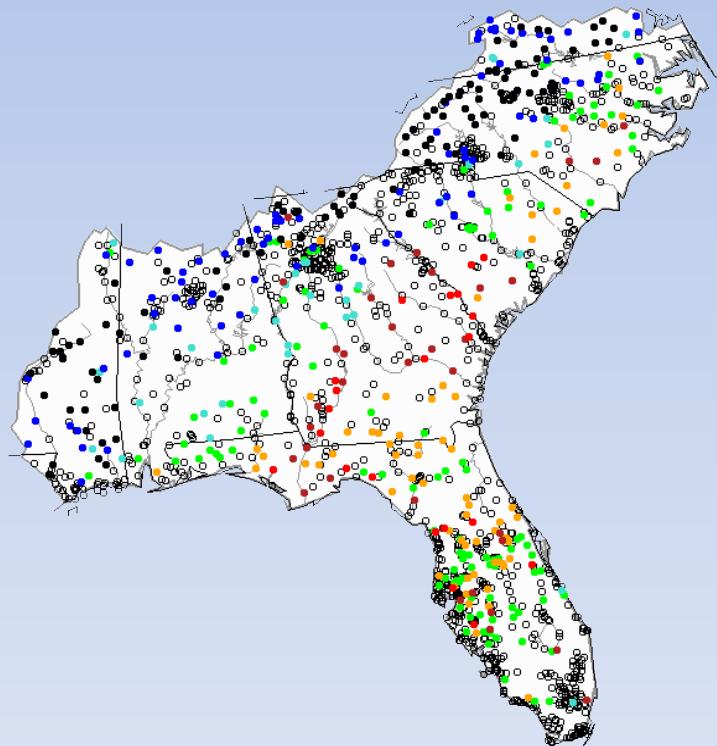
Valid at 2/4/2013 1200 UTC - Created 2/5/13 0:19 UTC



Realtime stream flow compared with historical monthly averages

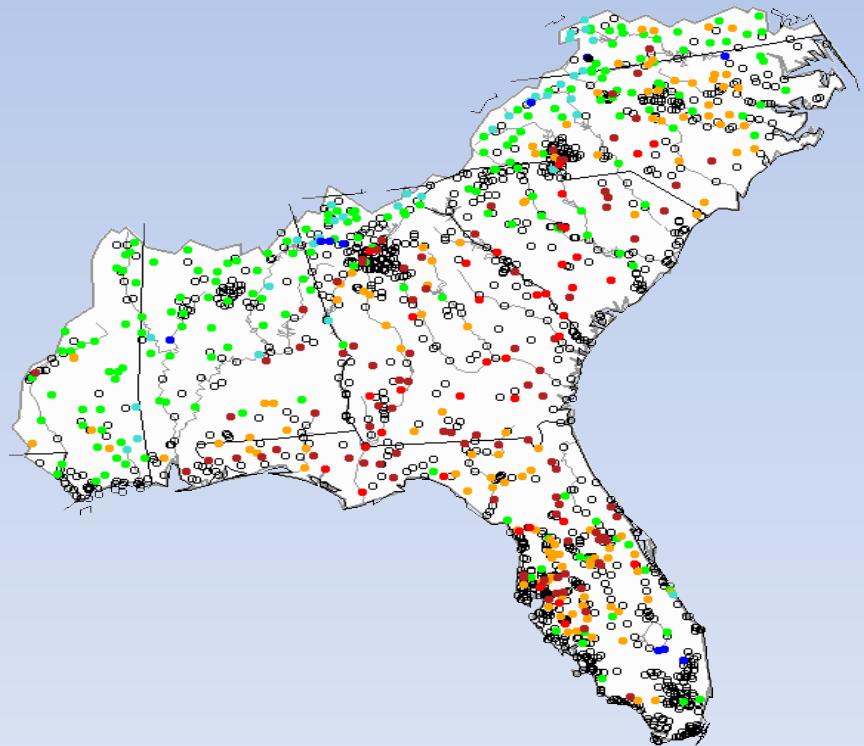
Previous Brief:

Friday, January 18, 2013 07:30ET



Current:

Monday, February 04, 2013 11:30ET



<http://waterwatch.usgs.gov>

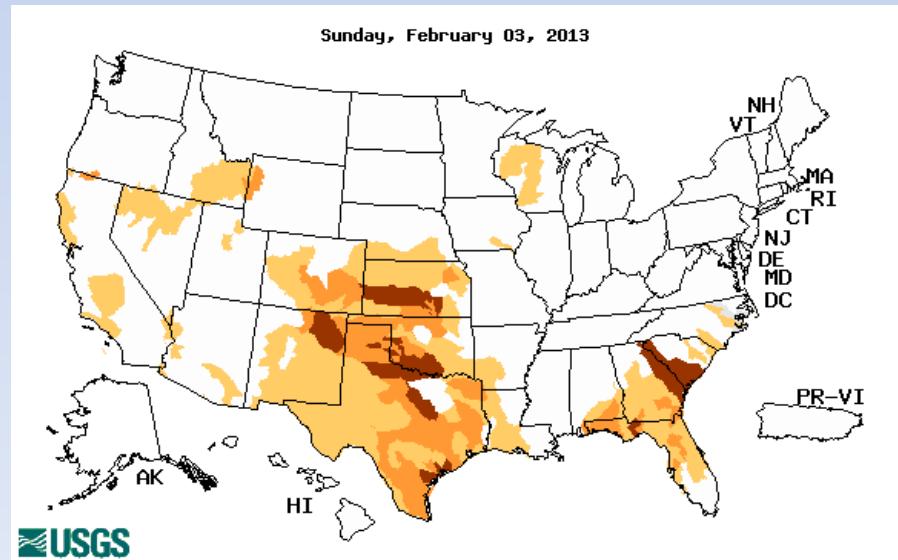
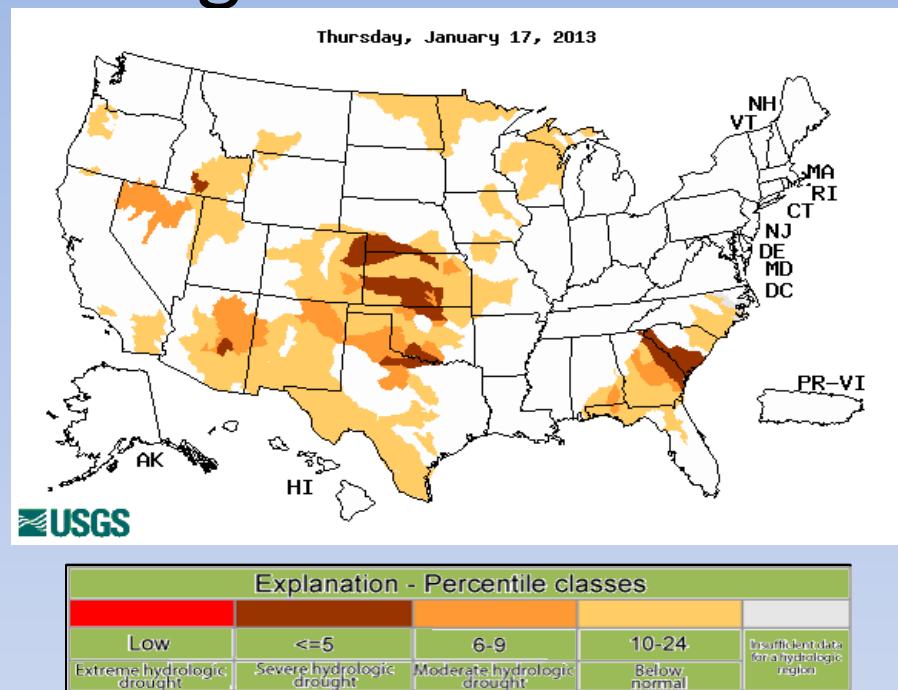
Below Normal 7-day Average Streamflows

Previous brief:

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

Current:

<http://waterwatch.usgs.gov>



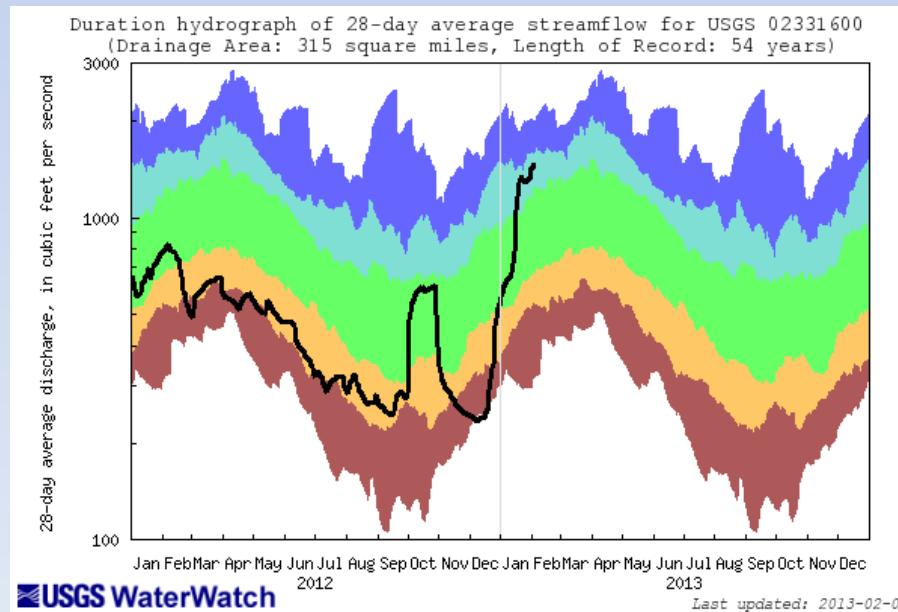
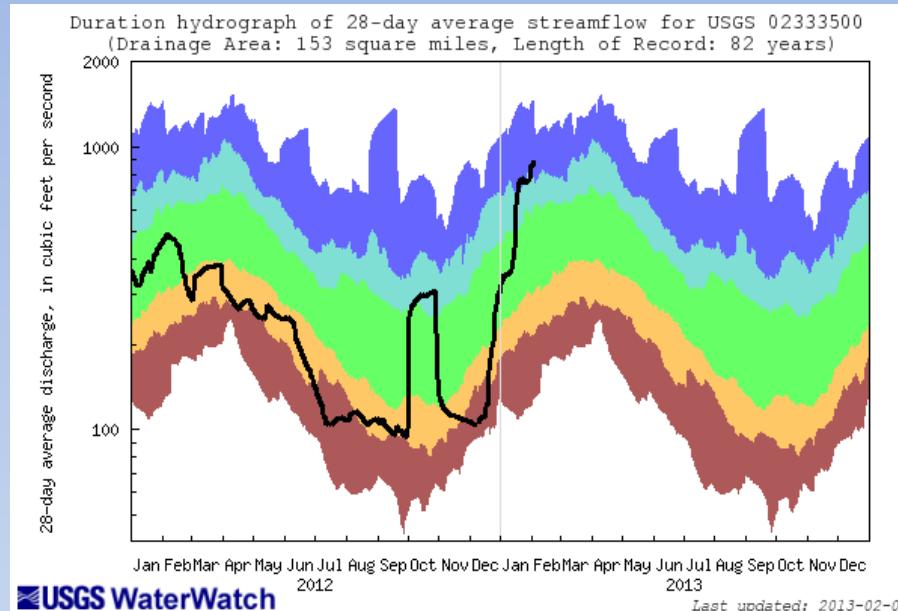
Lake Lanier Inflows

Chestatee near
Dahlonega
(02333500)

<http://waterwatch.usgs.gov>

Chattahoochee near
Cornelia (02331600)

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	



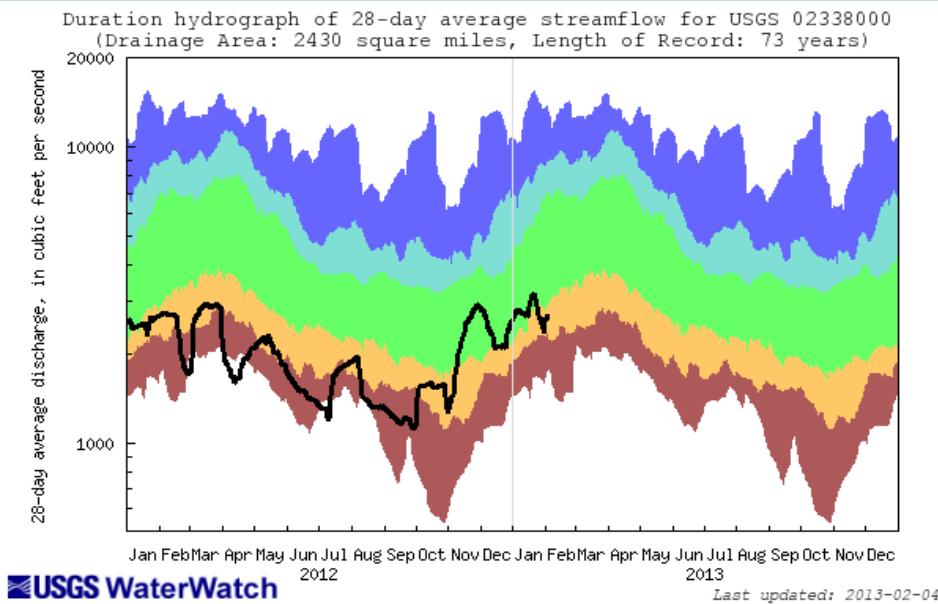
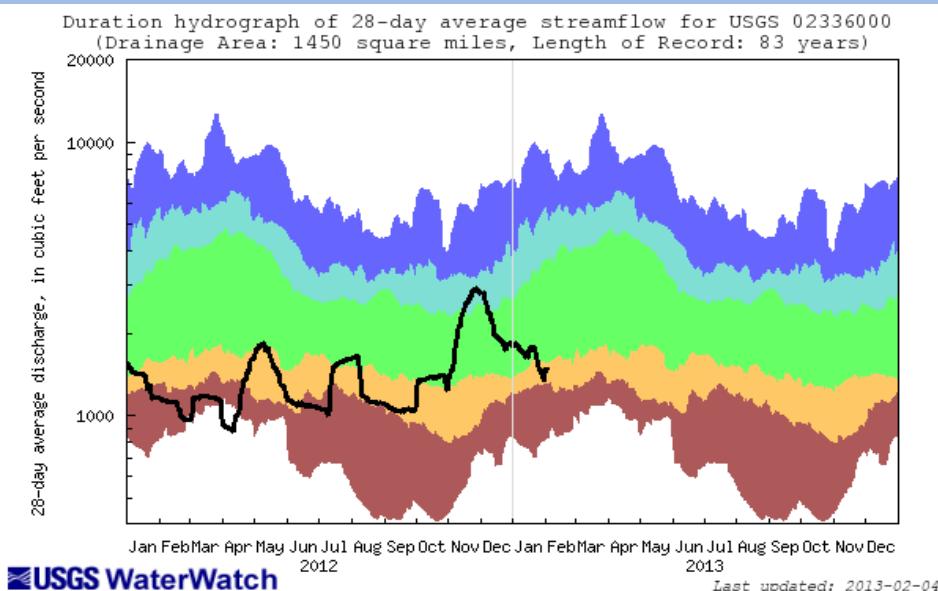
Current Streamflows

Chattahoochee at Atlanta (02336000)

<http://waterwatch.usgs.gov>

Chattahoochee near Whitesburg (02338000)

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	



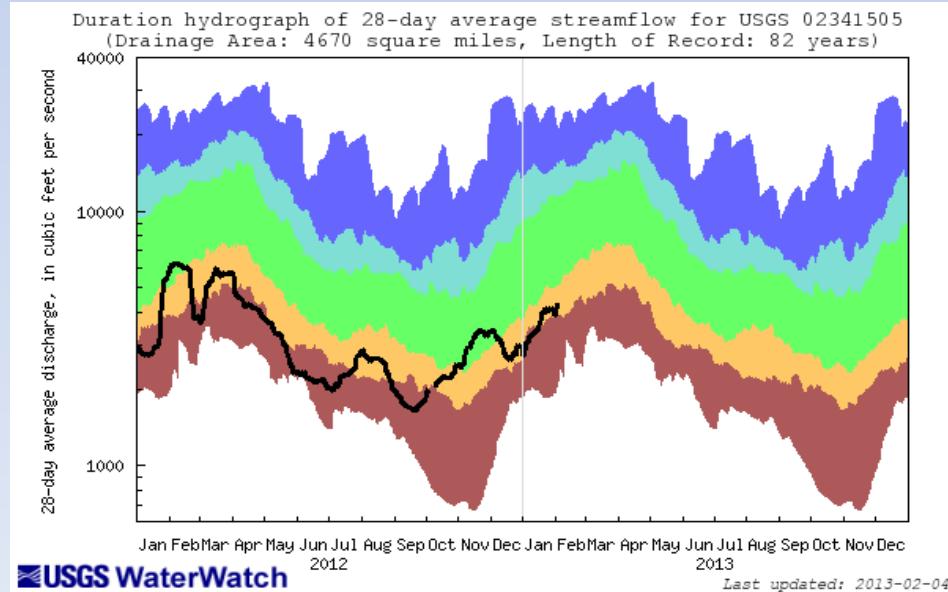
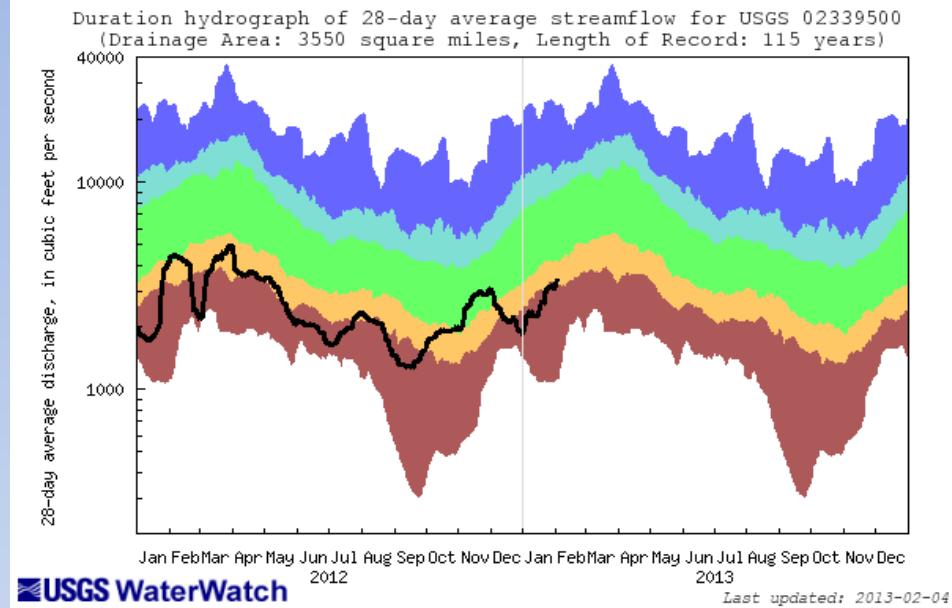
Current Streamflows

Chattahoochee at West Point (02339500)

<http://waterwatch.usgs.gov>

Chattahoochee near Columbus (02341505)

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	



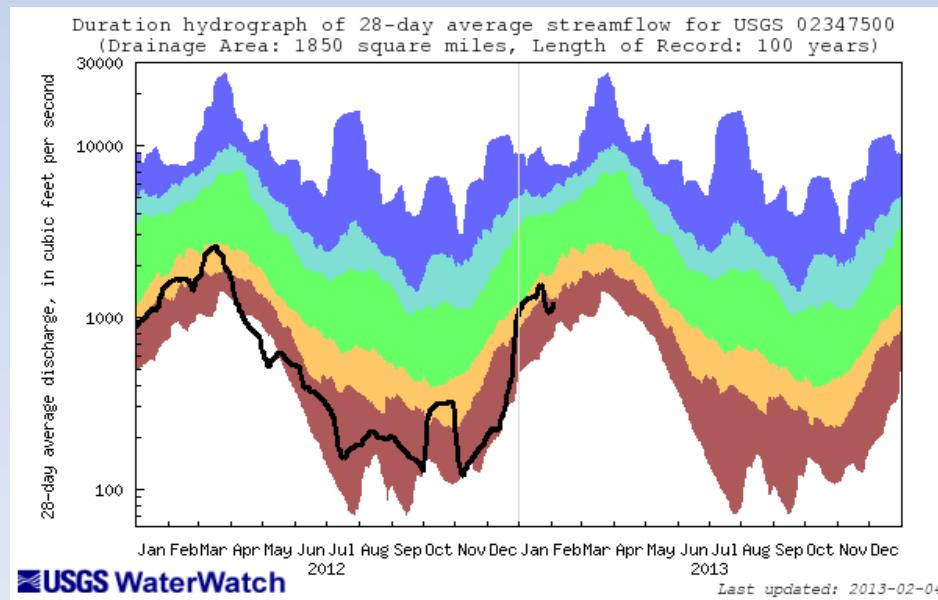
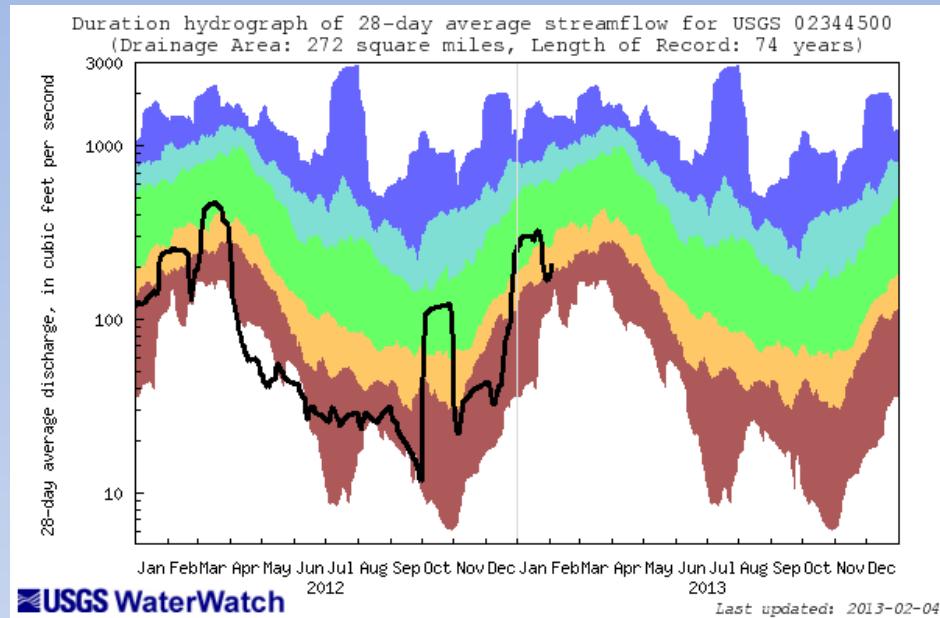
Current Streamflows

Flint River near Griffin
(02344500)

<http://waterwatch.usgs.gov>

Flint River near
Carsonville
(02347500)

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	

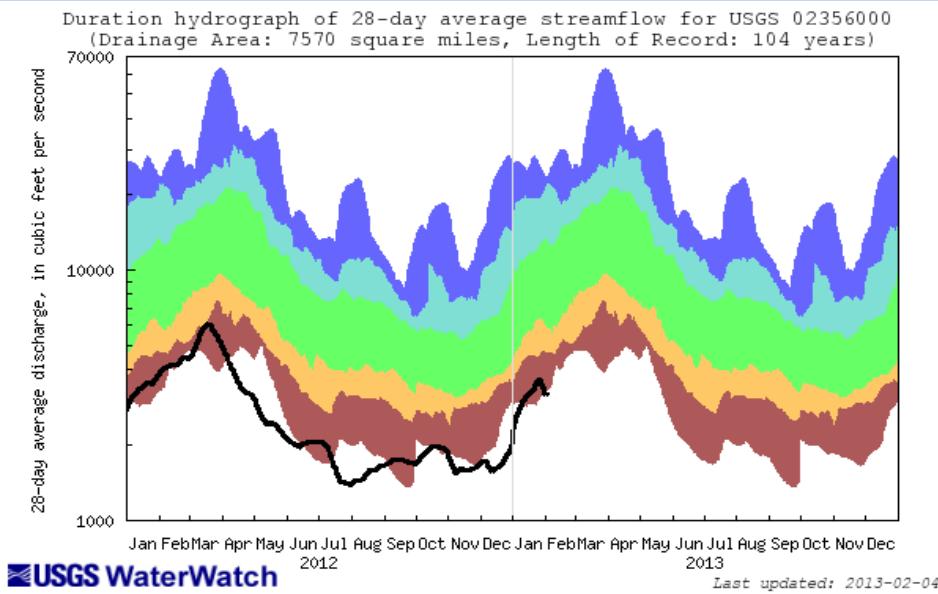
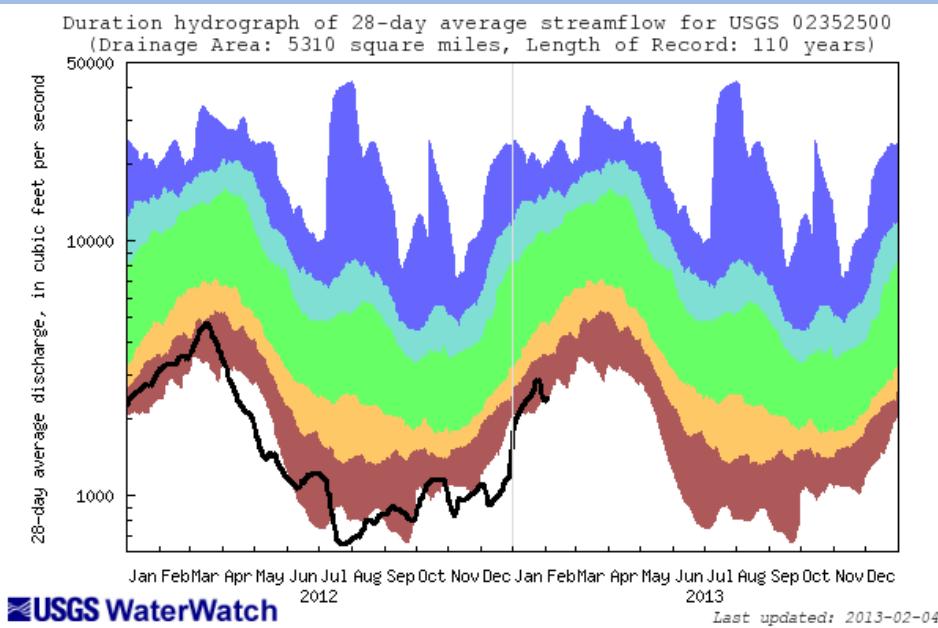
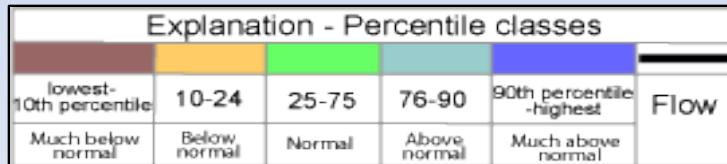


Current Streamflows

Flint River at Albany (02352500)

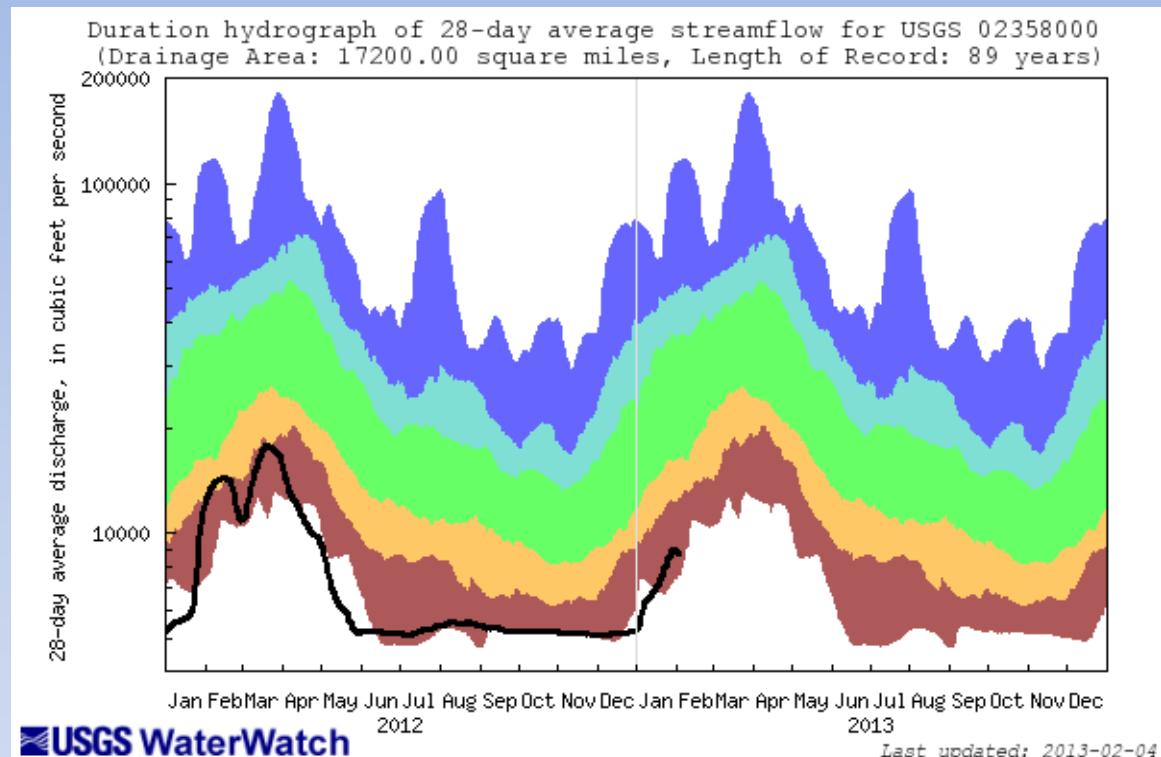
<http://waterwatch.usgs.gov>

Flint at Bainbridge (02356000)



Streamflows

Apalachicola at
Chattahoochee
(02358000)

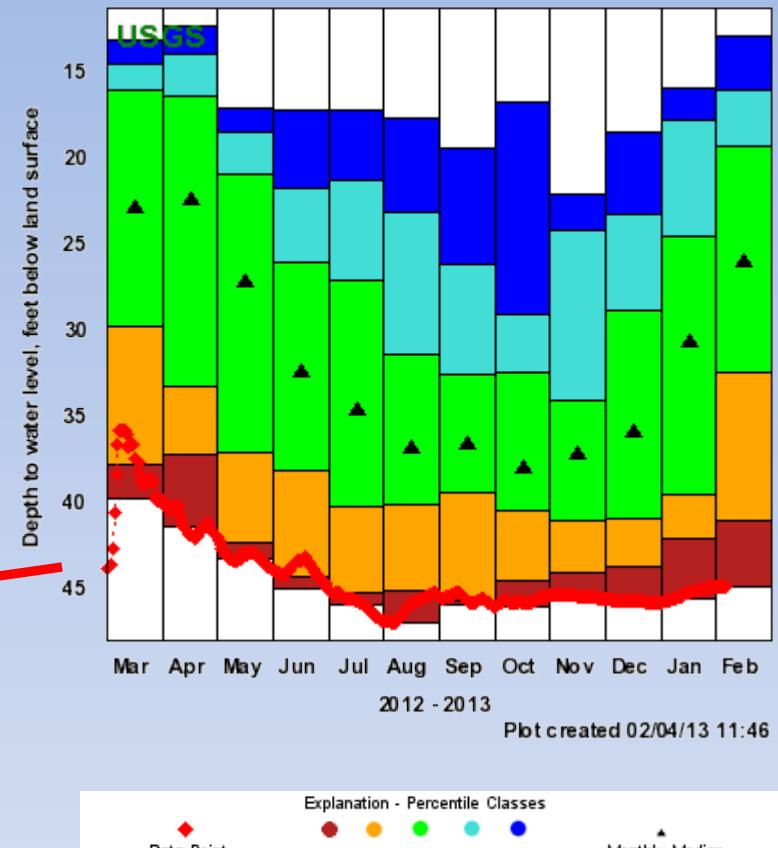
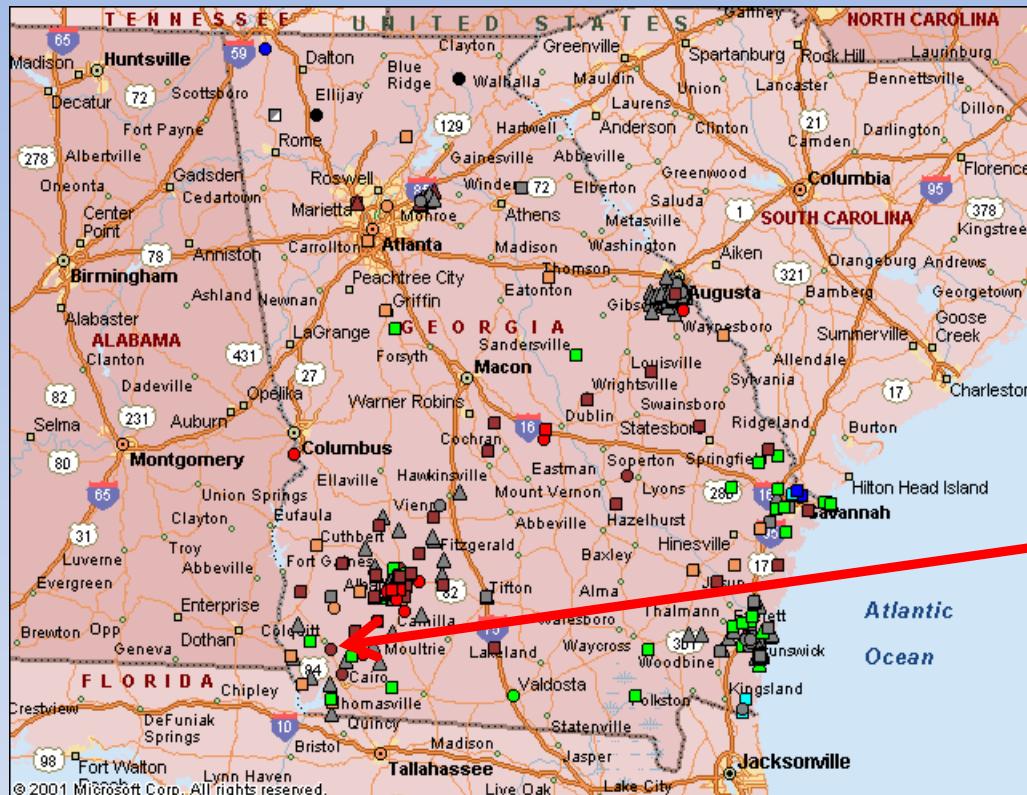


<http://waterwatch.usgs.gov>

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

310651084404501 - 08G001



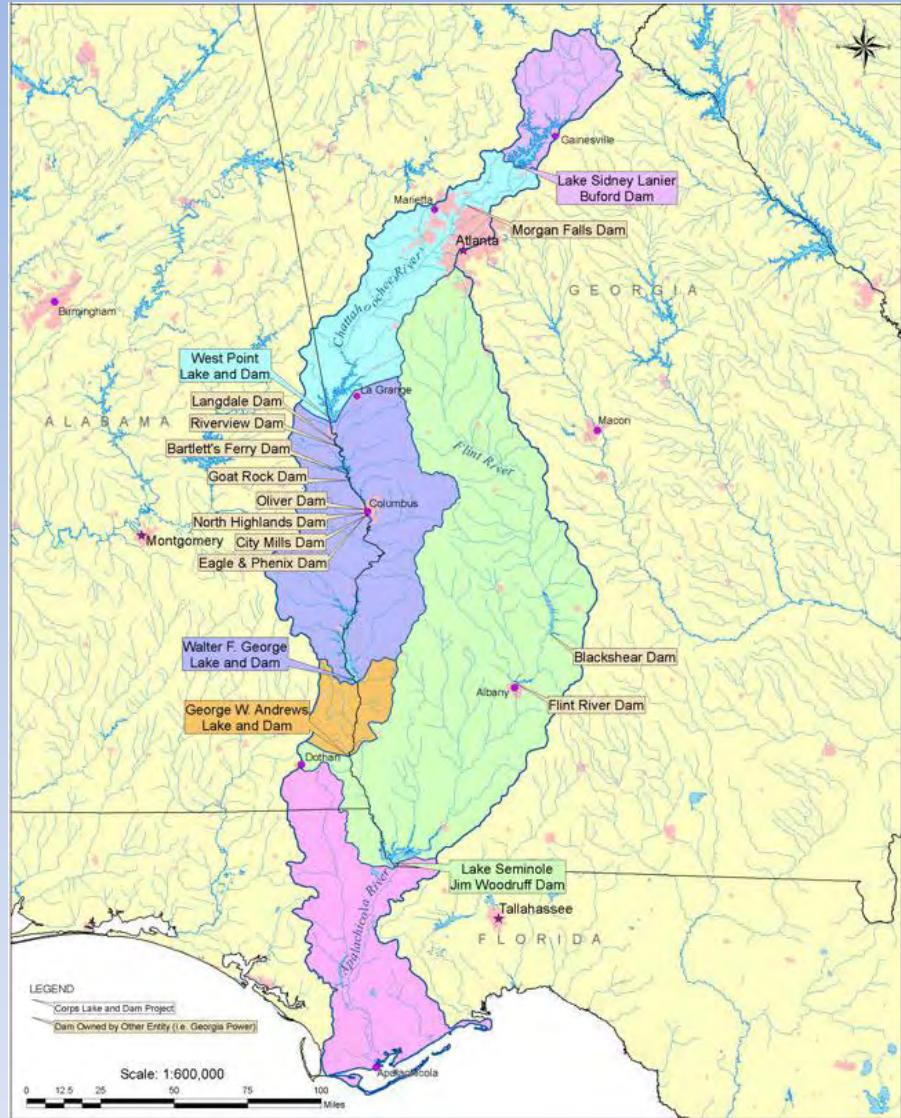
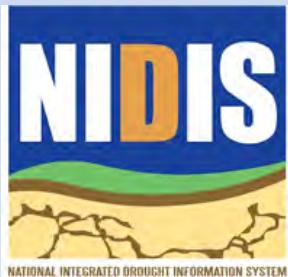
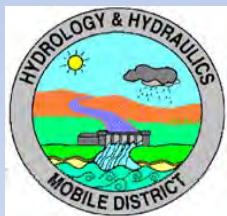
Explanation - Percentile classes (symbol color based on most recent measurement)

	●	●	●	●	●	●	●	Wells	Springs
Low	<10	10-24	25-75	76-90	>90			Real-Time	■
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal	High	Not Ranked	Continuous	■
						△		Periodic Measurements	■

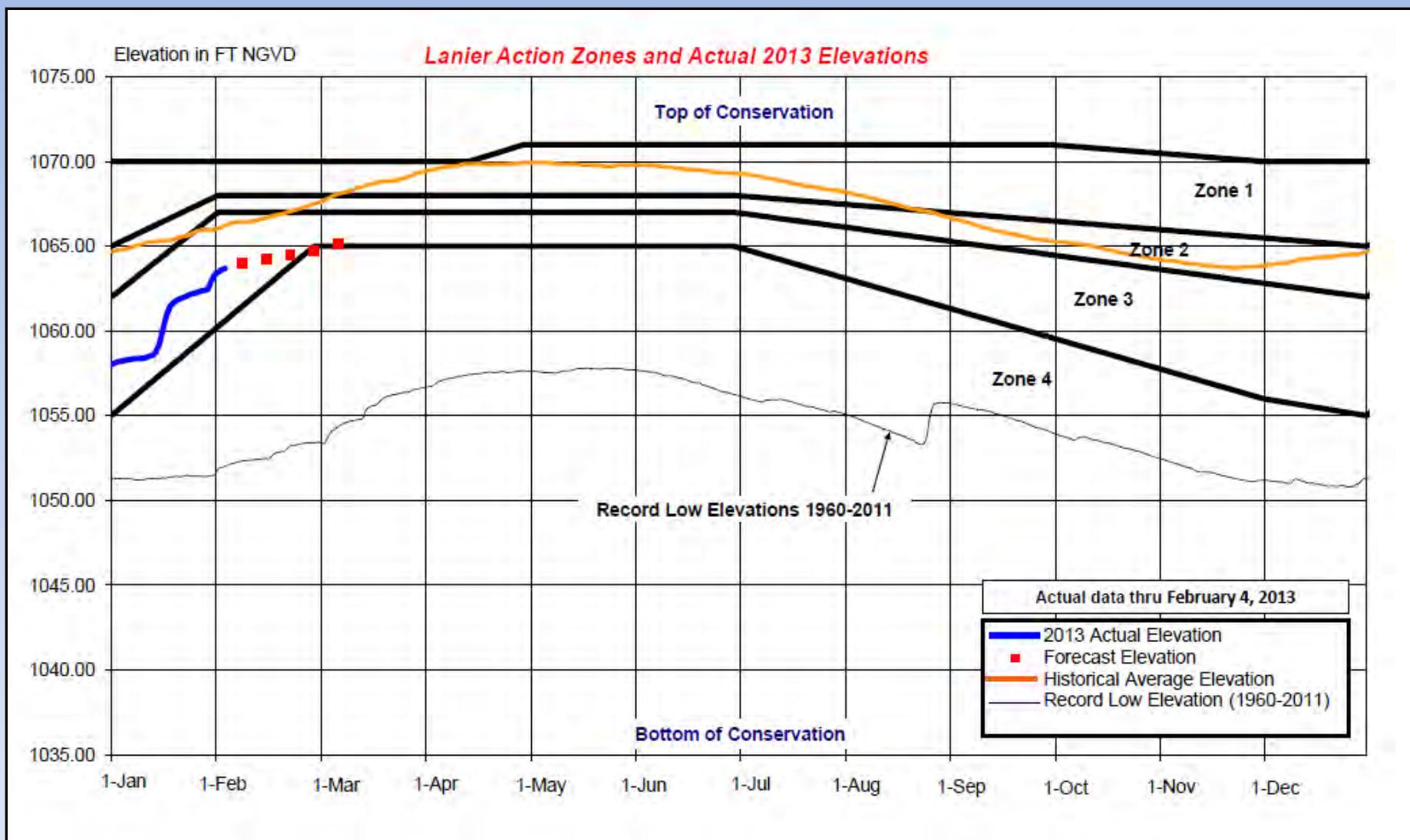
Miller County, GA
(Upper Floridan Aquifer)

<http://groundwaterwatch.usgs.gov>

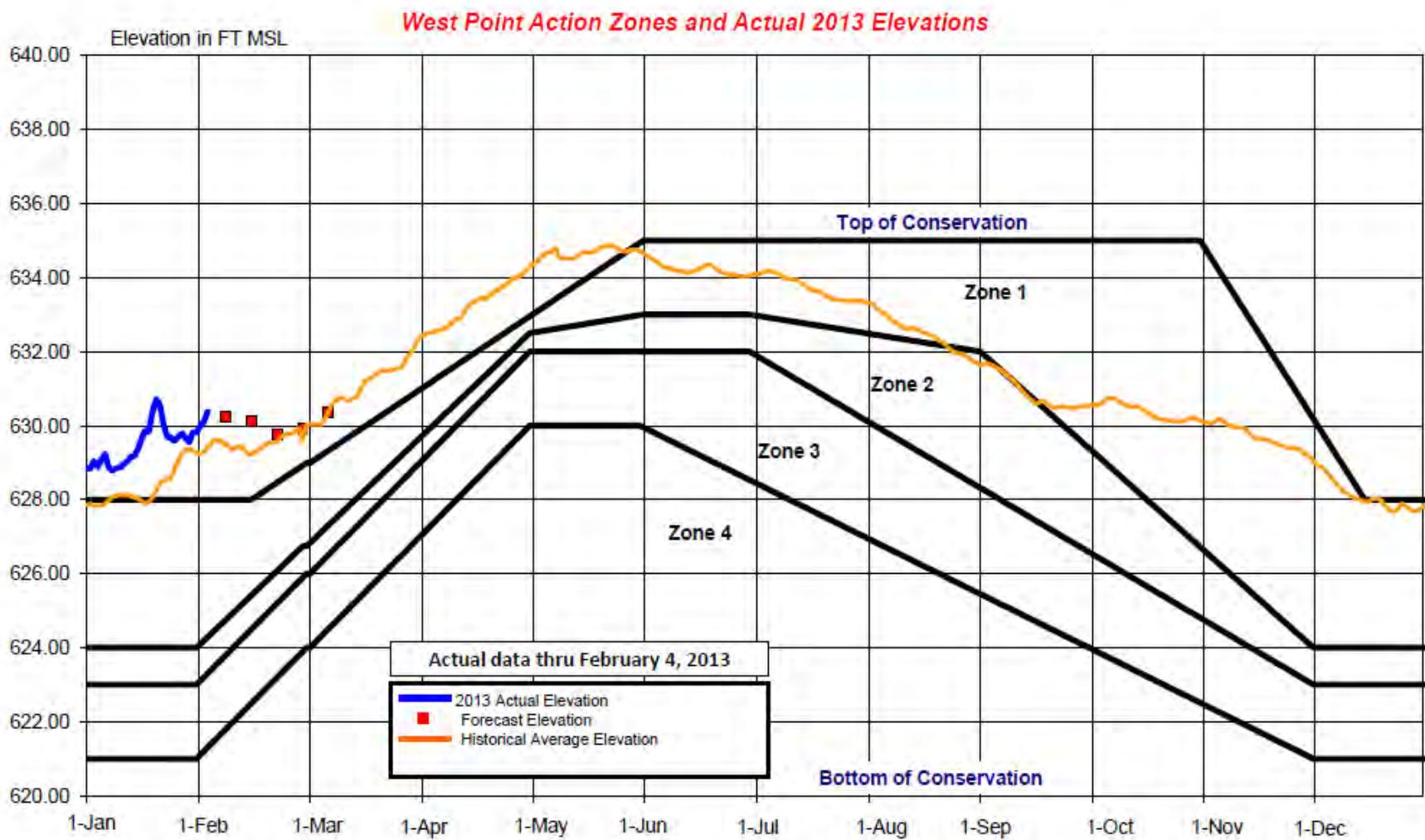
USACE – ACF Operations



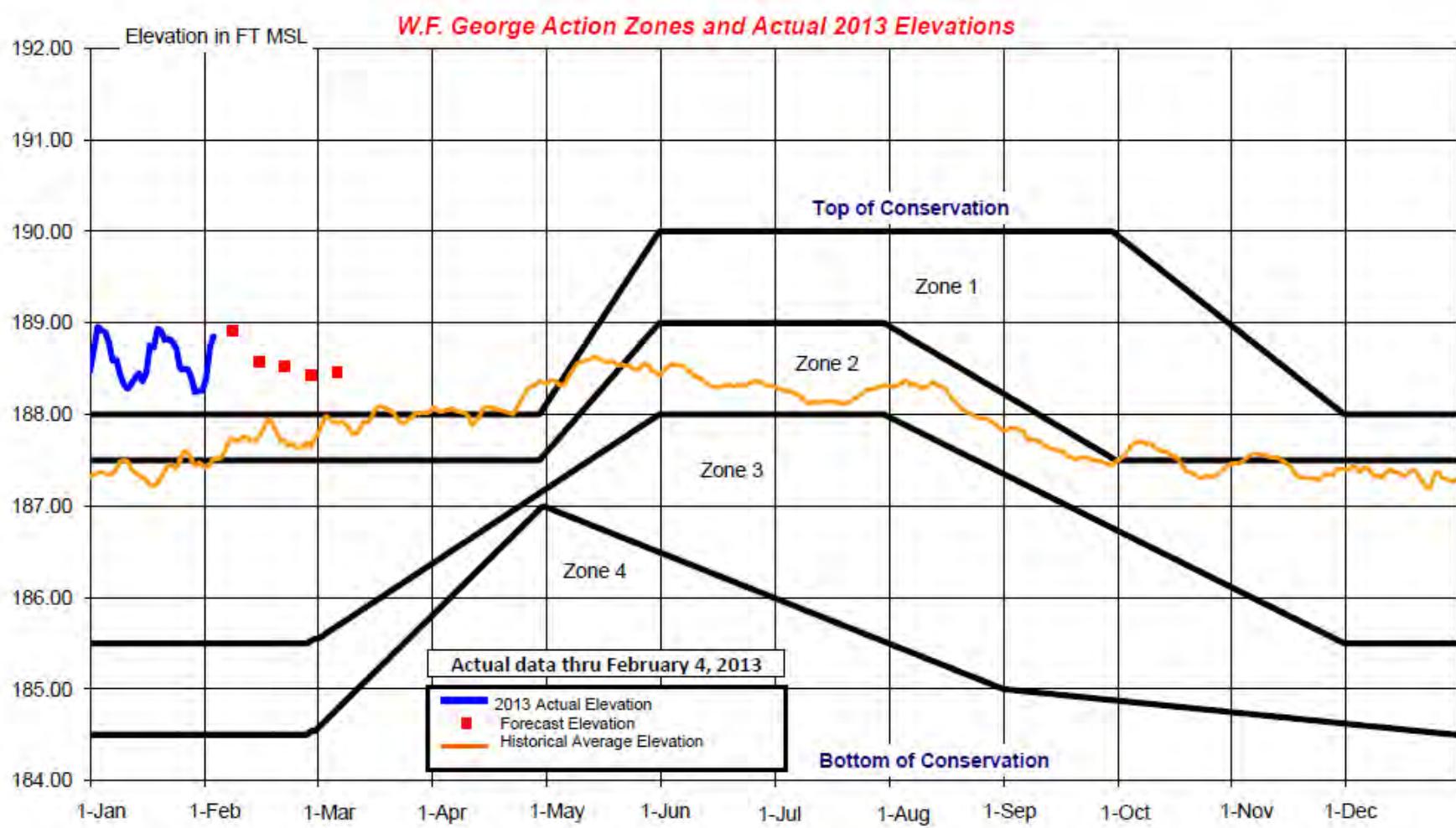
Lake Lanier



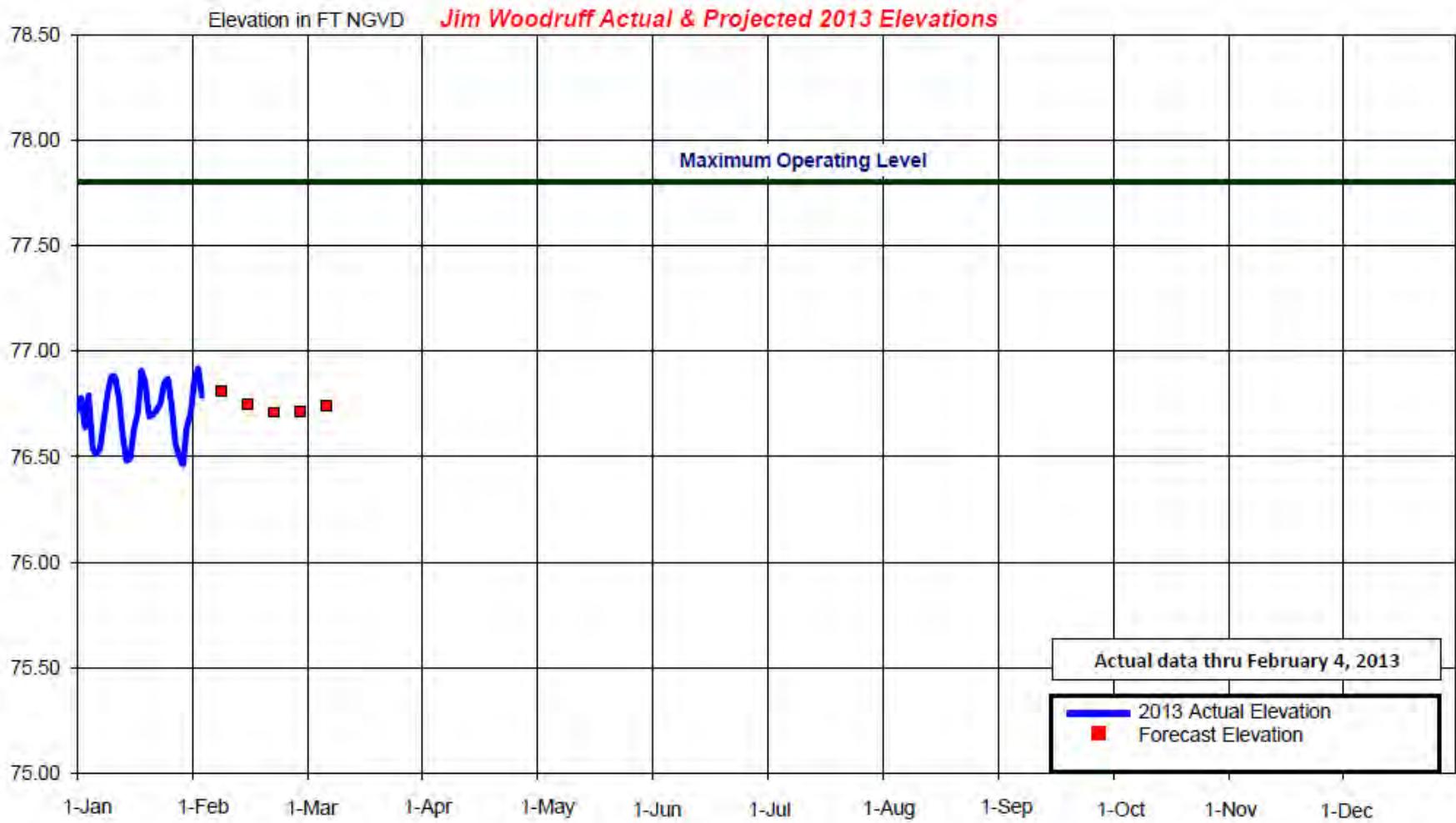
West Point



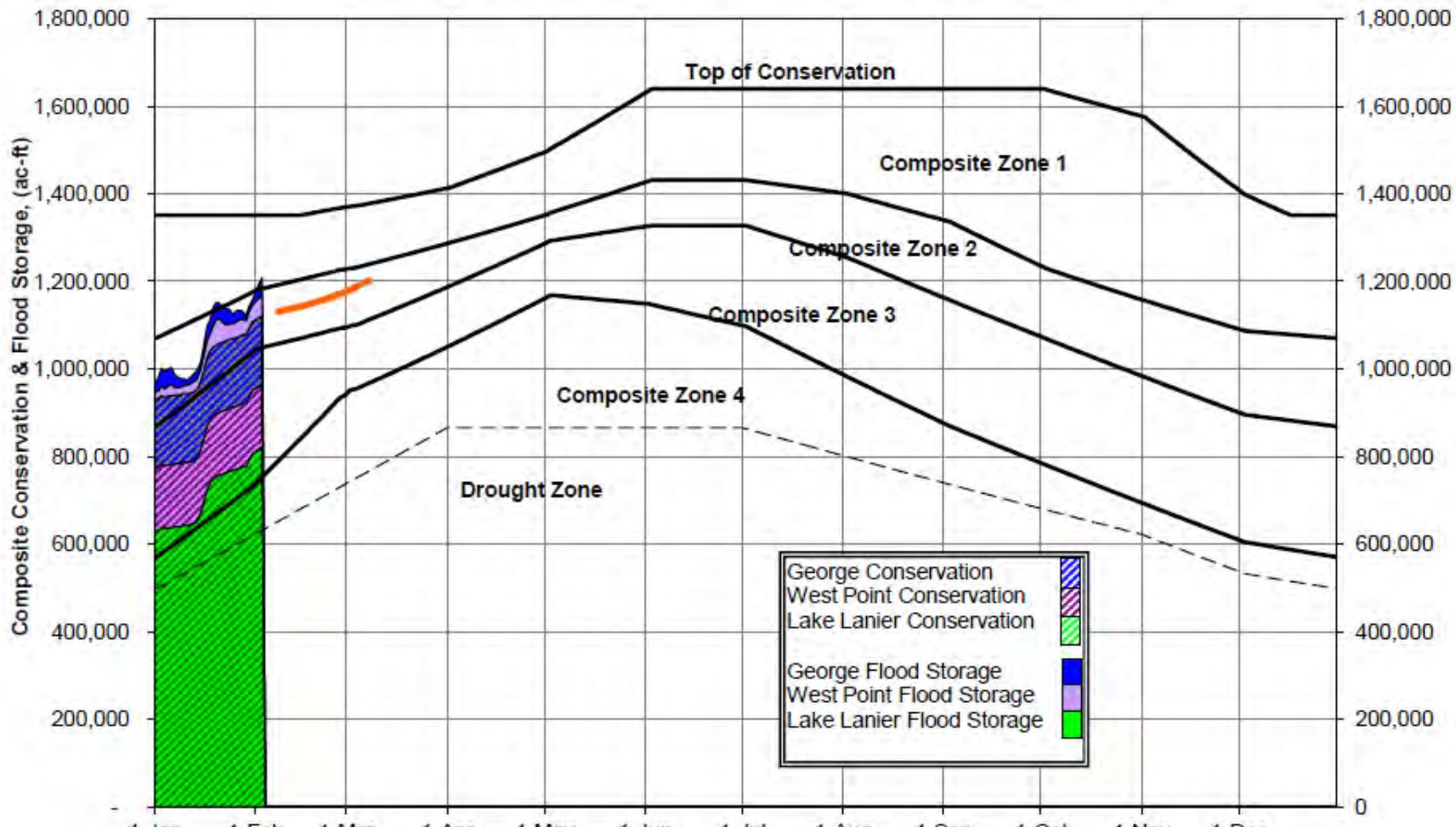
W.F. George



Woodruff



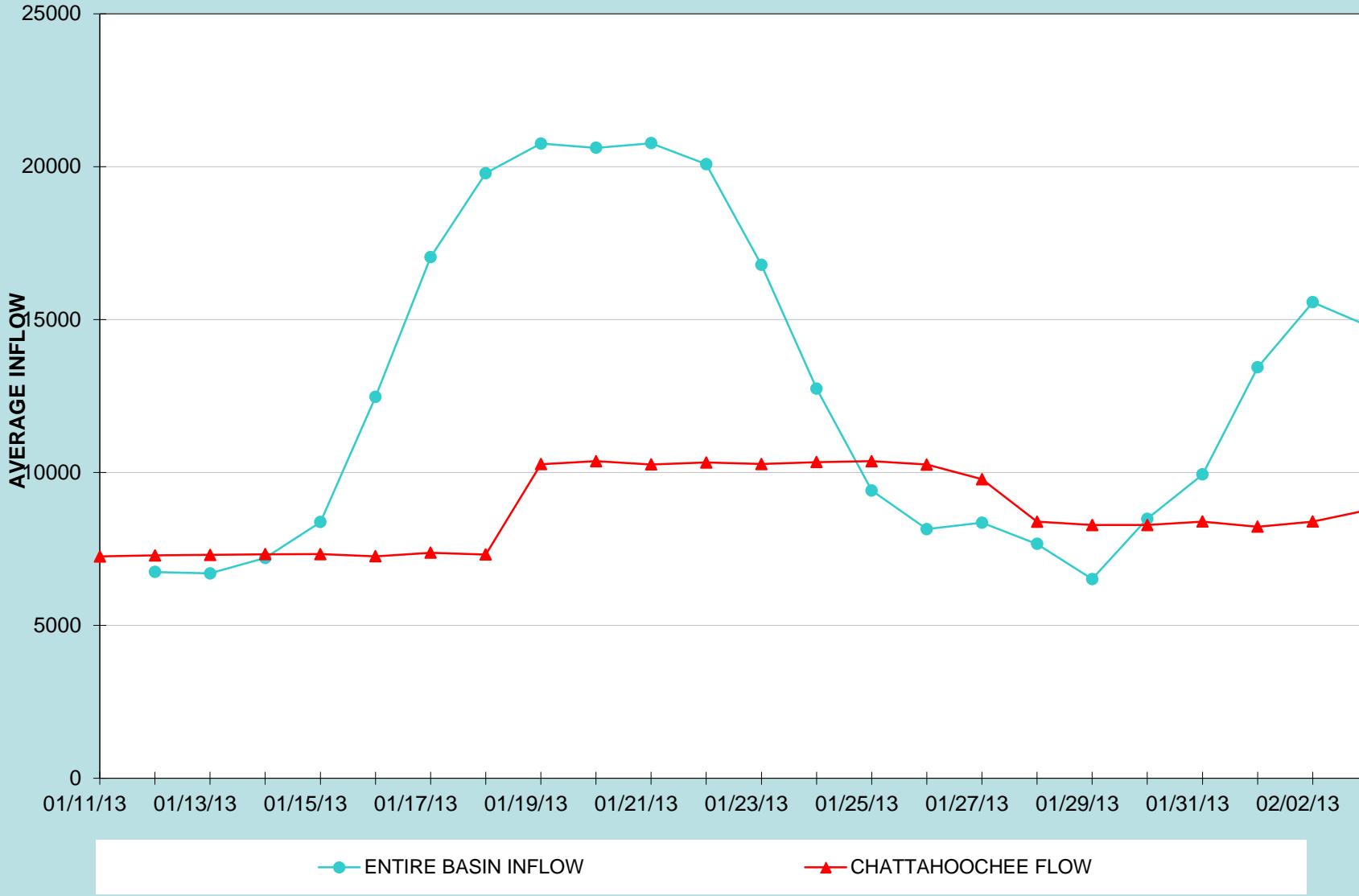
2013 ACF Basin Composite Conservation and Flood Storage



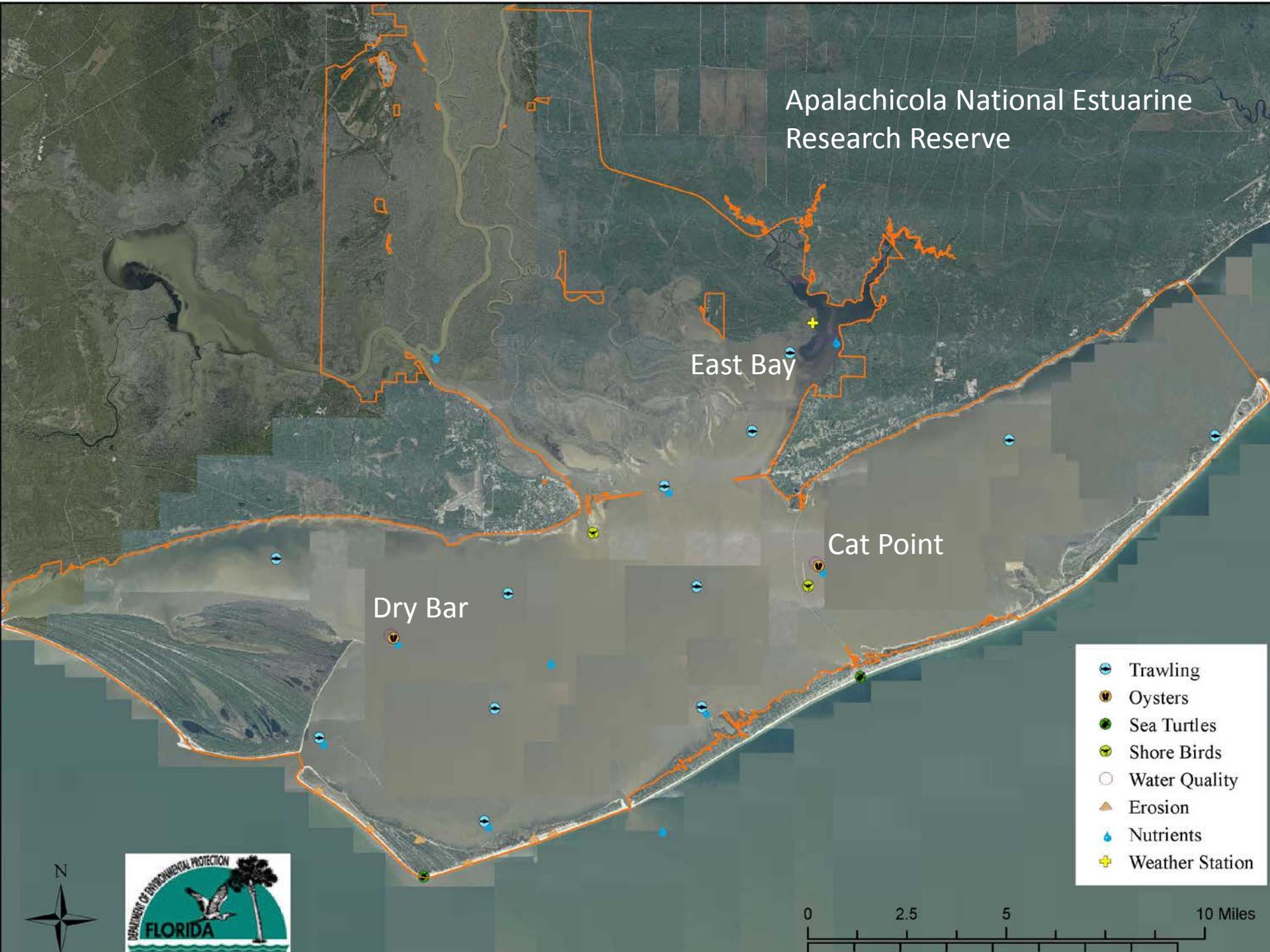
Actual data thru 2-4-2013

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

7-DAY MOVING AVERAGE INFLOW VERSUS 1-DAY CHATTAHOOCHEE FLOW

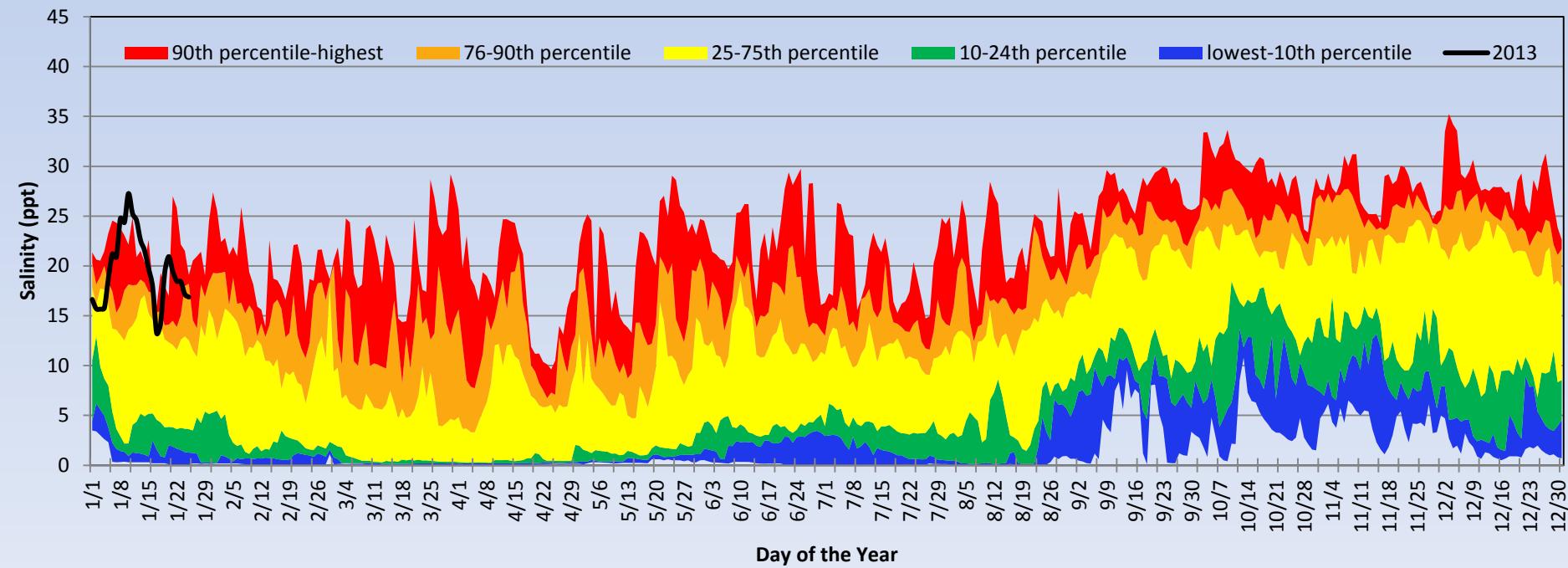
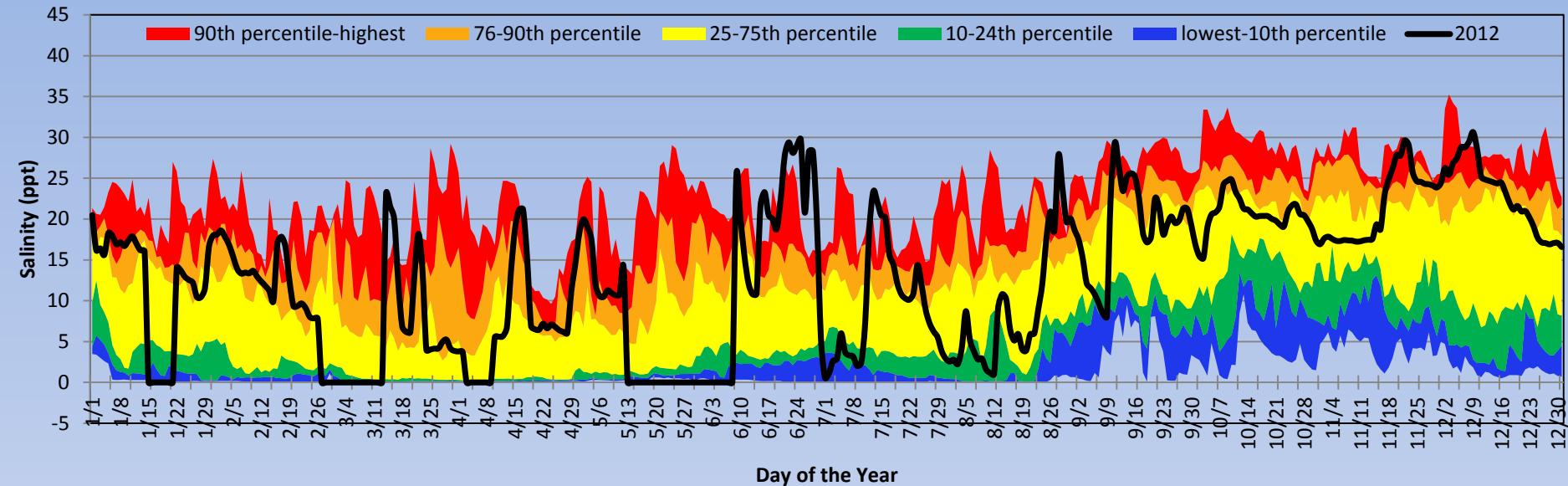


Apalachicola National Estuarine Research Reserve

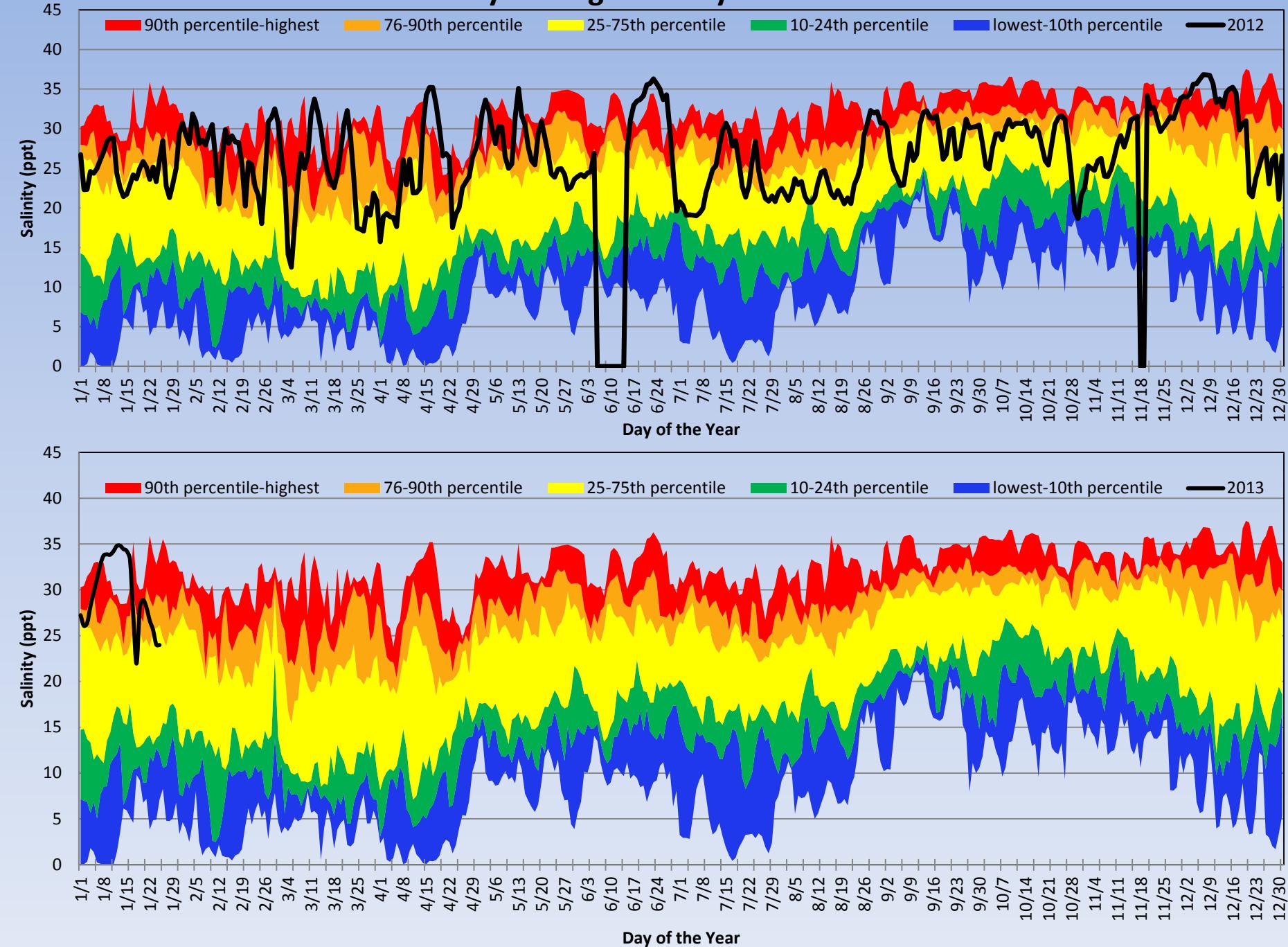


0 2.5 5 10 Miles

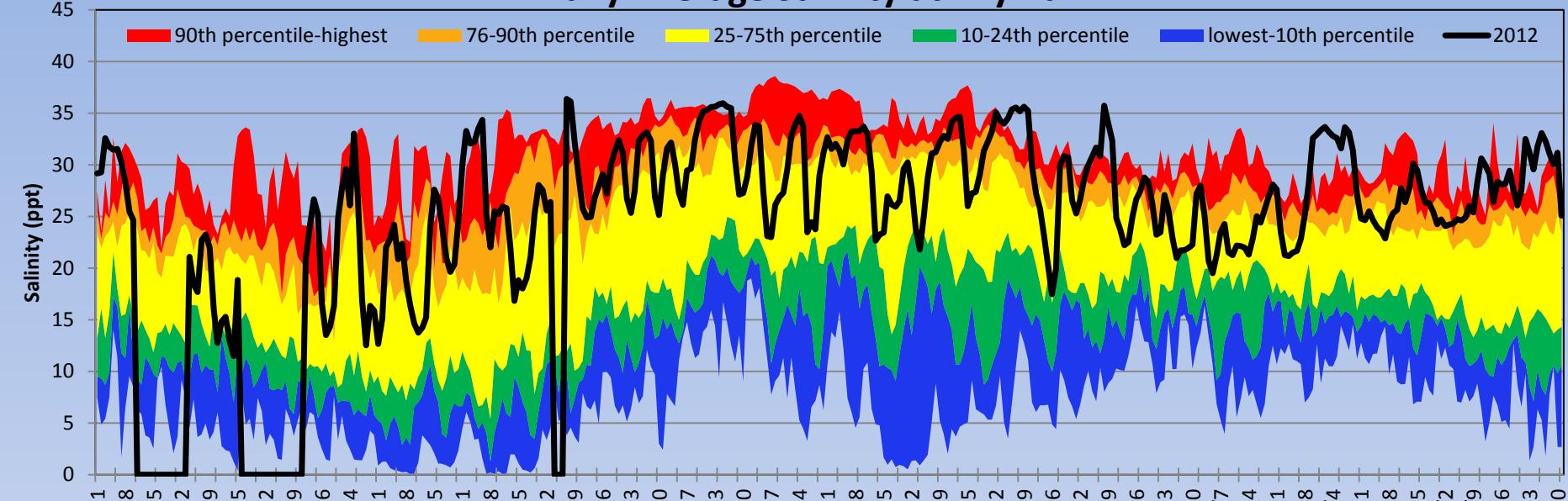
Daily Average Salinity at East Bay Bottom



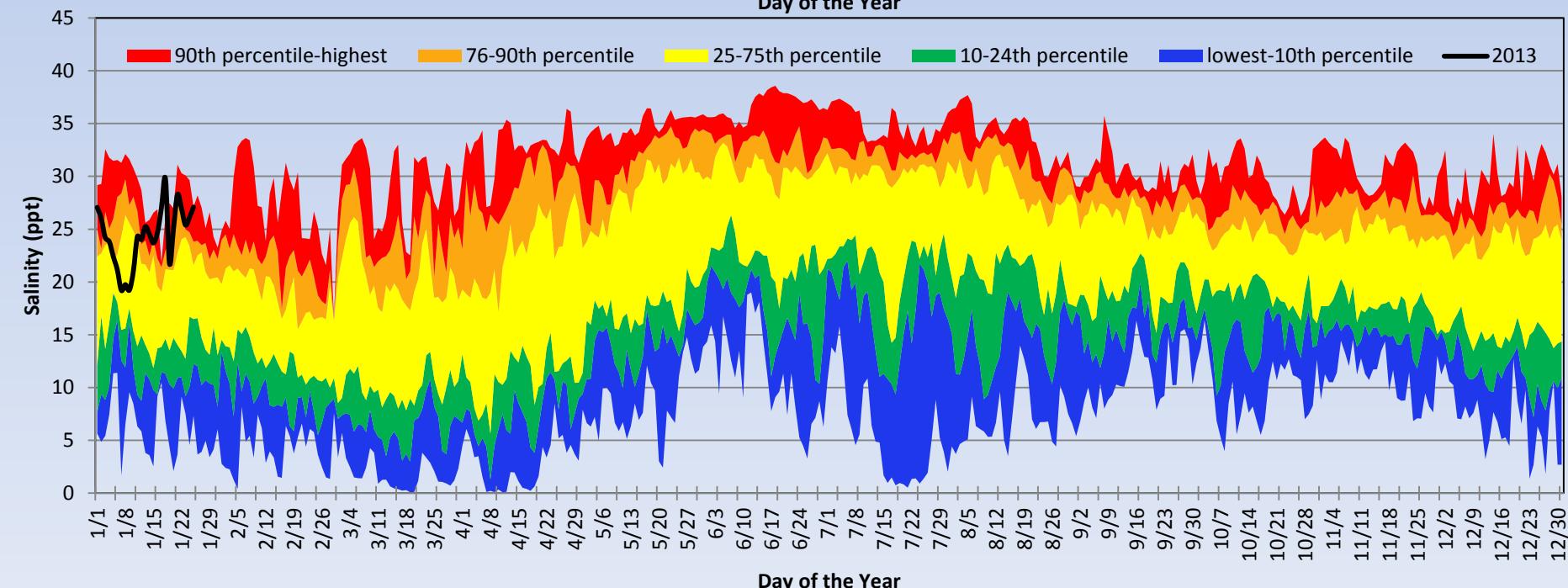
Daily Average Salinity at Cat Point



Daily Average Salinity at Dry Bar

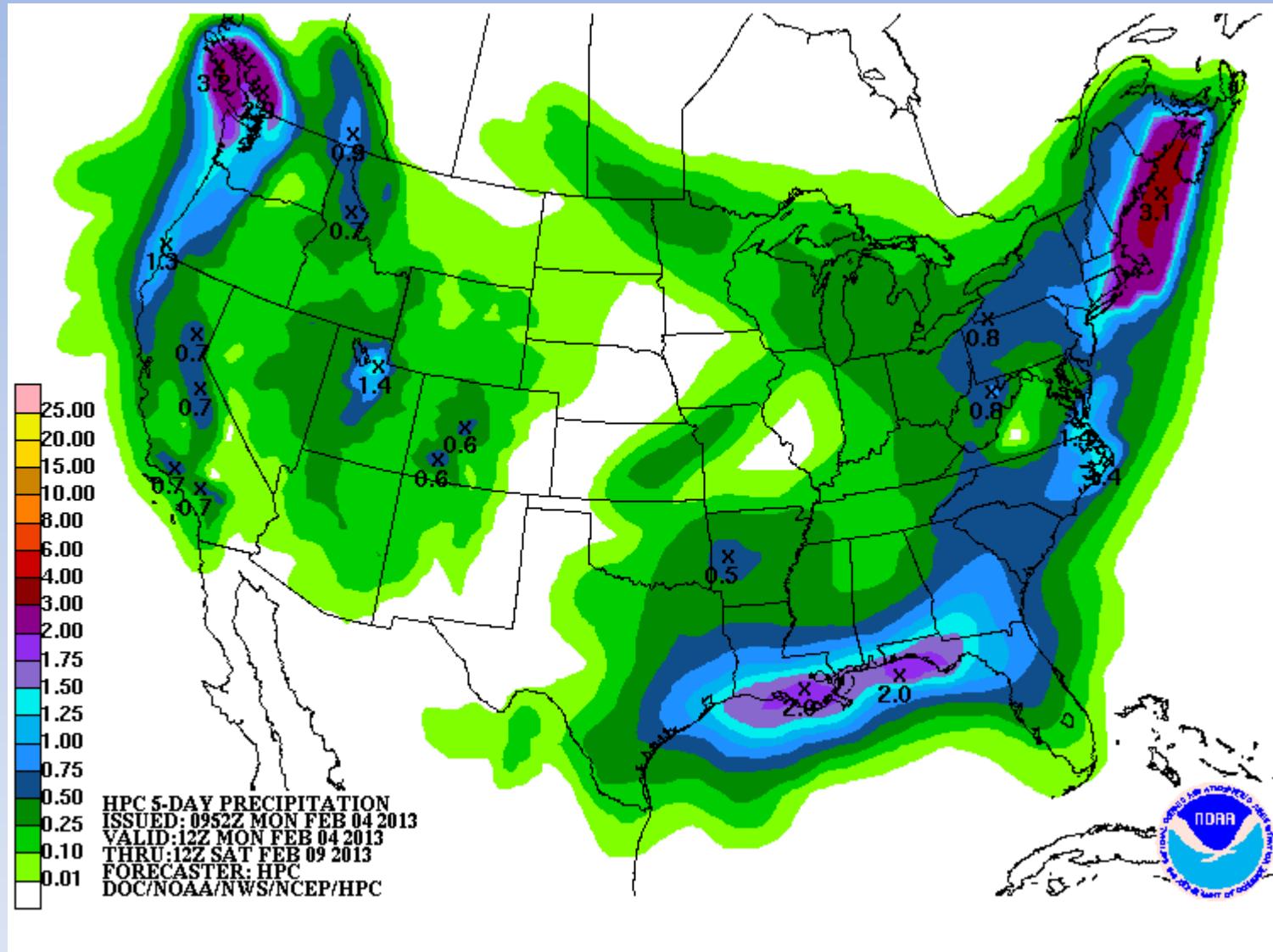


Day of the Year



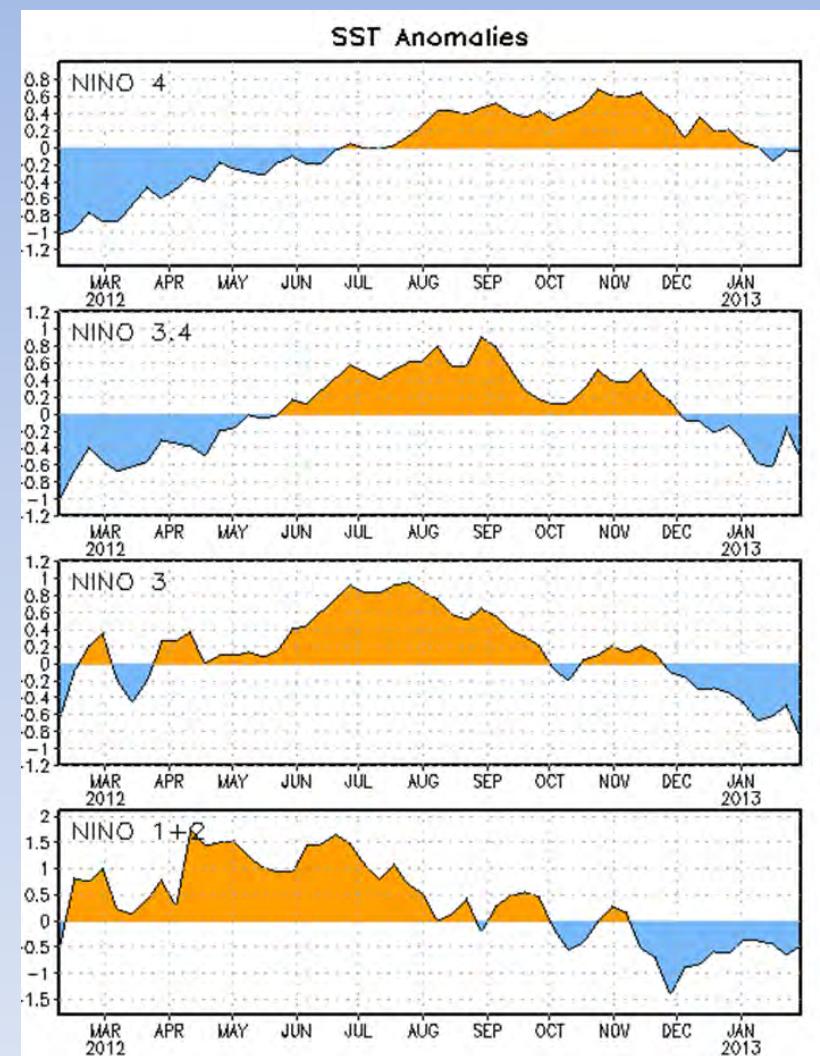
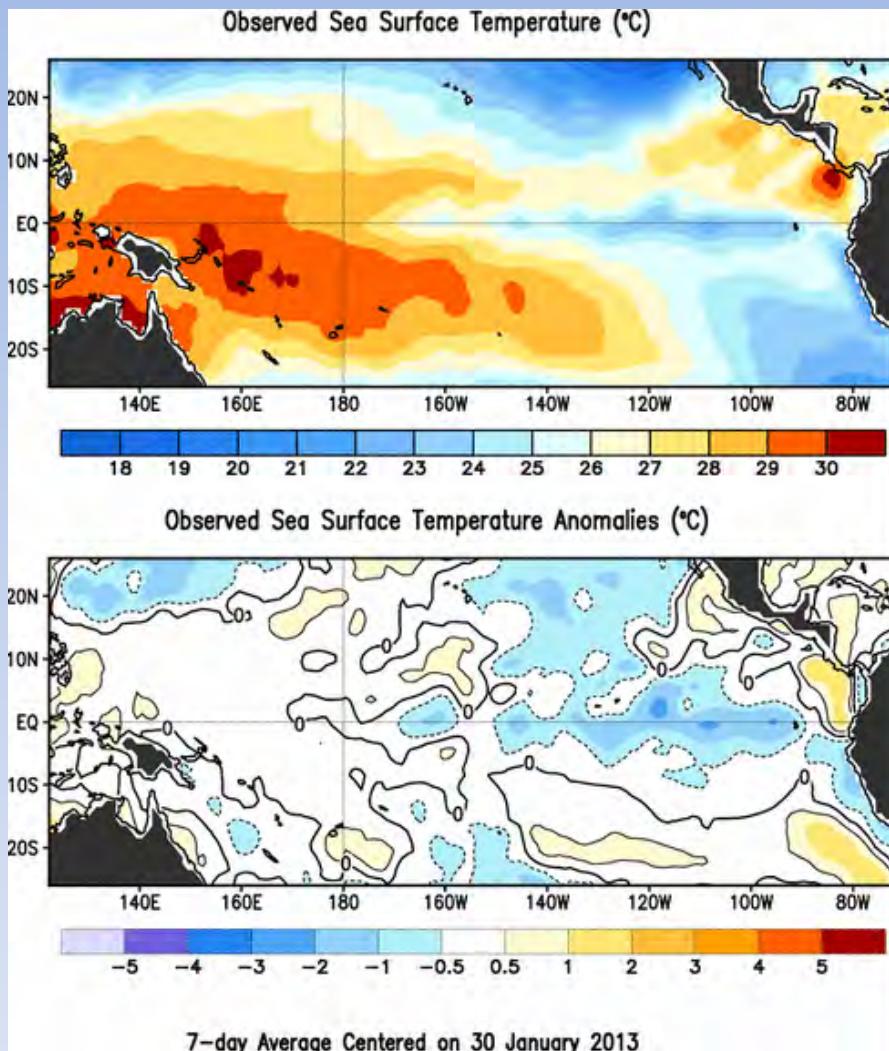
Day of the Year

5-Day Precipitation Forecast

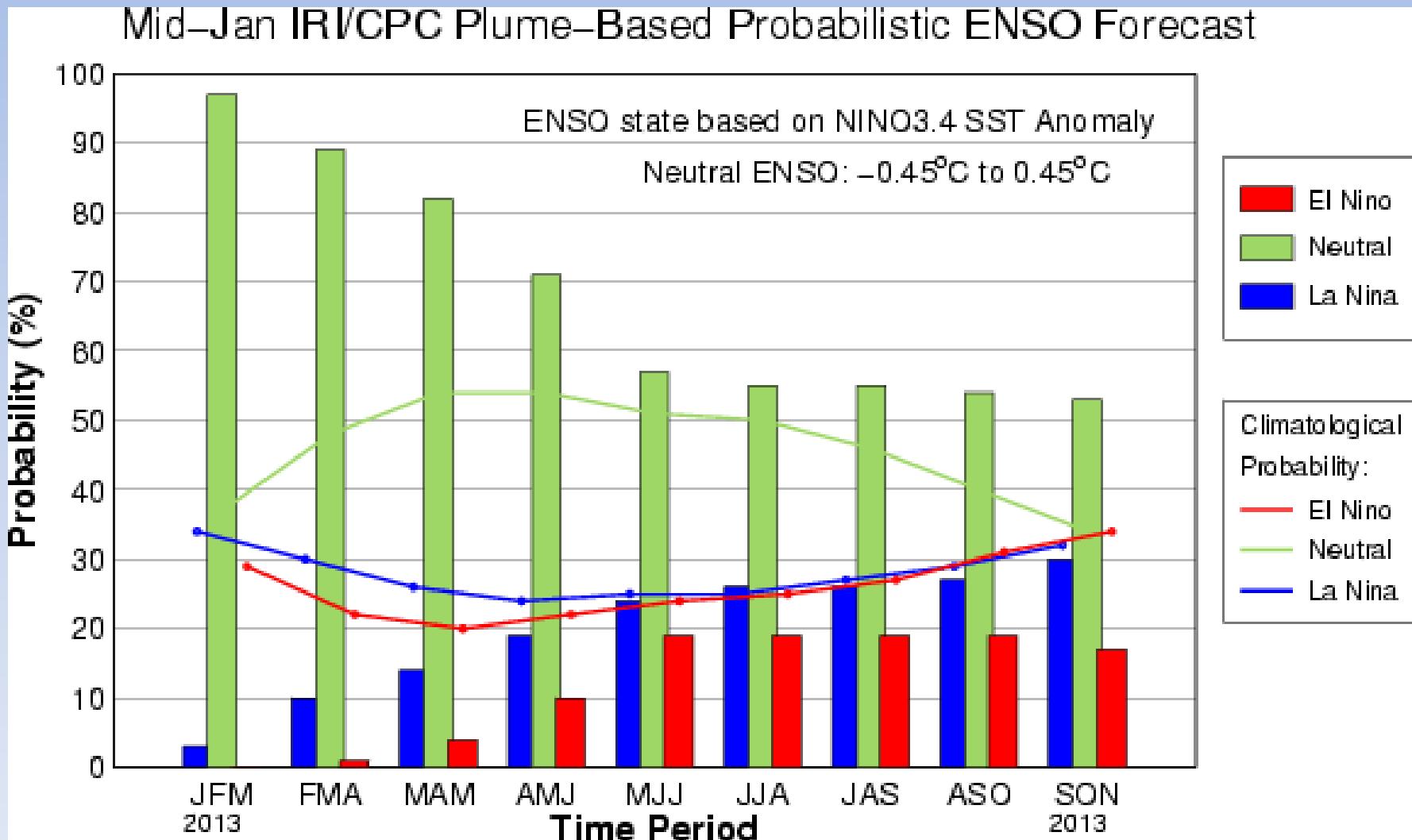


<http://www.hpc.ncep.noaa.gov/qpf/day1-5.shtml>

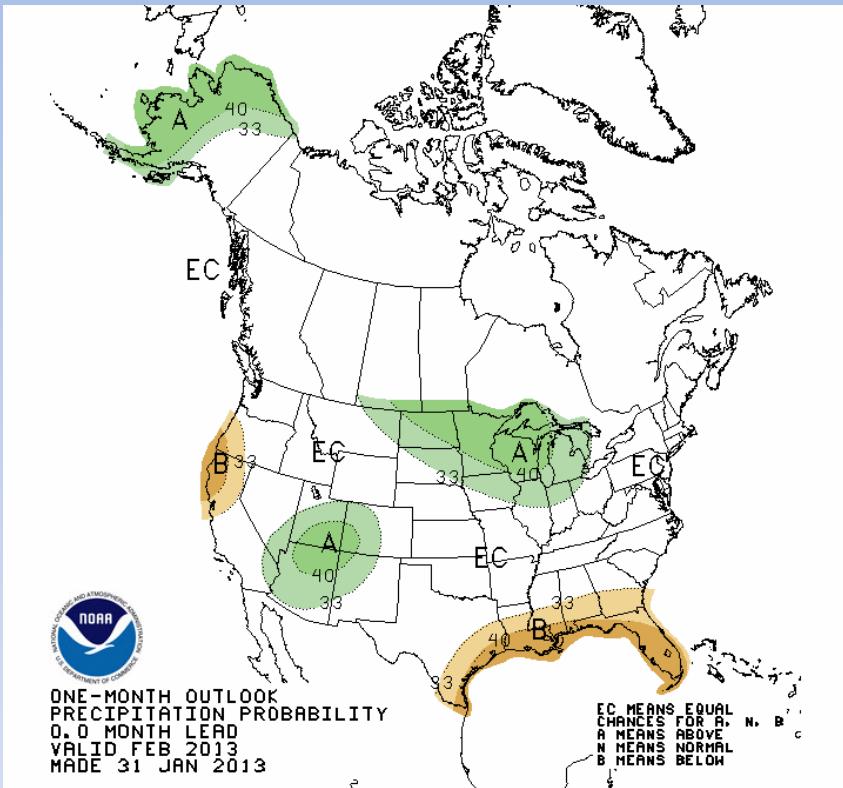
7-day average Pacific Ocean SST Anomalies



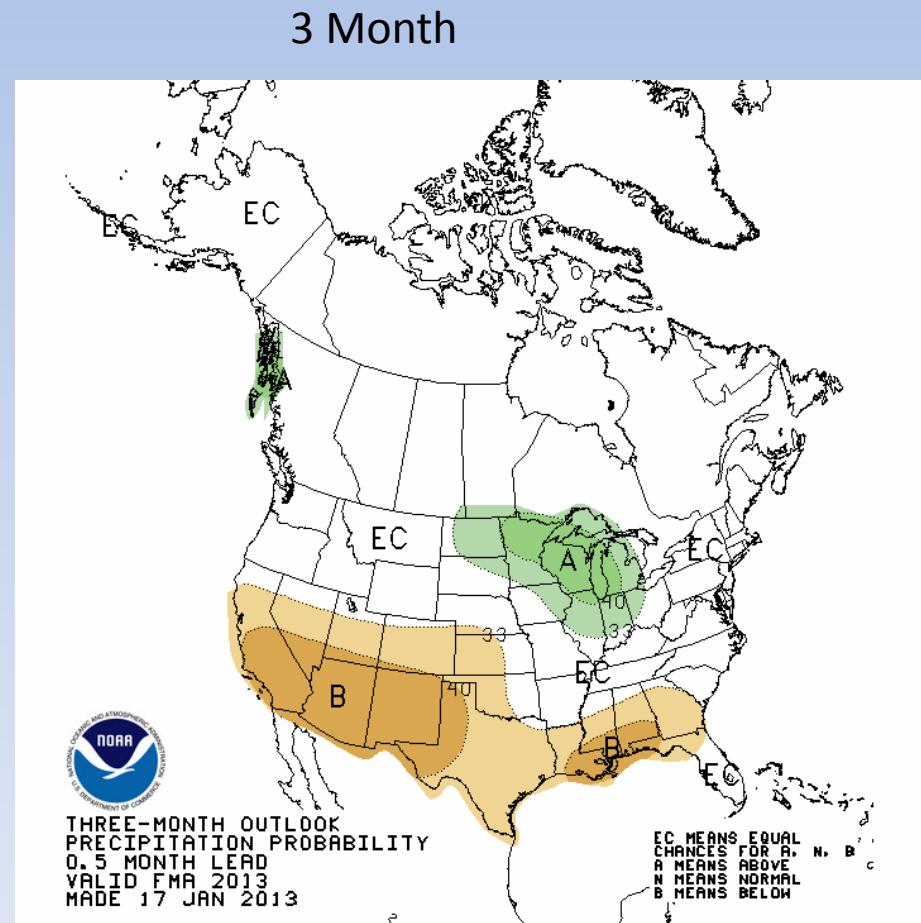
ENSO forecast from IRI



1-3 Month Precipitation Outlook

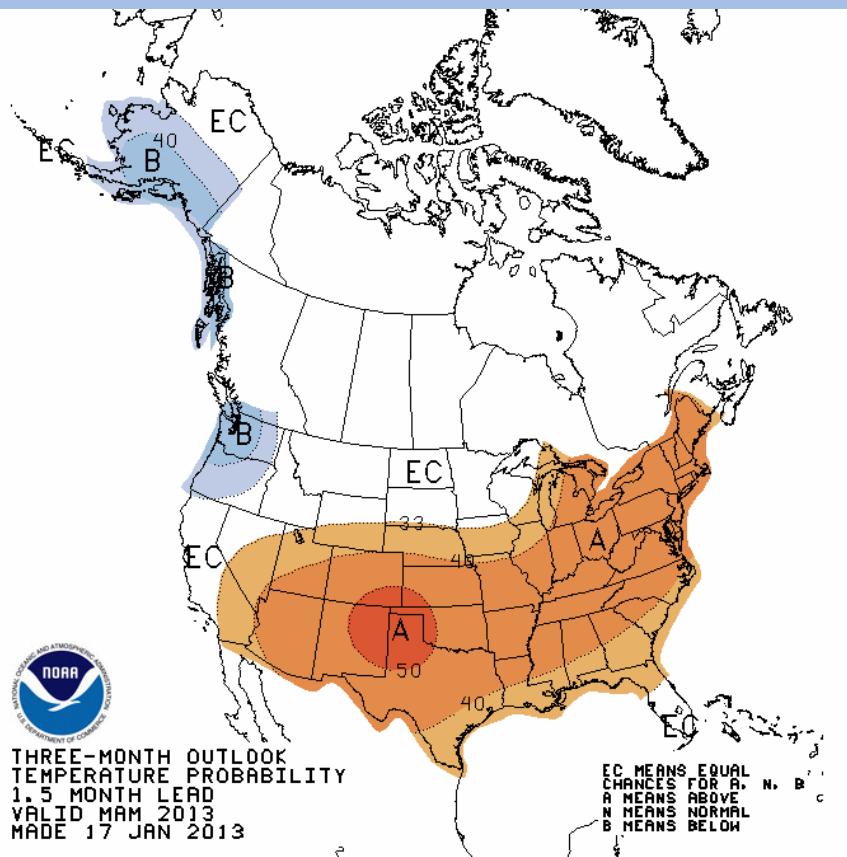


1 Month

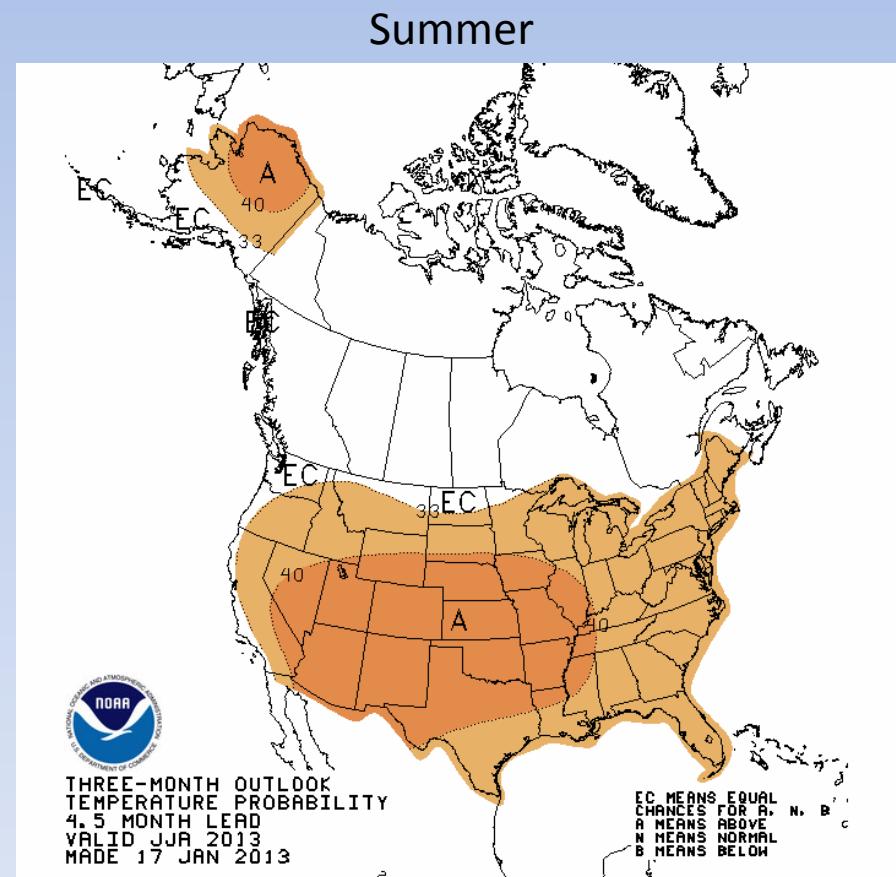


3 Month

Temperature Outlooks

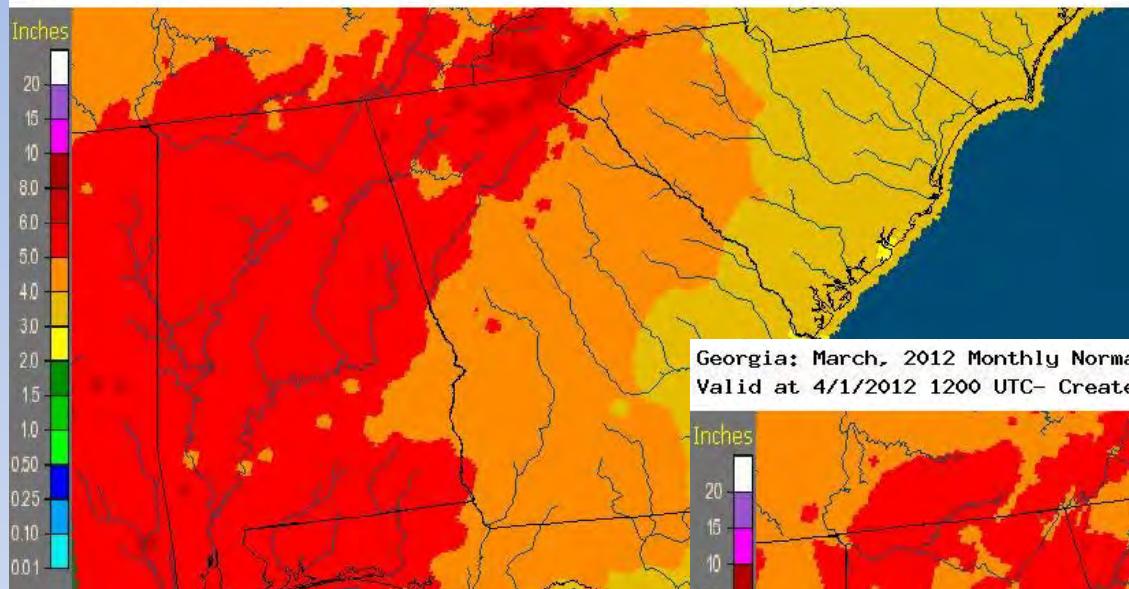


Spring

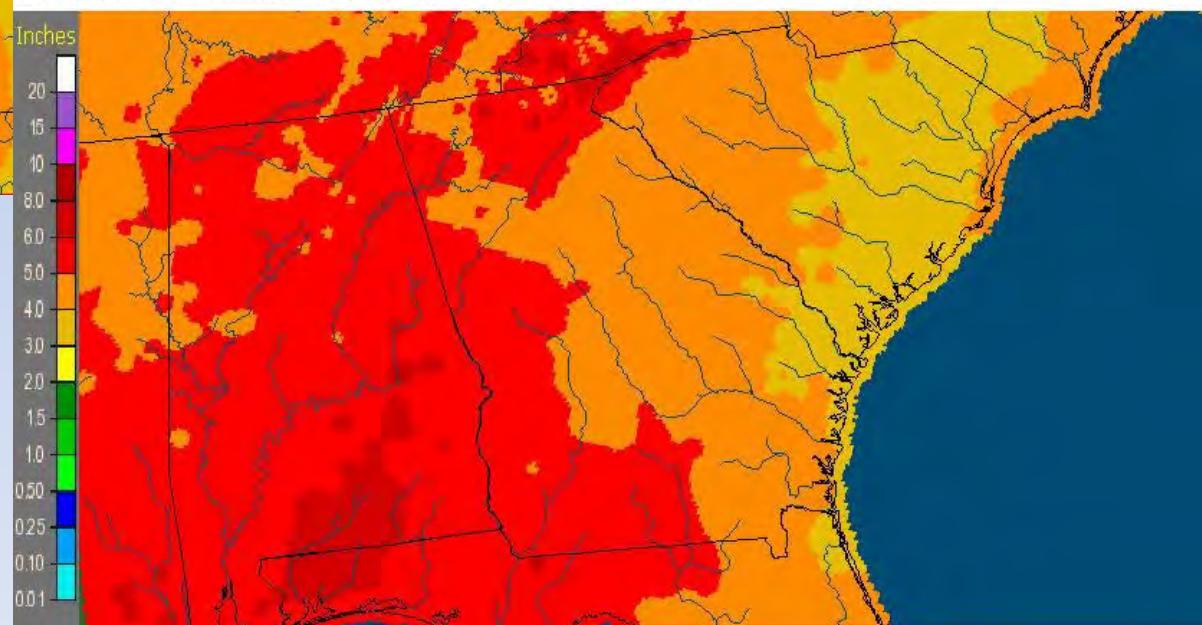


Fall Rainfall Climatology

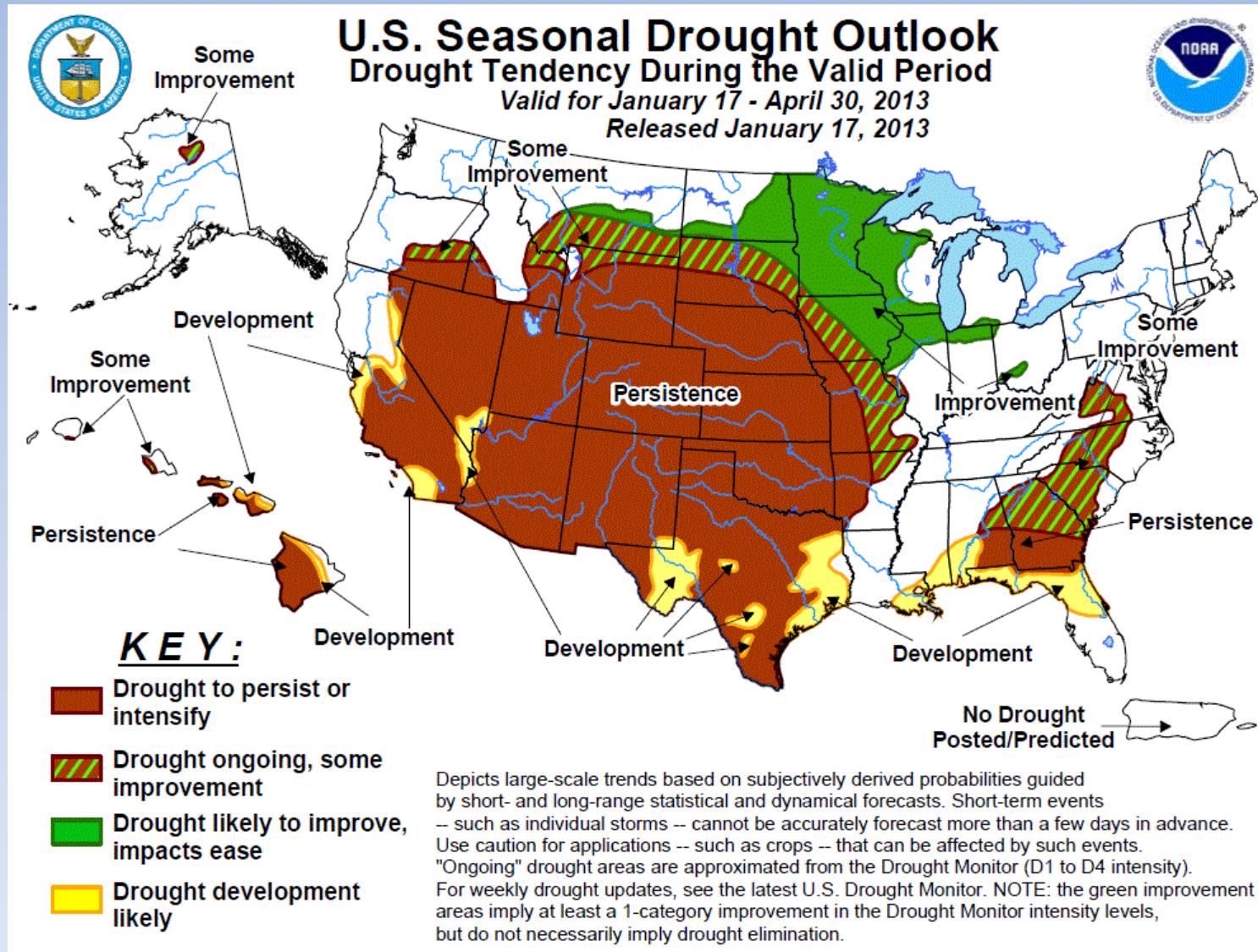
Georgia: February, 2012 Monthly Normal Precipitation
Valid at 3/1/2012 1200 UTC- Created 10/16/12 5:08 UTC



Georgia: March, 2012 Monthly Normal Precipitation
Valid at 4/1/2012 1200 UTC- Created 10/16/12 7:32 UTC



U.S. Drought Outlook



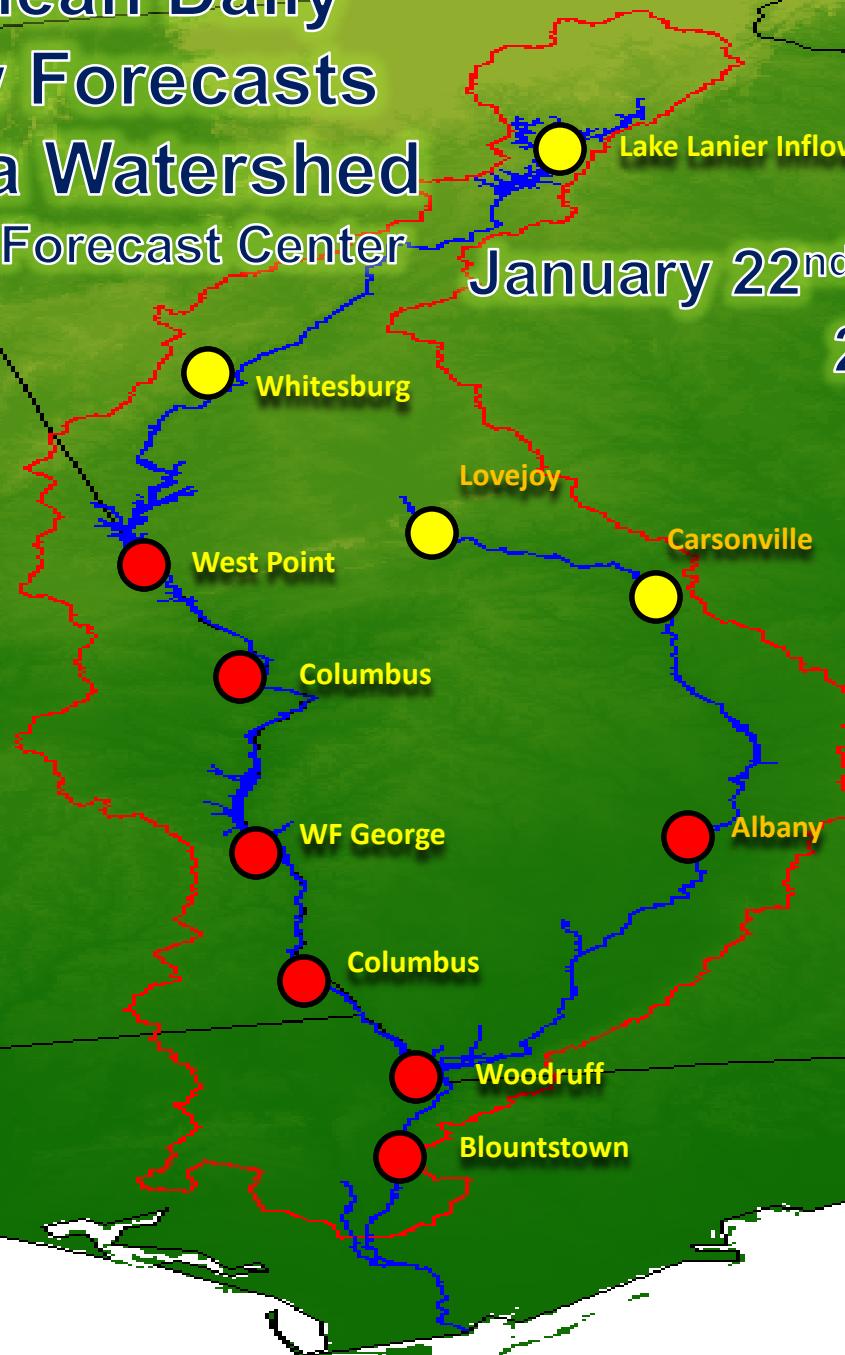
1-Month Mean Daily Streamflow Forecasts Apalachicola Watershed

Southeast River Forecast Center

Lake Lanier Inflows

January 22nd – February 22nd
2013

- Above Normal
- Near Normal
- Below Normal



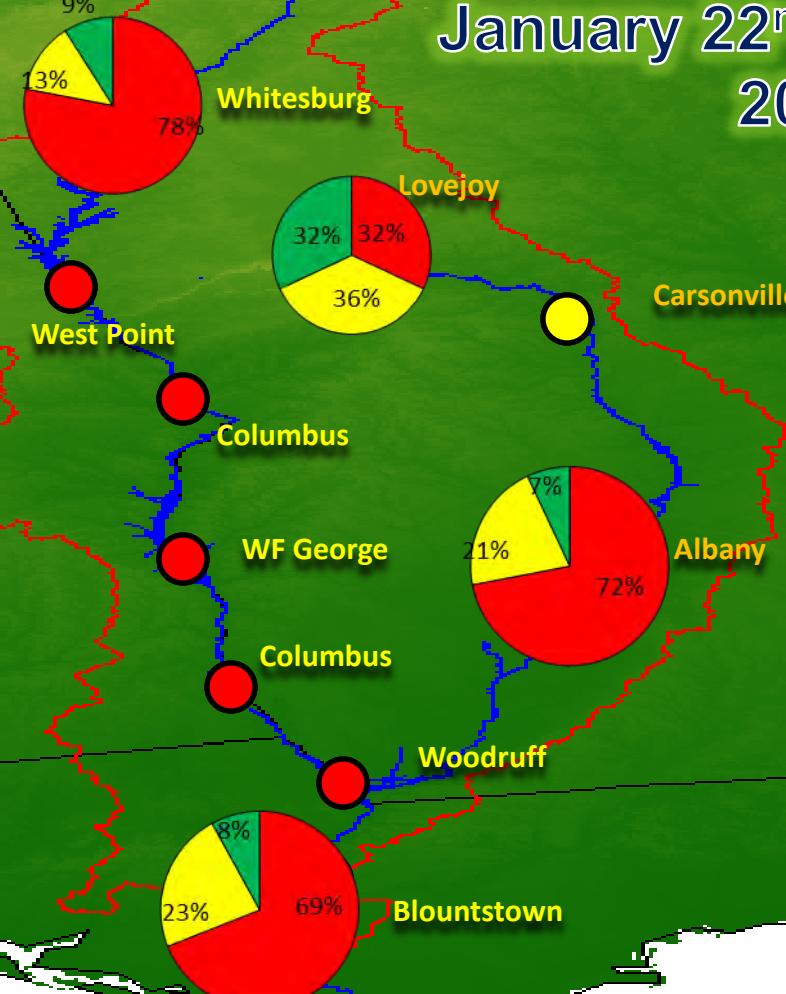
3-Month Mean Daily Streamflow Forecasts Apalachicola Watershed

Southeast River Forecast Center



January 22nd – April 22nd
2013

- Above Normal
- Near Normal
- Below Normal



Summary

- Drought conditions prevail throughout the basin, with an increasing area of extreme to exceptional drought in the center of the basin
- Inflows to Lake Lanier have increased dramatically to above normal levels, but streamflows have decreased in all other parts of the basin with flows in the southernmost part of the basin remaining near historic low levels
- Ground water levels in S Georgia also remain near historic low levels for this time of year

Summary

- The level of Lake Lanier has increased steadily, but remains in conservation zone 3
- Levels of West Point and WF George are above guide curve so that the composite for the basin has stayed near the border between conservation zones 1 and 2
- Salinity levels in Apalachicola Bay are above normal in East Bay Bottom and Dry Bar, but have decreased into the normal range for Cat Point

References

Speakers

David Zierden, UGA

Chris Smith, USGS

Bailey Crane, USACE

Jenna Harper, ANERR

Todd Hamill, SERFC

Moderator

Pam Knox, UGA

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 & forecasting

<http://waterwatch.usgs.gov>

<http://www.srh.noaa.gov/serfc/>

Groundwater monitoring

<http://groundwaterwatch.usgs.gov>

Thank you!

Next briefing – 19 February 2013, 1:00 pm EST

Slides from this briefing will be posted at

<http://drought.gov/drought/content/regional-programs/regional-drought-webinars>

Please send comments and suggestions to:

ktingram@ufl.edu