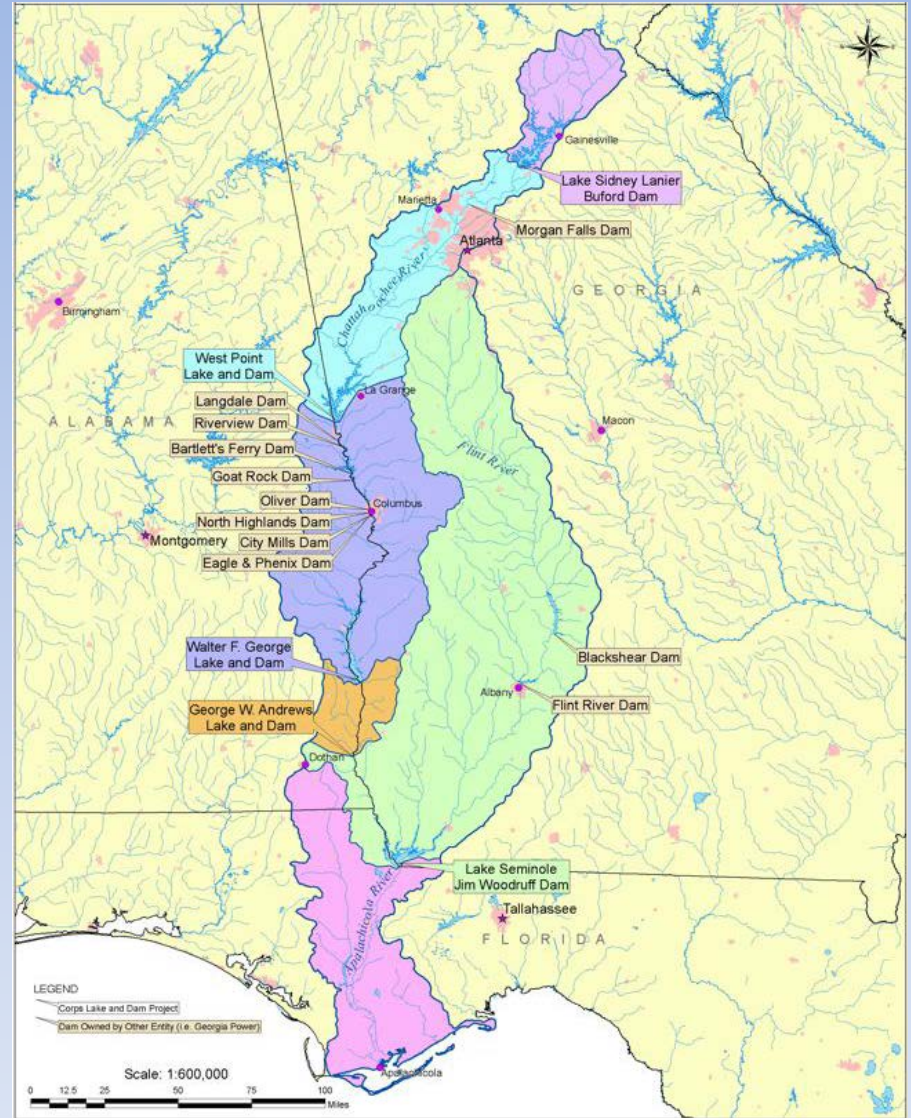
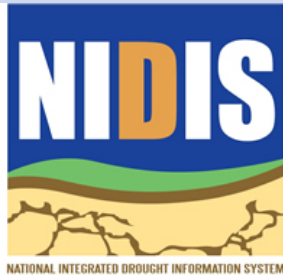


National Integrated Drought Information System

Drought Early Warning for the Apalachicola-Chattahoochee-Flint River Basin

19 January 2016

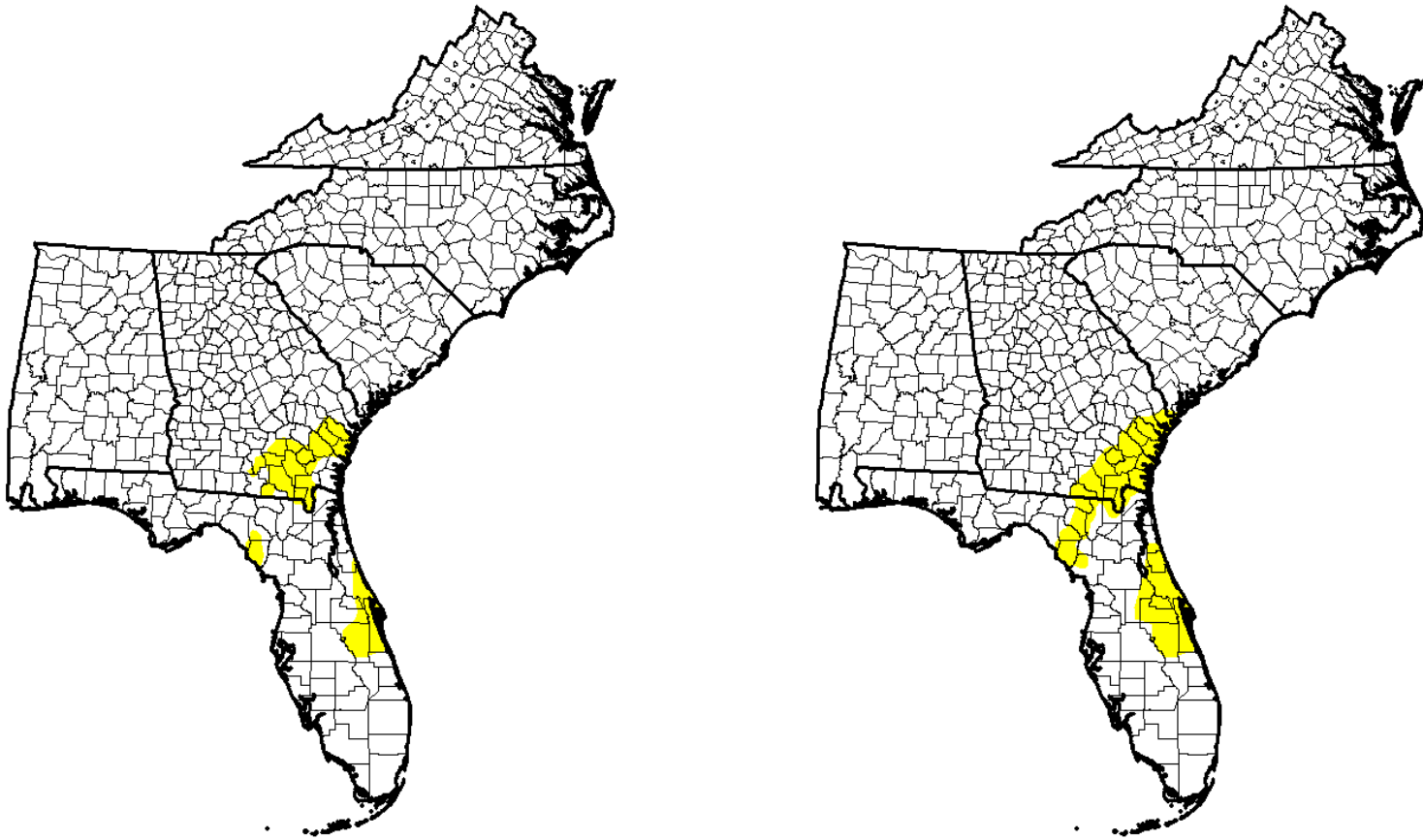


Outline




Welcome – Eric Reutebuch, AU Water Resources Center



- Drought conditions & outlook – Eric Reutebuch, AU
- Streamflows and groundwater – Paul Ankorn, USGS
- Streamflow forecasts – Jeff Dobur, SERFC
- Summary and Discussion

Current drought status



Intensity.

-  D0 - Abnormally Dry
-  D1 - Moderate Drought
-  D2 - Severe Drought

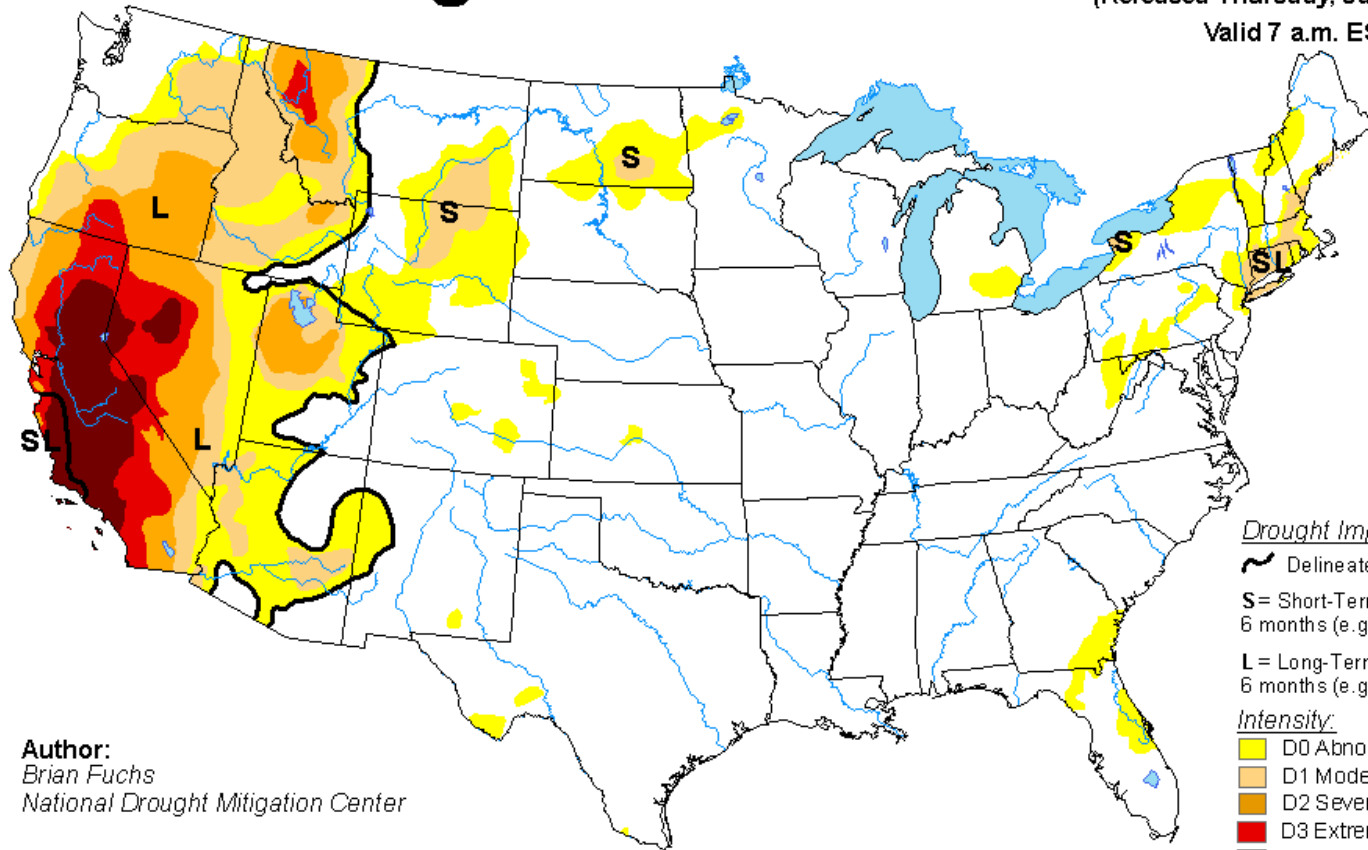
-  D3 - Extreme Drought
-  D4 - Exceptional Drought

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

U.S. Drought Monitor

January 12, 2016
 (Released Thursday, Jan. 14, 2016)

Valid 7 a.m. EST



Author:
 Brian Fuchs
 National Drought Mitigation Center

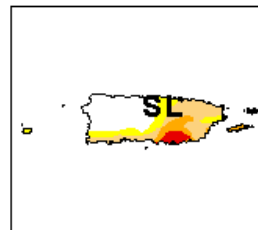
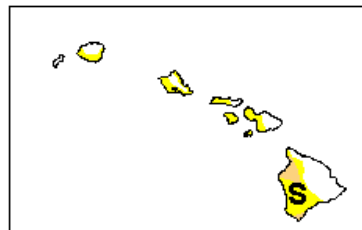
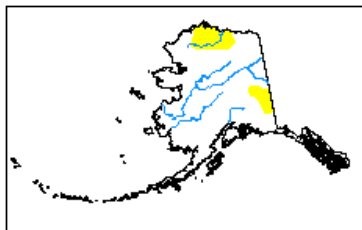
Drought Impact Types:

- ~ Delineates dominant impacts
- S= Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L= Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Orange: D2 Severe Drought
- Red-Orange: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

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

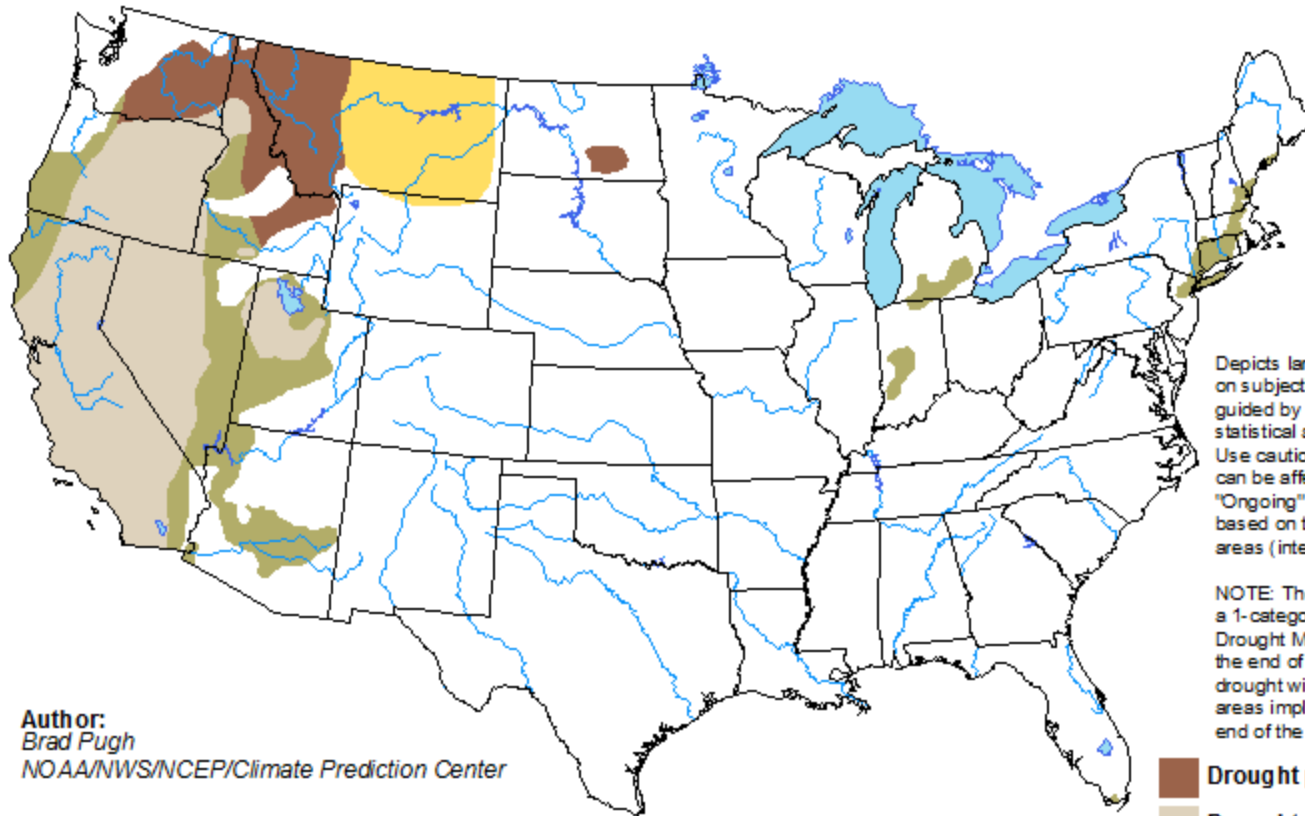


<http://droughtmonitor.unl.edu/>

U.S. Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period





Valid for December 17 - March 31, 2016
Released December 17, 2015

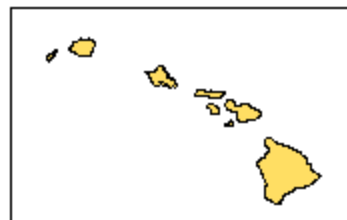
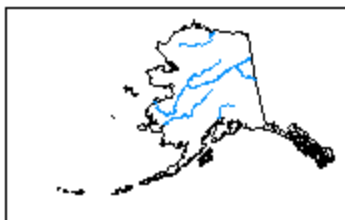


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center

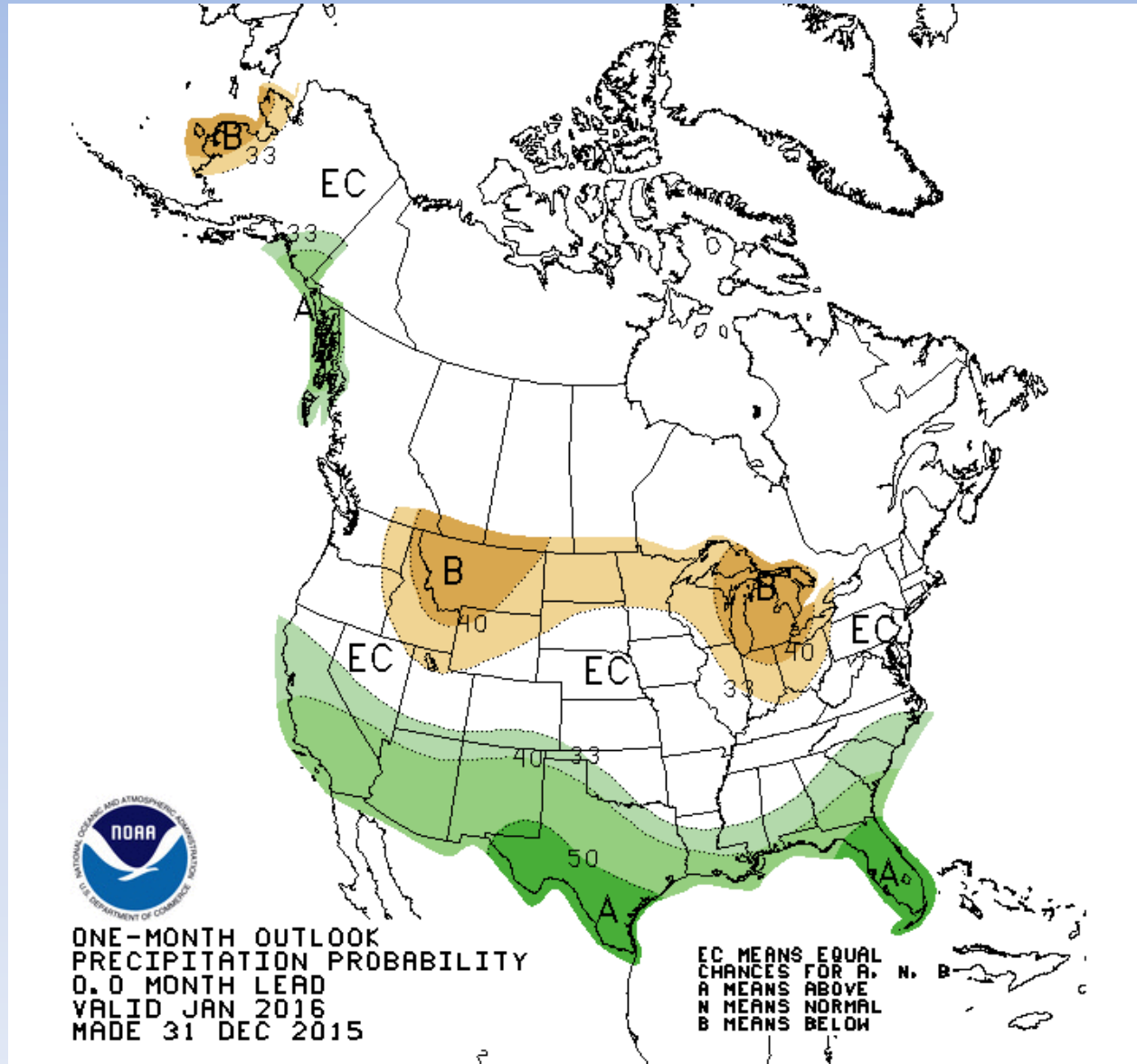
-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>

National Weather Service Climate Prediction Center

Revised OFFICIAL Forecasts – One Month Outlook for Precipitation
January 2016

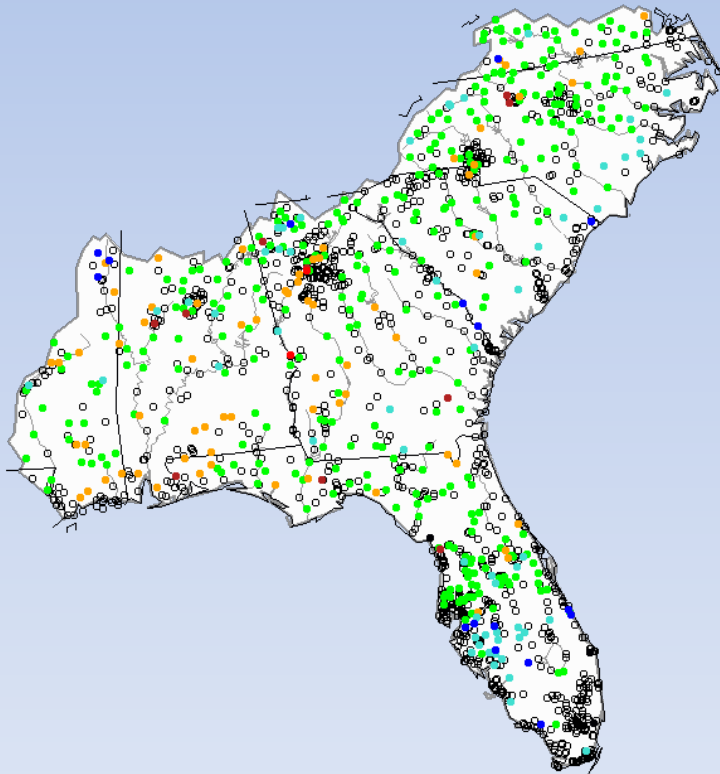


Streamflows and Groundwater

Realtime stream flow compared with historical monthly averages

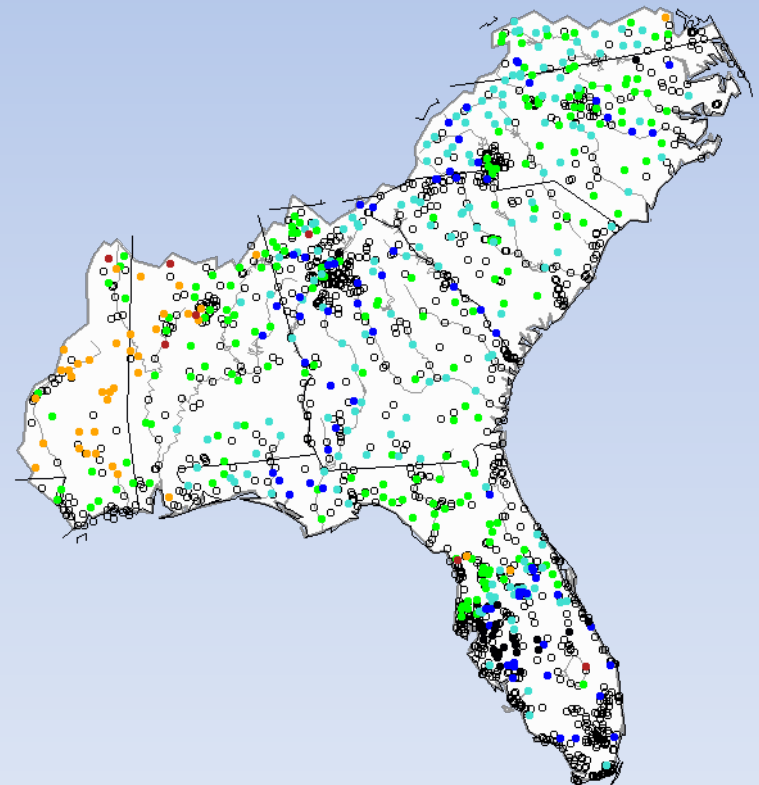
Previous Brief:

Monday, December 14, 2015 08:30ET



Current:

Monday, January 18, 2016 08:30ET



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



<http://waterwatch.usgs.gov>

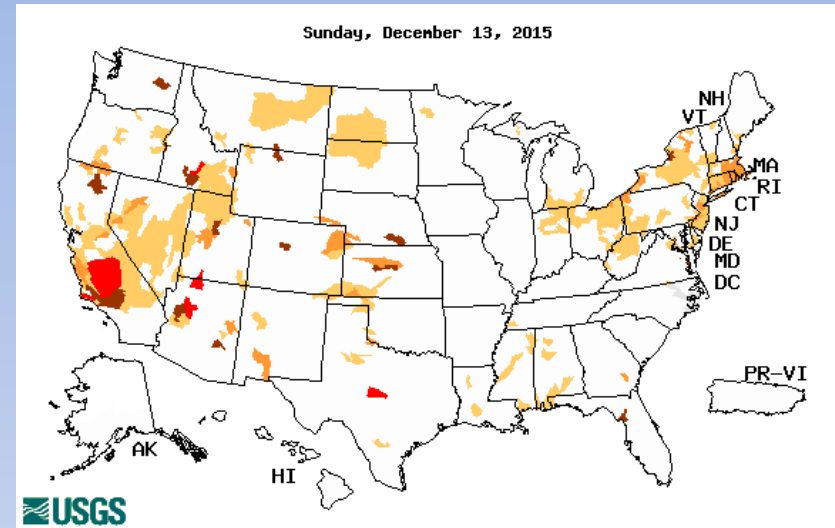
Below Normal 7-day Average Streamflows

Previous brief:

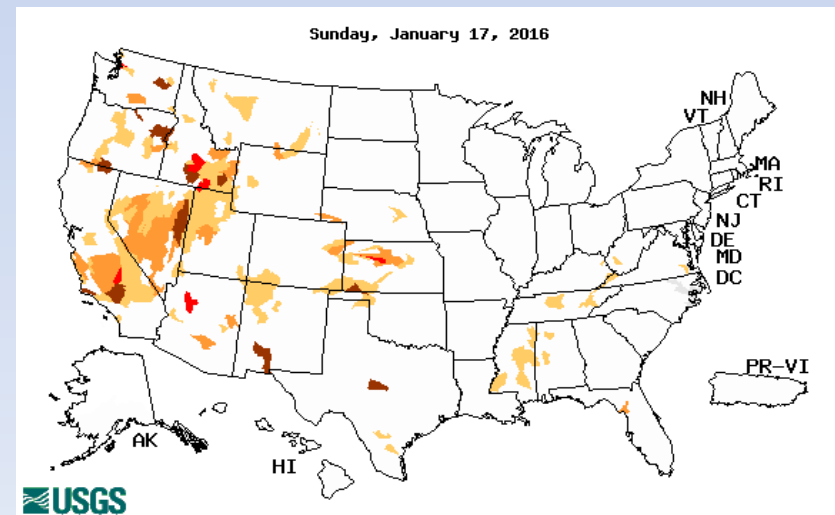
Below normal 7-day average streamflow as compared with historical streamflow for day shown

Current:

<http://waterwatch.usgs.gov>



Explanation - Percentile classes				
Low	≤ 5	6-9	10-24	Near or above normal
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

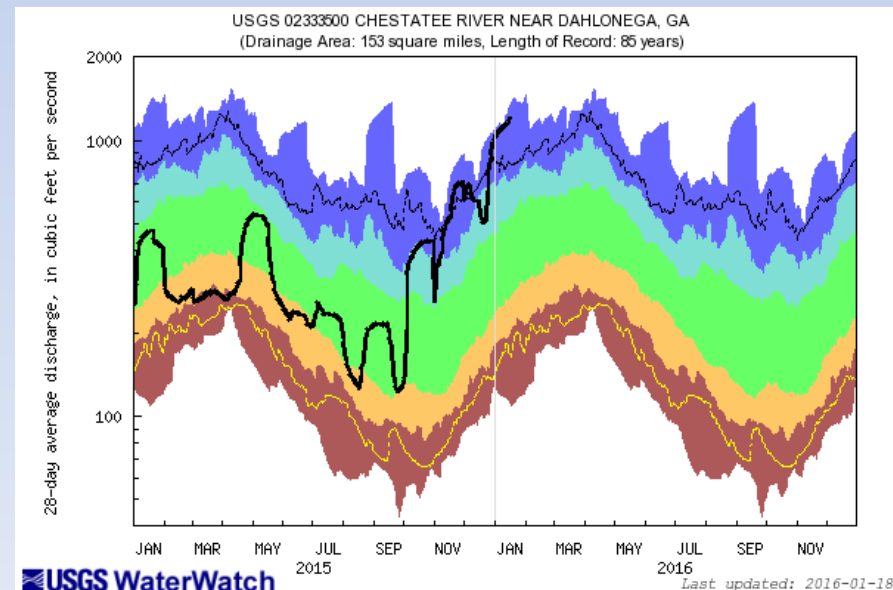
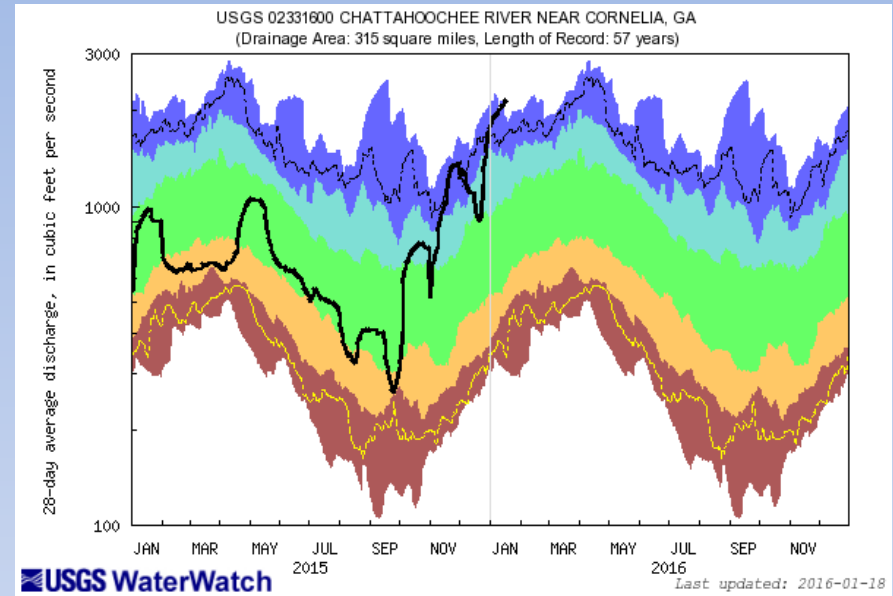


Lake Lanier Inflows

Chattahoochee near
Cornelia (02331600)

<http://waterwatch.usgs.gov>

Chestatee near
Dahlonega (02333500)

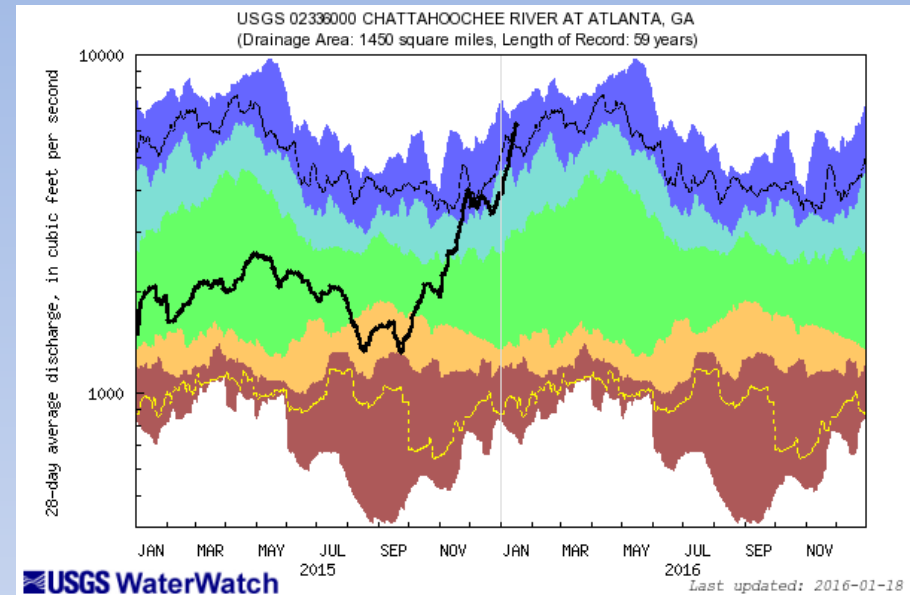


Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal		Below normal	Normal	Above normal	Much above-normal	

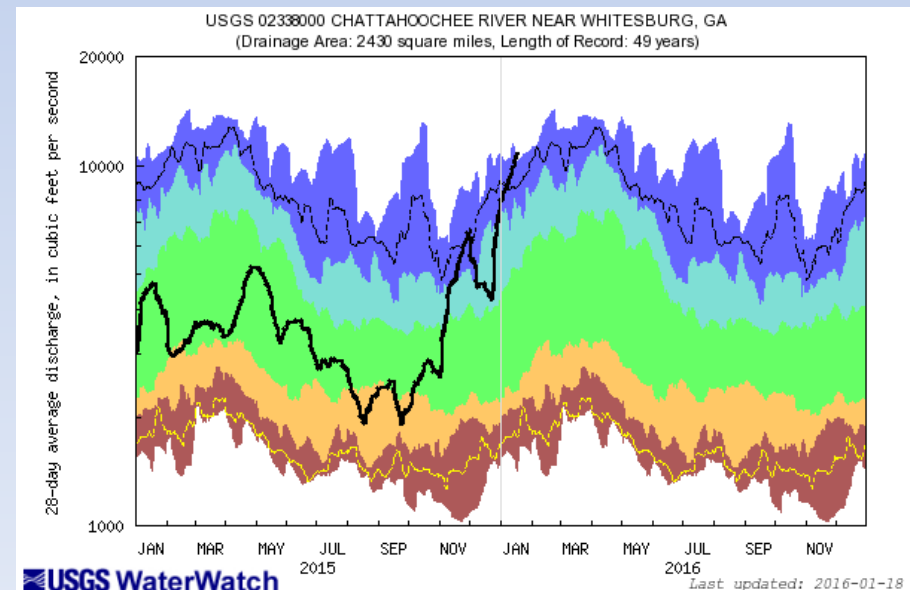
Current Streamflows

Chattahoochee at Atlanta (02336000)

<http://waterwatch.usgs.gov>



Chattahoochee near Whitesburg (02338000)

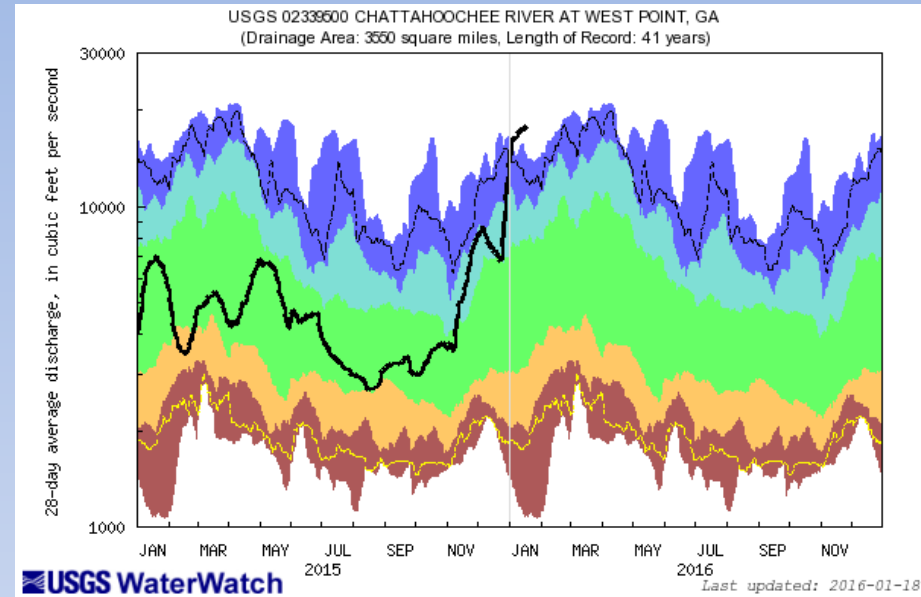


Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above-normal		

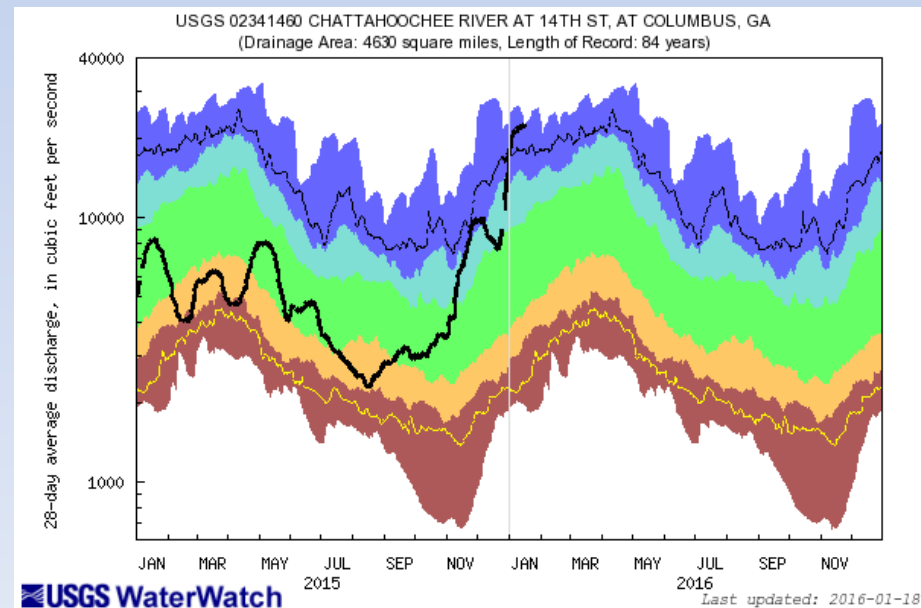
Current Streamflows

Chattahoochee at West Point (02339500)

<http://waterwatch.usgs.gov>



Chattahoochee at Columbus(02341460)



Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above-normal		

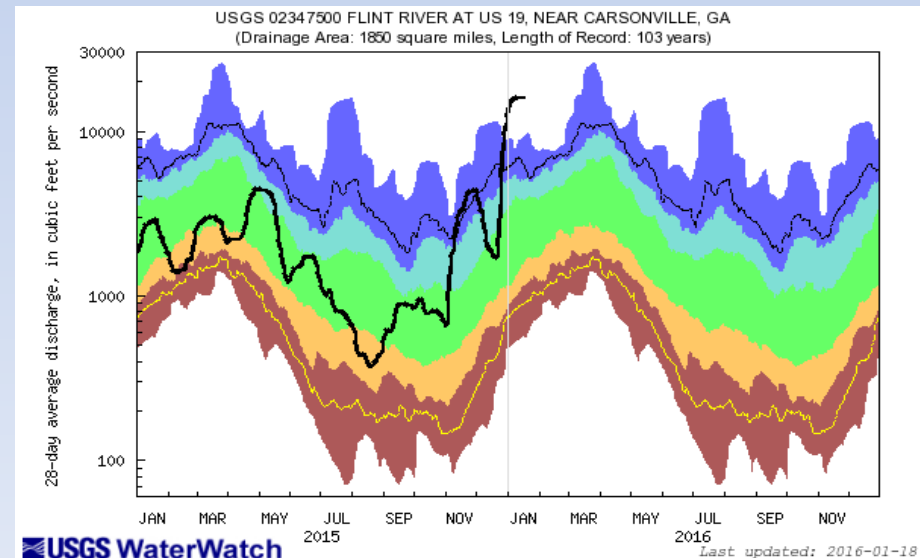
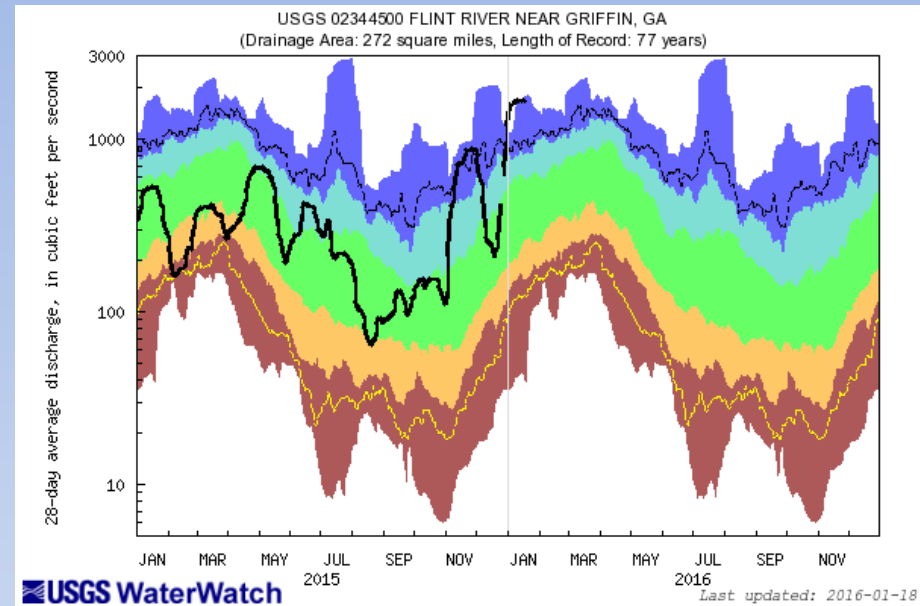
Current Streamflows

Flint River near Griffin (02344500)

<http://waterwatch.usgs.gov>

Flint River near Carsonville (02347500)

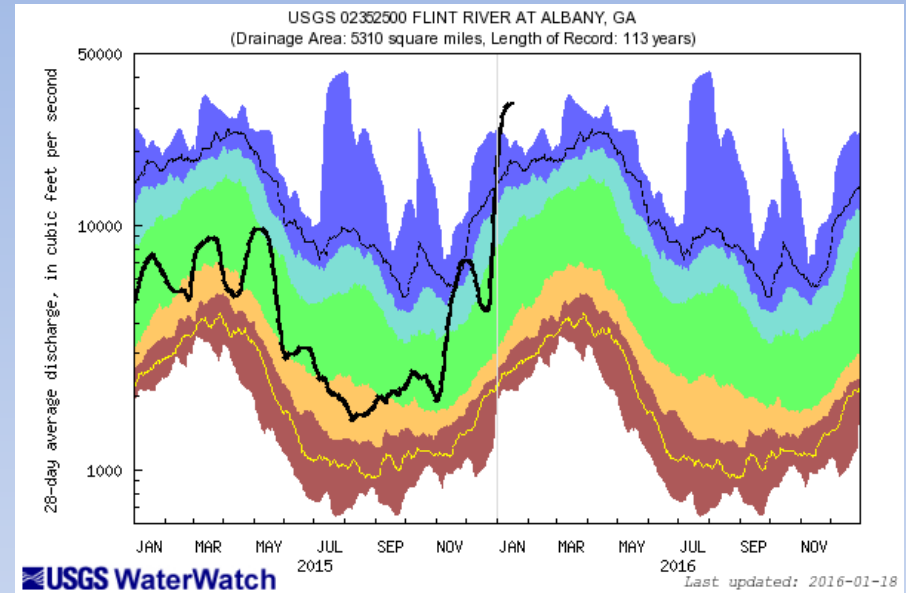
Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above-normal		



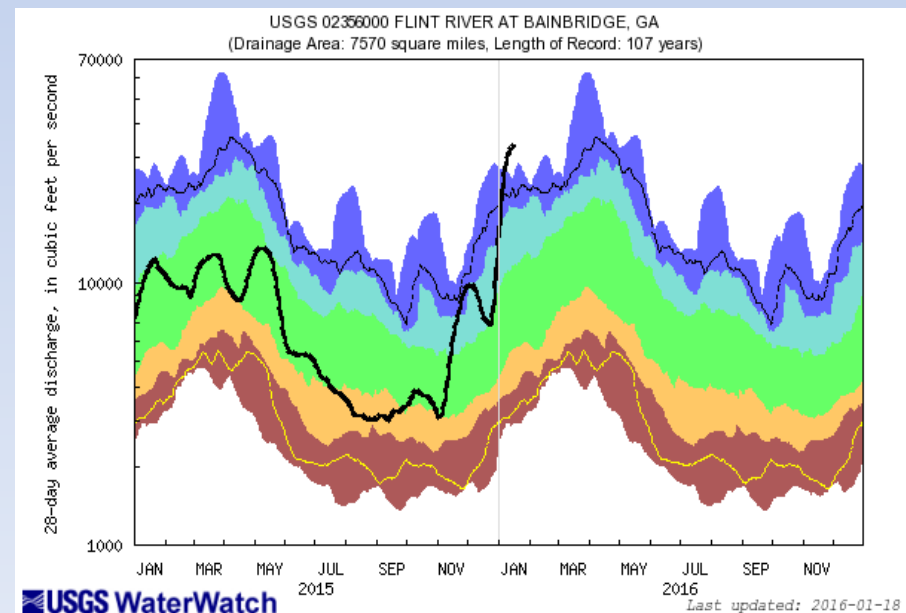
Current Streamflows

Flint River at Albany (02352500)

<http://waterwatch.usgs.gov>



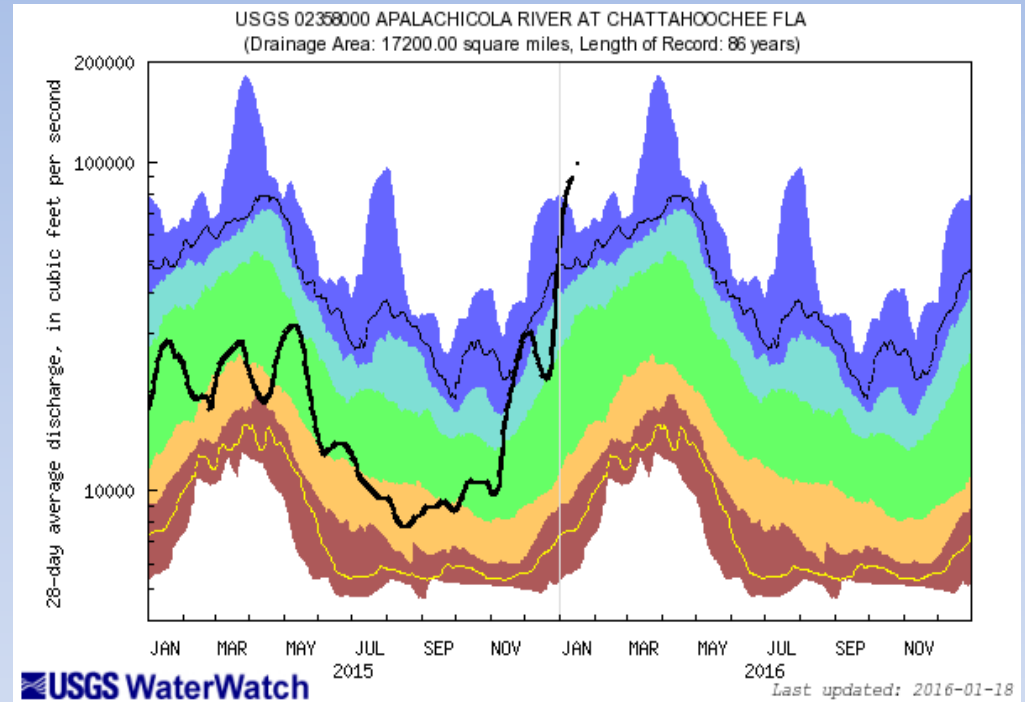
Flint at Bainbridge (02356000)



Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal		Below normal	Normal	Above normal	Much above-normal	

Streamflows

Apalachicola at Chattahoochee (02358000)

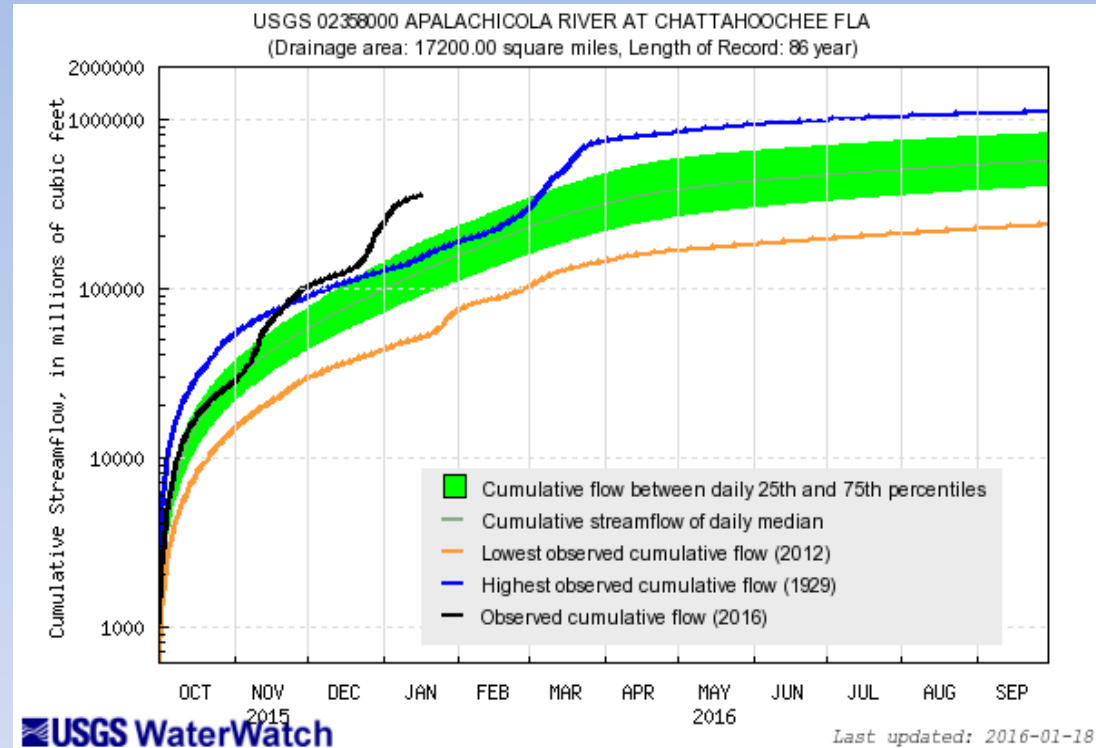


<http://waterwatch.usgs.gov>

Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

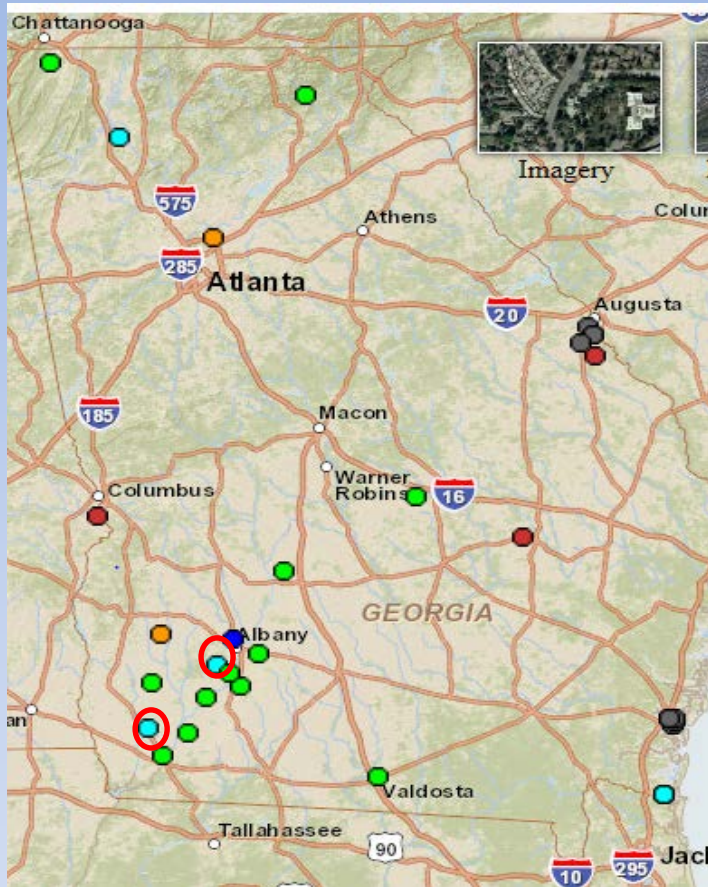
Streamflows

Apalachicola at Chattahoochee (02358000)

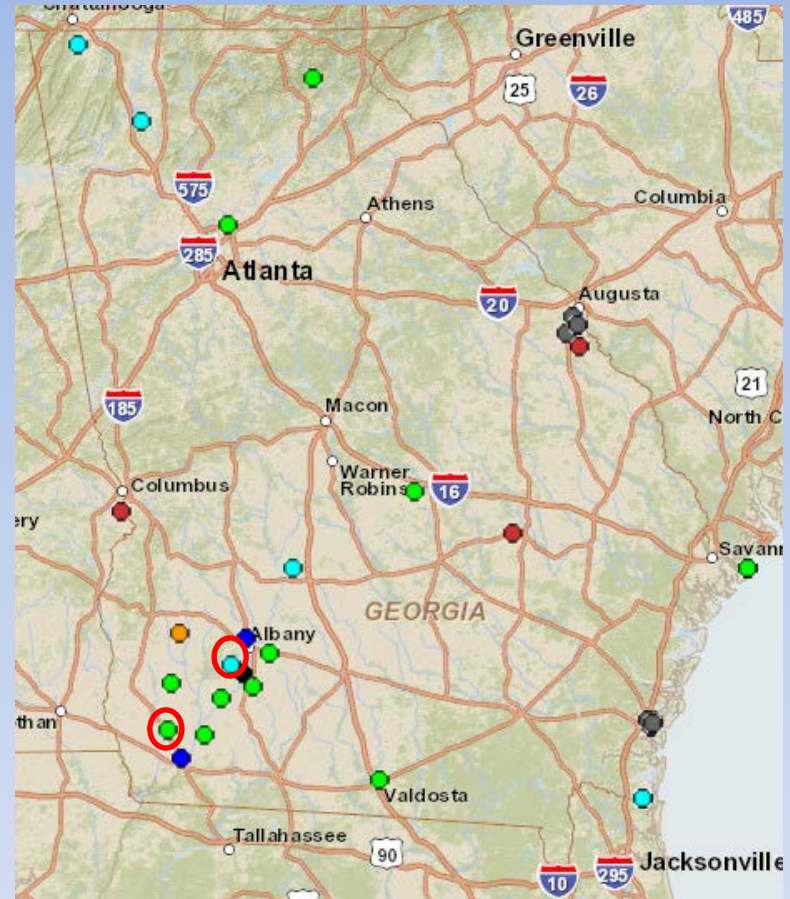


<http://waterwatch.usgs.gov>

Groundwater Conditions



Previous brief

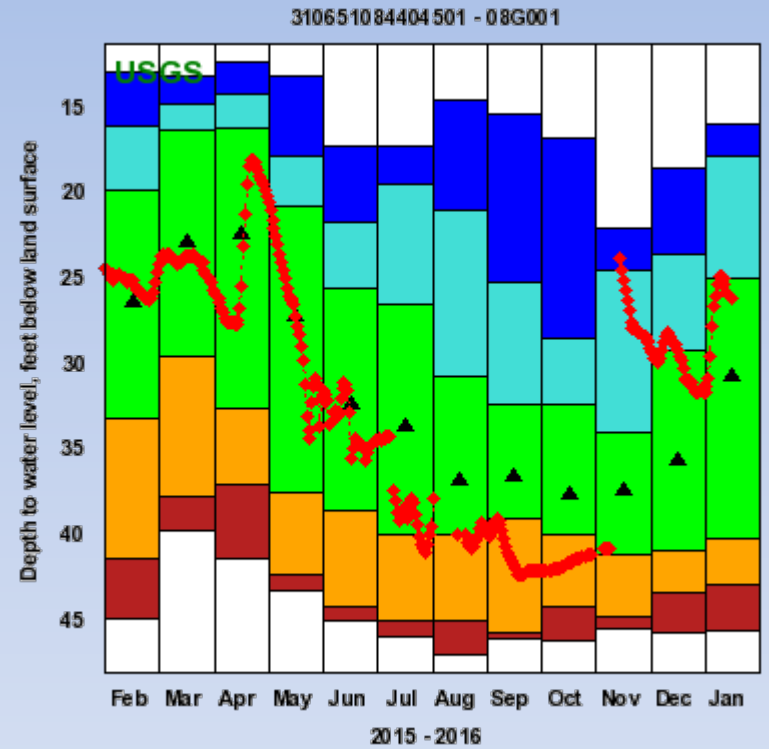
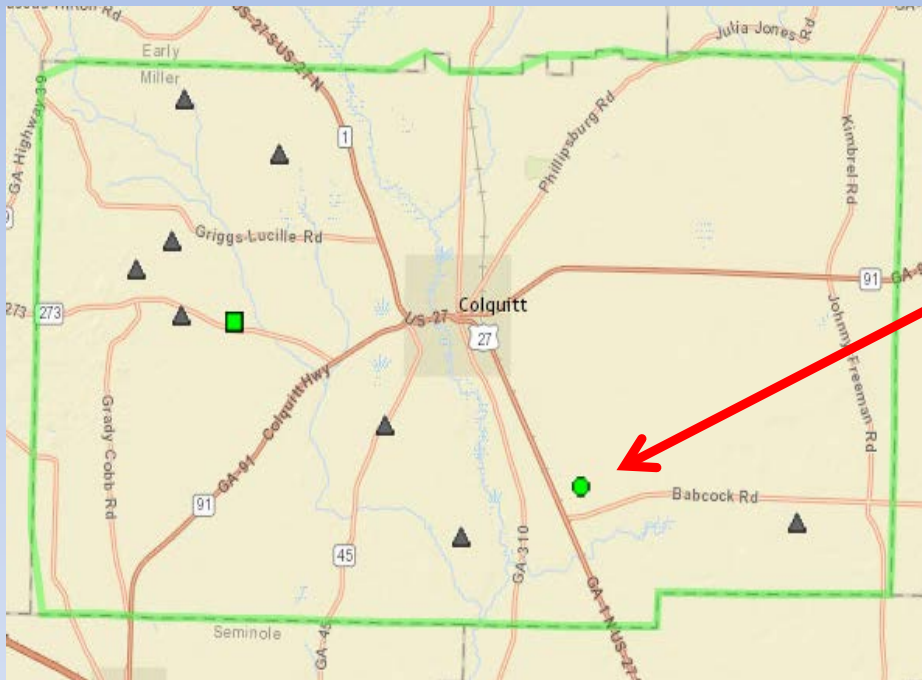


Current brief

Explanation - Percentile classes (symbol color based on most recent measurement)								Wells		Springs	
●	●	●	●	●	●	●	●	○	○	■	■
Low	<10	10-24	25-75	76-90	>90	High	Not Ranked	□	□	▣	▣
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal			△	△	▣	▣
								Periodic Measurements			

<http://groundwaterwatch.usgs.gov>

Groundwater Status – Miller County 08G001

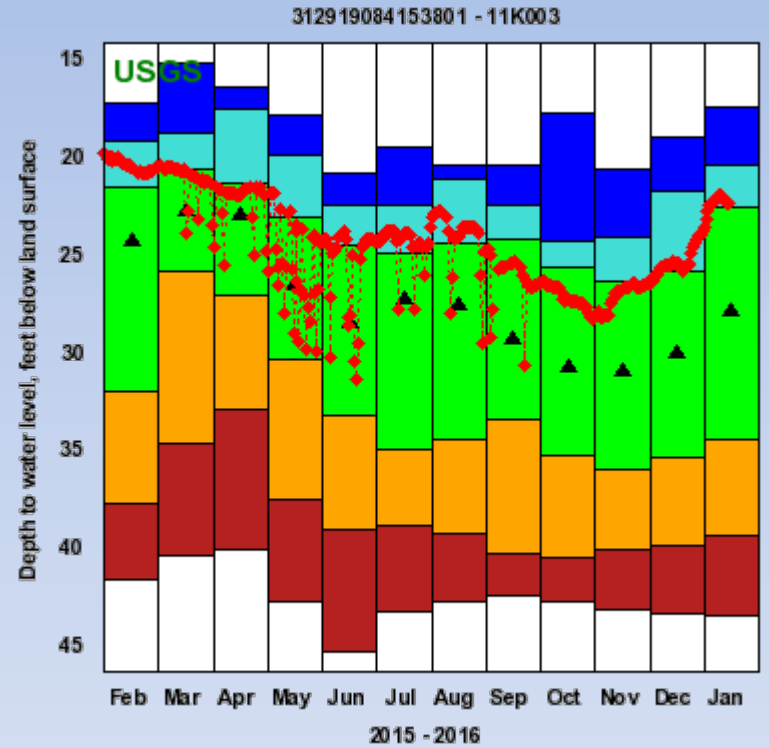
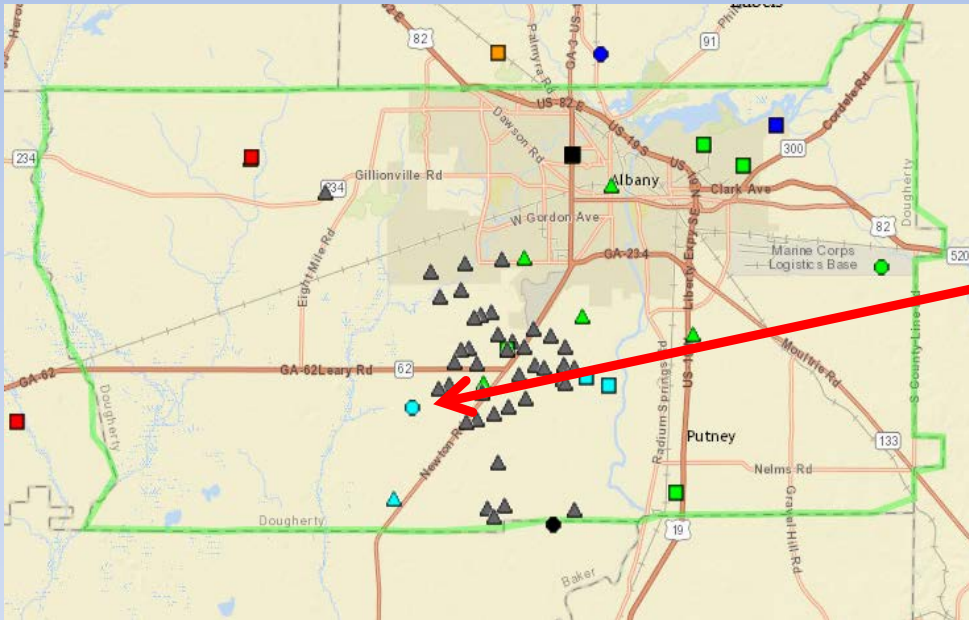


Explanation - Percentile classes (symbol color based on most recent measurement)							Wells		Springs	
●	●	●	●	●	●	●	○	□	■	▲
Low	<10	10-24	25-75	76-90	>90	High	○	□	■	▲
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal		△	□	■	▲
							Periodic Measurements			

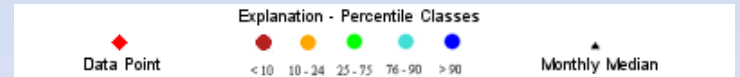
(Upper Floridan Aquifer)

Groundwater Status – Dougherty County

11K003



Plot created 01/16/16 11:05



Explanation - Percentile classes (symbol color based on most recent measurement)							Wells		Springs	
●	●	●	●	●	●	●	○	□	■	▲
Low	<10	10-24	25-75	76-90	>90	High	○	□	■	▲
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal		□	□	■	▲
							△	□	■	▲
							Measurements			

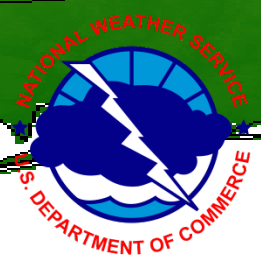
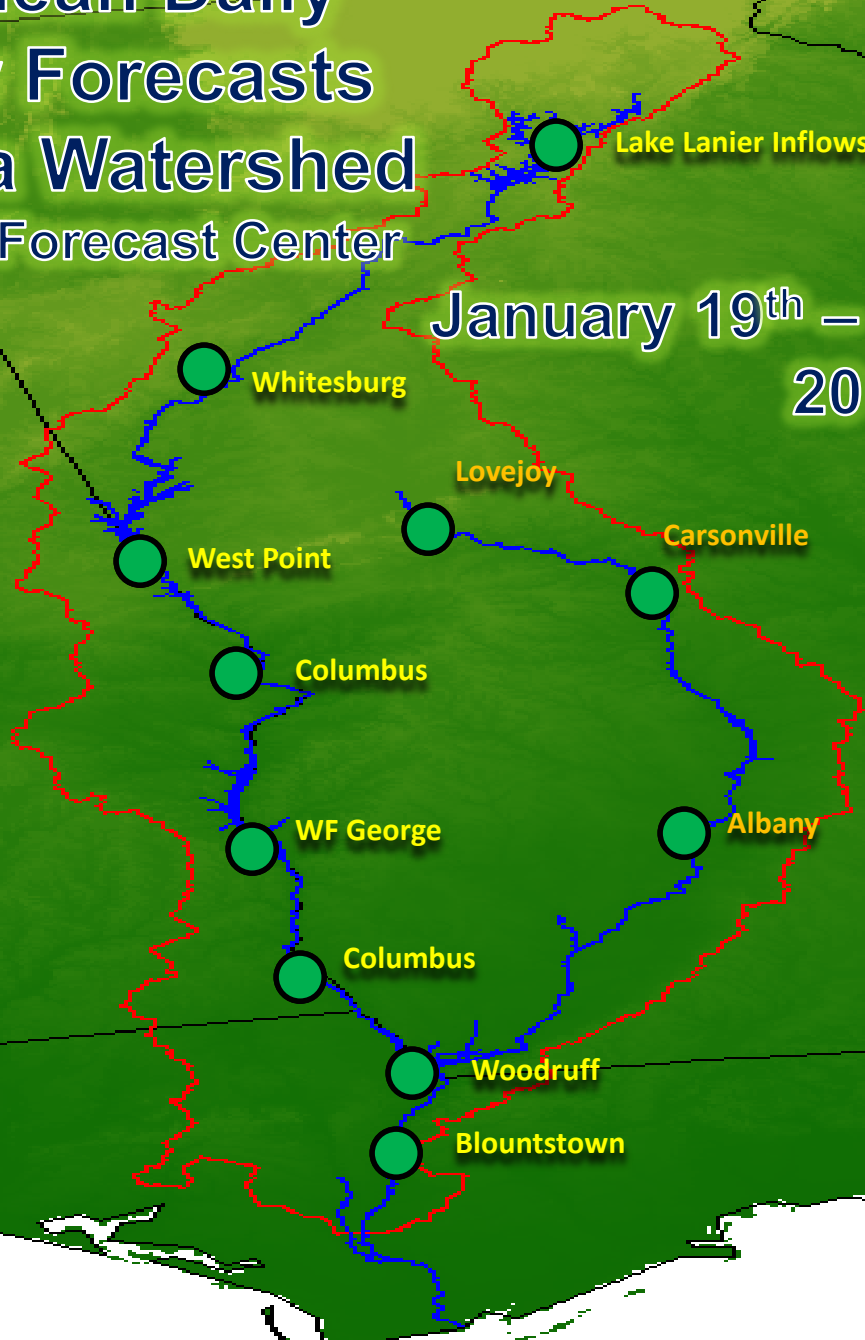
(Upper Floridan Aquifer)

Streamflow Forecasts

1-Month Mean Daily Streamflow Forecasts Apalachicola Watershed Southeast River Forecast Center

January 19th – February 19th
2016

-  Above Normal
-  Near Normal
-  Below Normal



3-Month Mean Daily Streamflow Forecasts

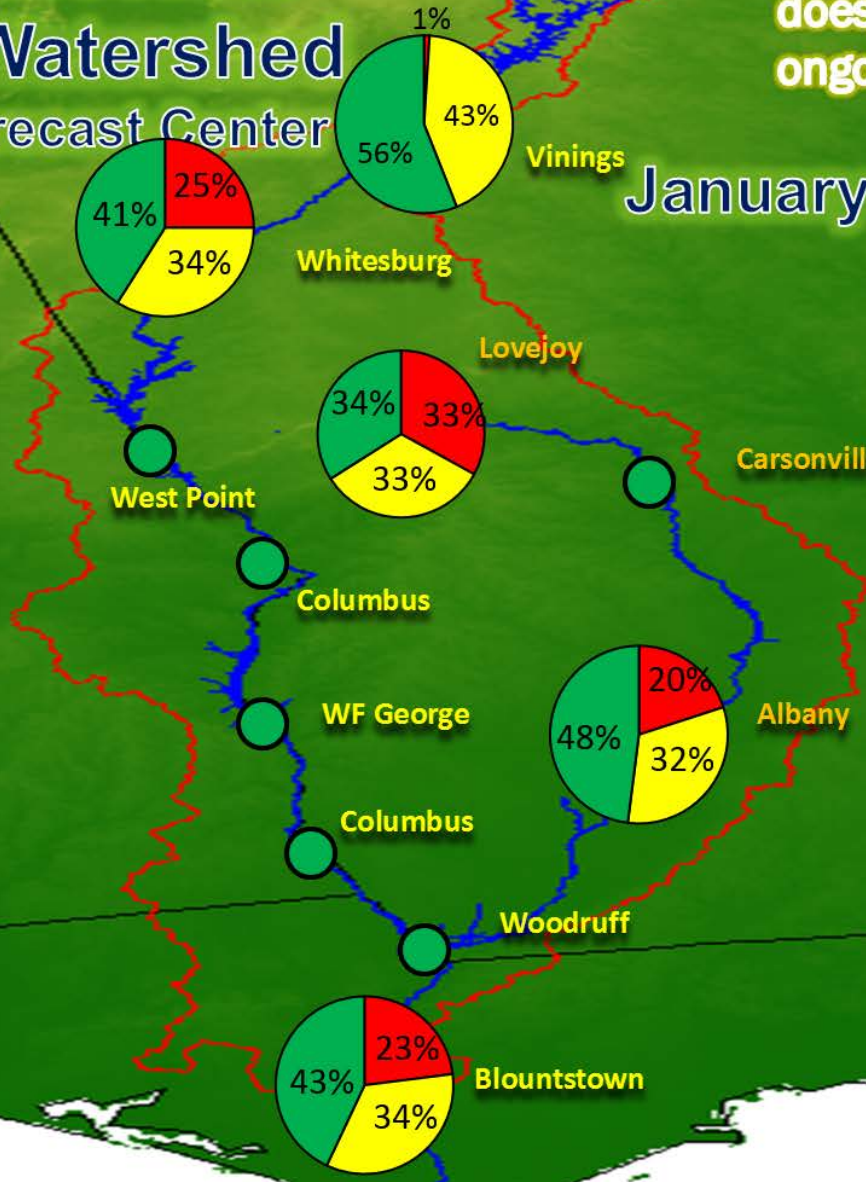
Apalachicola Watershed

Southeast River Forecast Center

This forecast method does not account for ongoing El Niño.

January 19th – April 18th 2016

- Above Normal
- Near Normal
- Below Normal



Summary – Eric Reutebuch

- All portions of ACF Basin completely drought-free according to the US Drought Monitor.
- Climate Prediction Center's one-month outlook favors a pattern of above-normal rainfall for all the Southern U.S.
- CPC El Niño Advisory: A strong El Niño is expected to gradually weaken through spring 2016, and to transition to ENSO-neutral during late spring or early summer (see www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/index.shtml)
- Drought very unlikely to develop in the basin over the next several months.

Summary-Paul Ankcorn

- Realtime streamflows range from normal to much above normal for most of the ACF basin, with the majority of stream gages in the above normal to much above normal range.
- 28-day average streamflows into Lake Lanier are much above normal.
- 28-day average streamflows for the Flint River are period of record highs for January.
- Groundwater levels are in the normal to above normal range in Southwest Georgia.

Summary – Jeff Dobur

- 1 Month Streamflow forecast - Above Normal
- 3 Month Streamflow forecast – Favor Above Normal
- Pie Charts do not bias toward any future forecast such as ENSO, CPC or other. Based on soil conditions relative to normal in concert with historical precipitation.

Questions, Comments, Discussion

References

Speakers

Eric Reutebuch, AU

Paul Ankorn, USGS

Jeff Dobur, SERFC

Moderator

Eric Reutebuch, AU WRC

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

February 16, 2016, 1:00 pm EDT

Moderator: Eric Reutebuch

Slides from this briefing will be posted at

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

Please send comments and suggestions to:

reuteem@auburn.edu