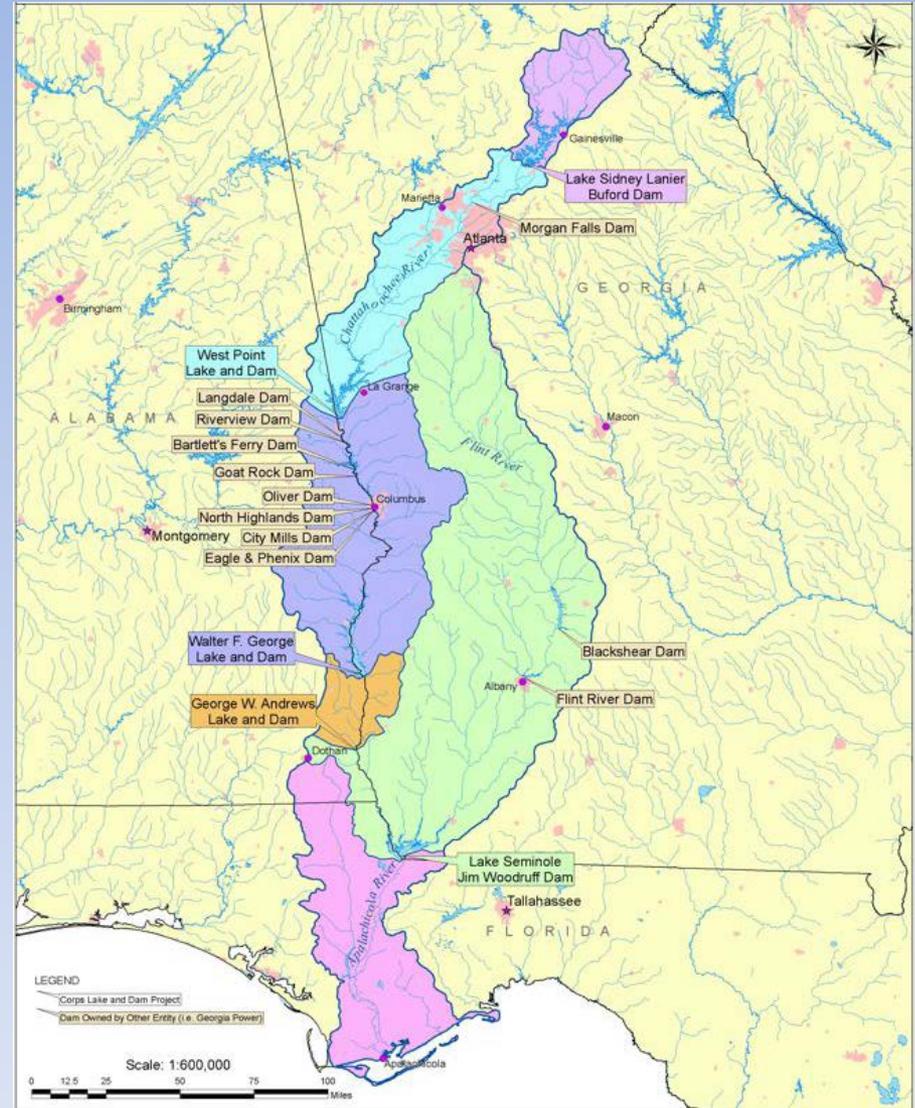
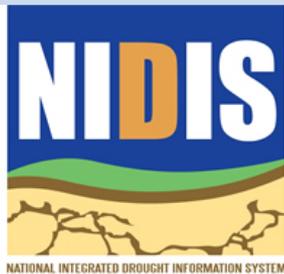


National Integrated Drought Information System

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

17 February 2015



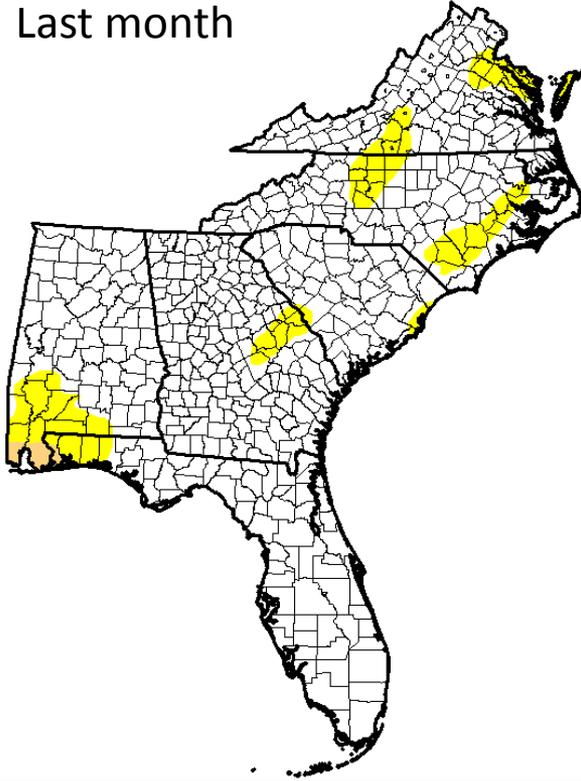
Outline

Welcome – Eric Reutebuch, AU Water Resources Center

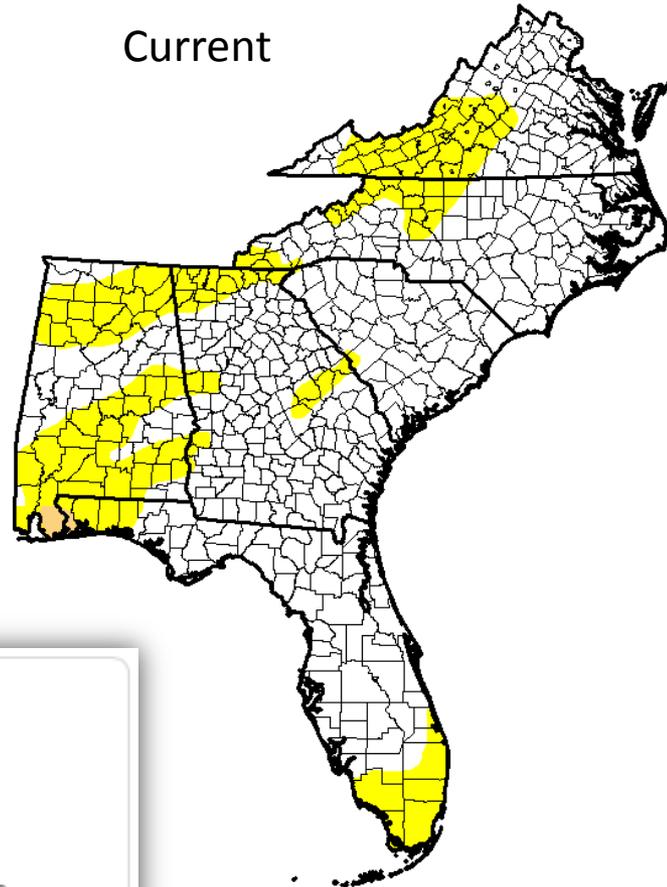
- Current drought status, seasonal forecasts
- Streamflows and groundwater – Tony Gotvald, USGS
- Deterministic precipitation – new product from NOAA
- Summary and Discussion

Current drought status

Last month



Current



Intensity:

- | | |
|--|--|
|  D0 - Abnormally Dry |  D3 - Extreme Drought |
|  D1 - Moderate Drought |  D4 - Exceptional Drought |
|  D2 - Severe Drought | |

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

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

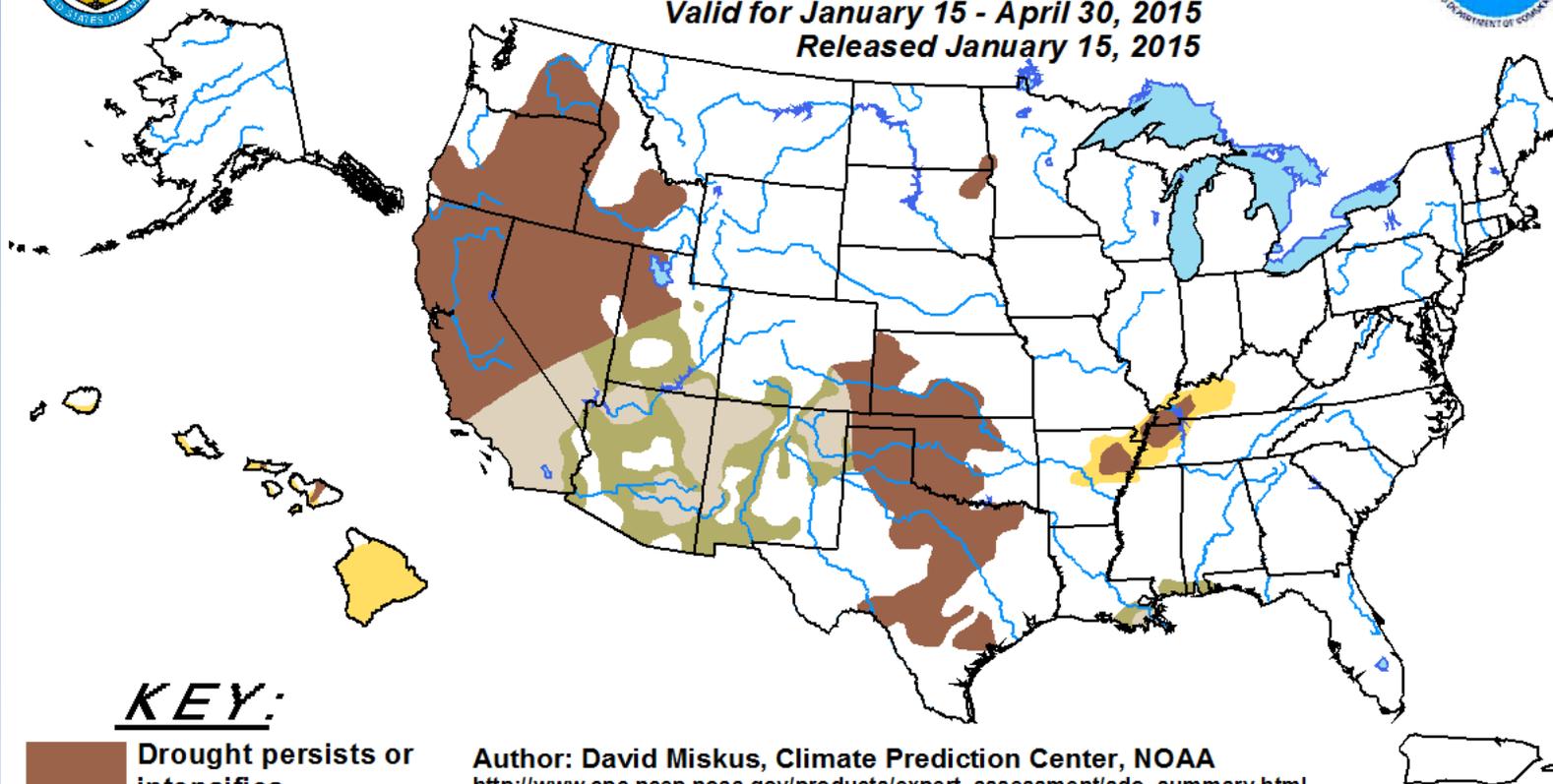
U.S. Drought Outlook



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

Valid for January 15 - April 30, 2015

Released January 15, 2015



KEY:

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

Author: David Miskus, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

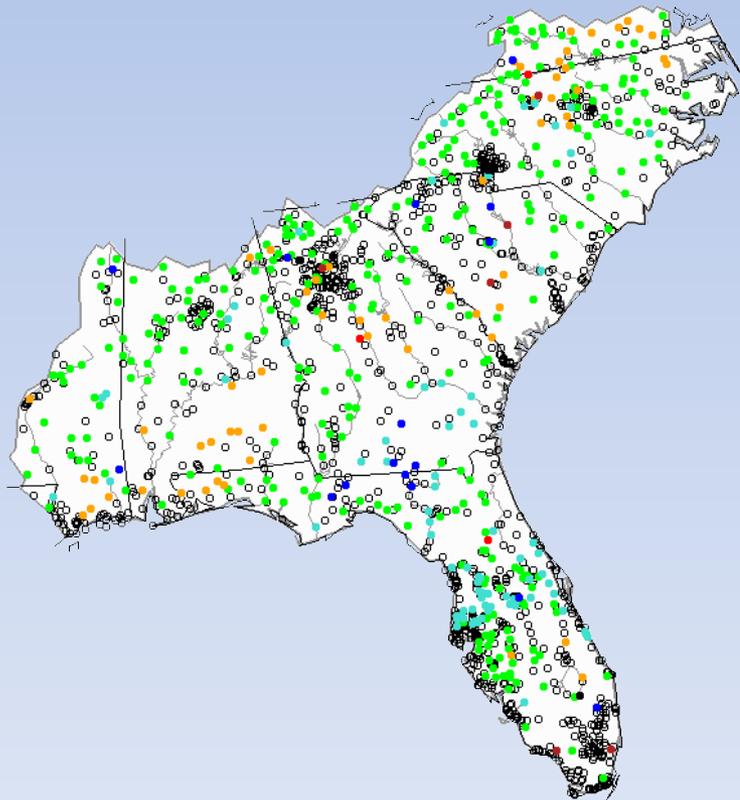
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The green areas imply drought removal by the end of the period (D0 or none)

Streamflows and Groundwater

Realtime stream flow compared with historical monthly averages

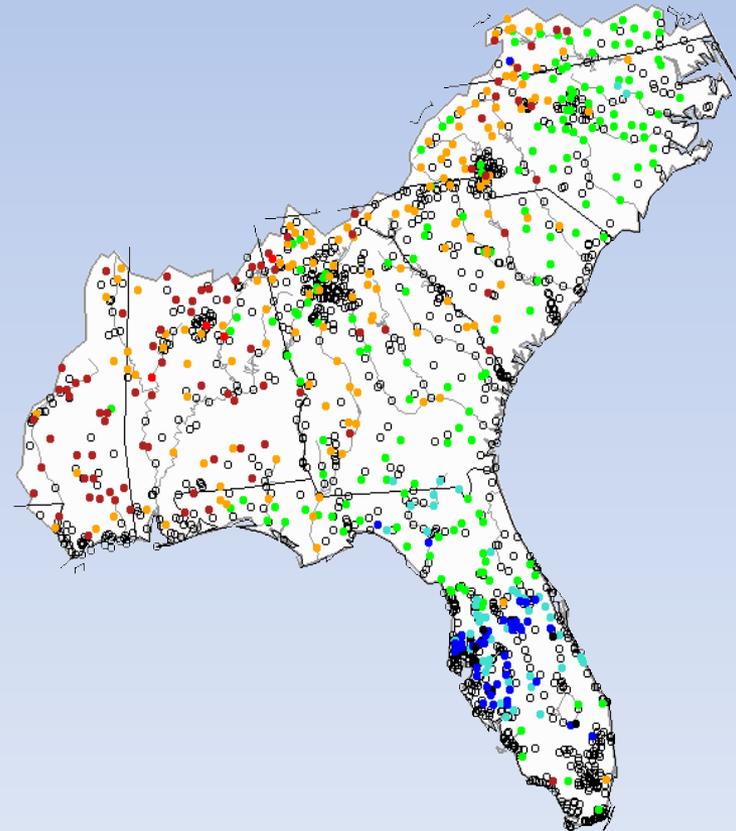
Previous Brief:

Monday, January 12, 2015 07:30ET



Current:

Friday, February 13, 2015 07:00ET



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

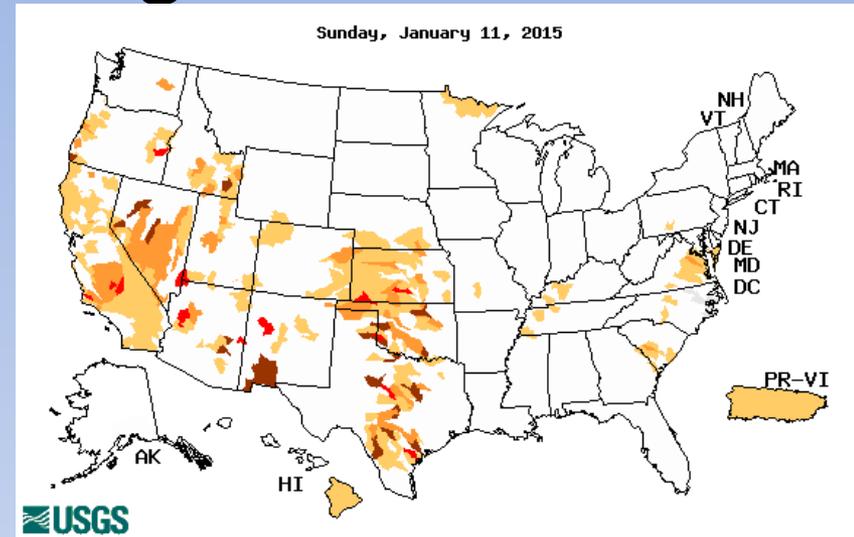
Below Normal 7-day Average Streamflows

Previous brief:

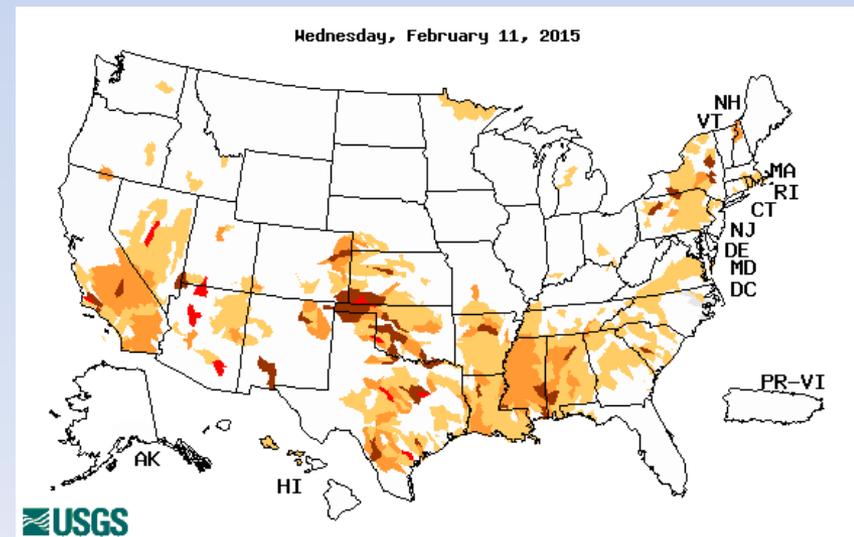
Below normal 7-day average streamflow as compared with historical streamflow for day shown

Current:

<http://waterwatch.usgs.gov>



Explanation - Percentile classes				
Low	<=5	6-9	10-24	Disrupted or not in a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

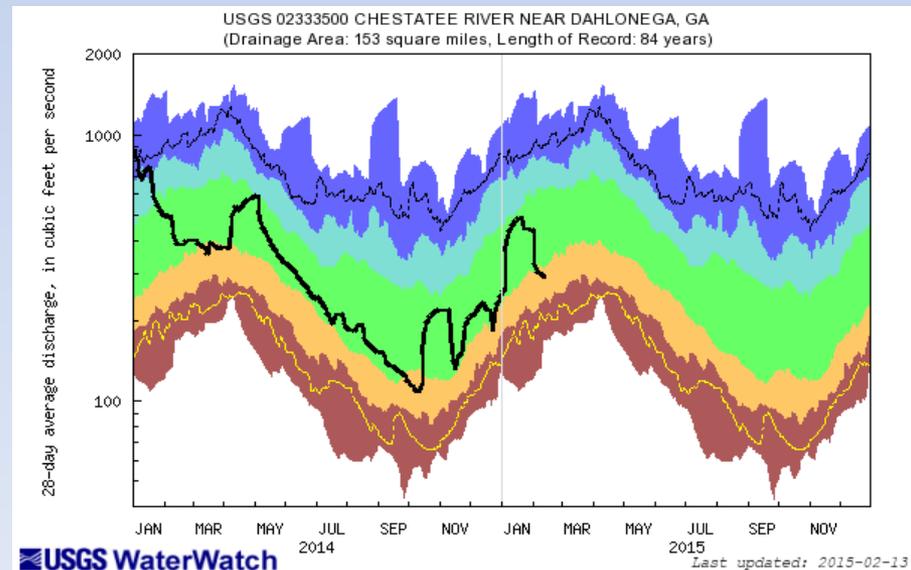
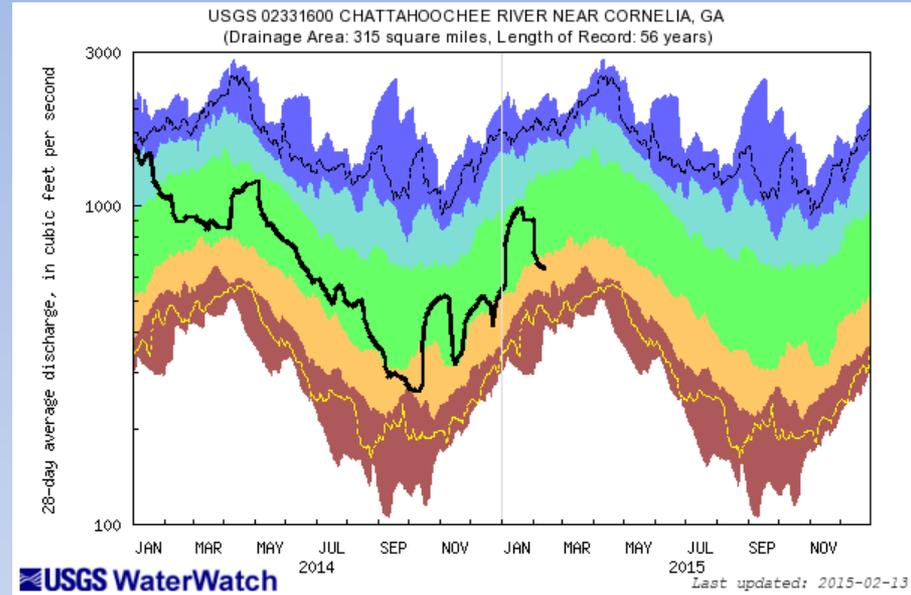


Lake Lanier Inflows

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	90th percentile - highest	
Much below Normal	Below normal	Normal	Above normal	Much above normal			

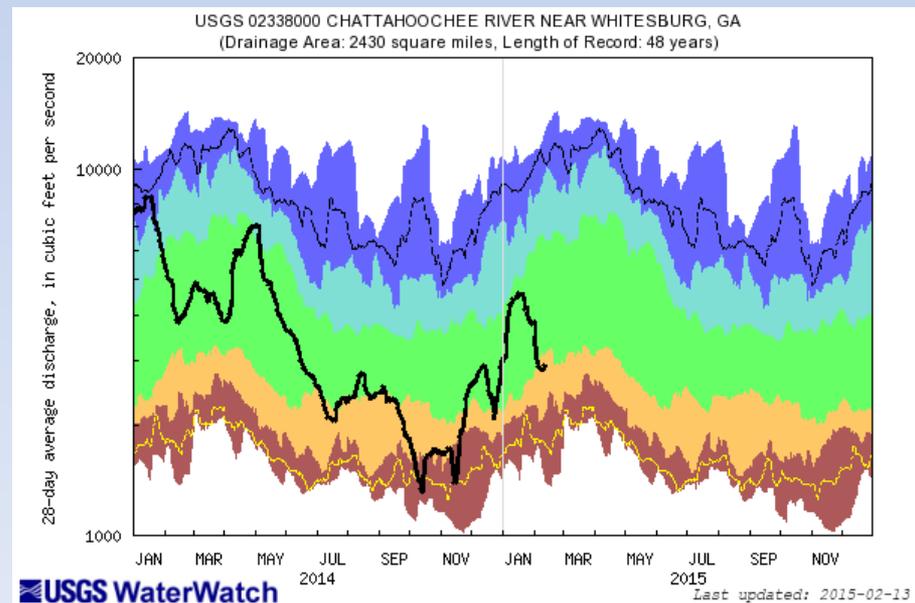
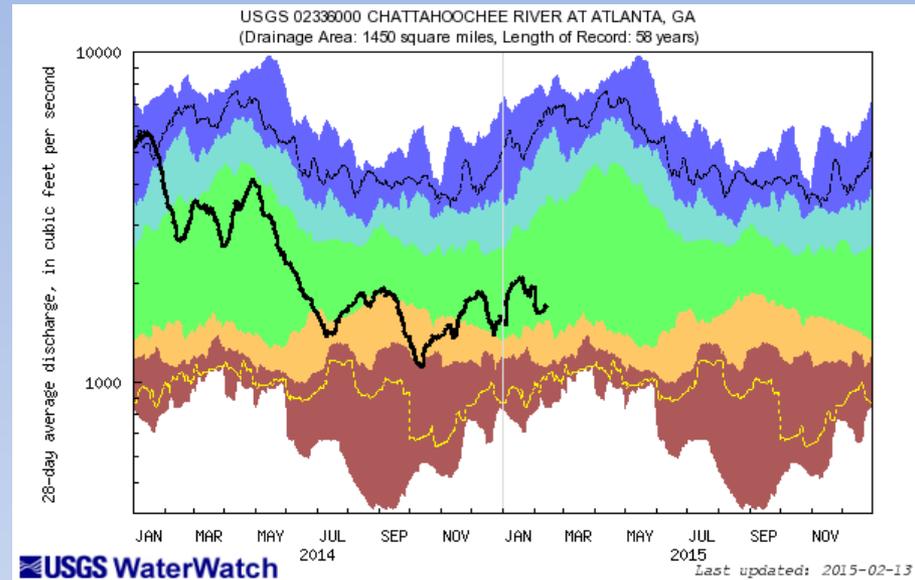
Current Streamflows

Chattahoochee at Atlanta (02336000)

<http://waterwatch.usgs.gov>

Chattahoochee near Whitesburg (02338000)

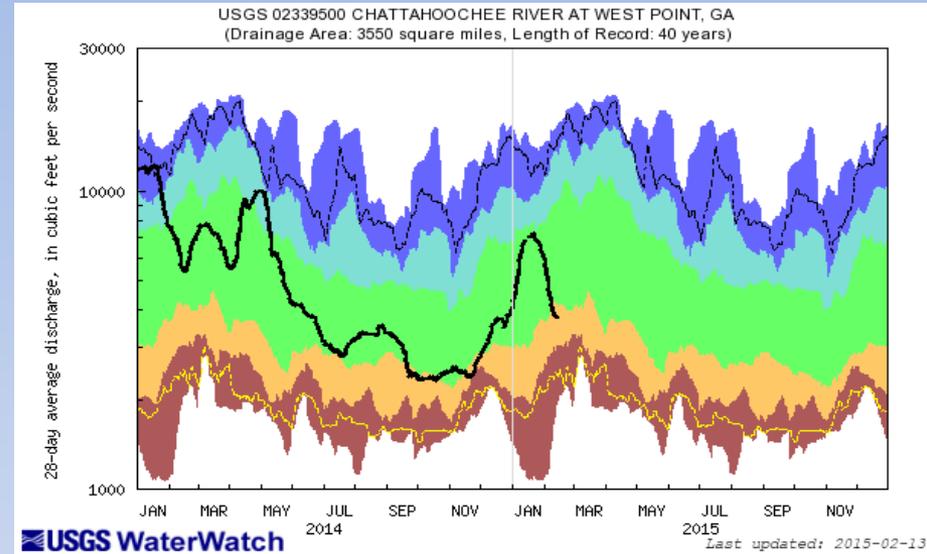
Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above normal	90th percentile - highest	



Current Streamflows

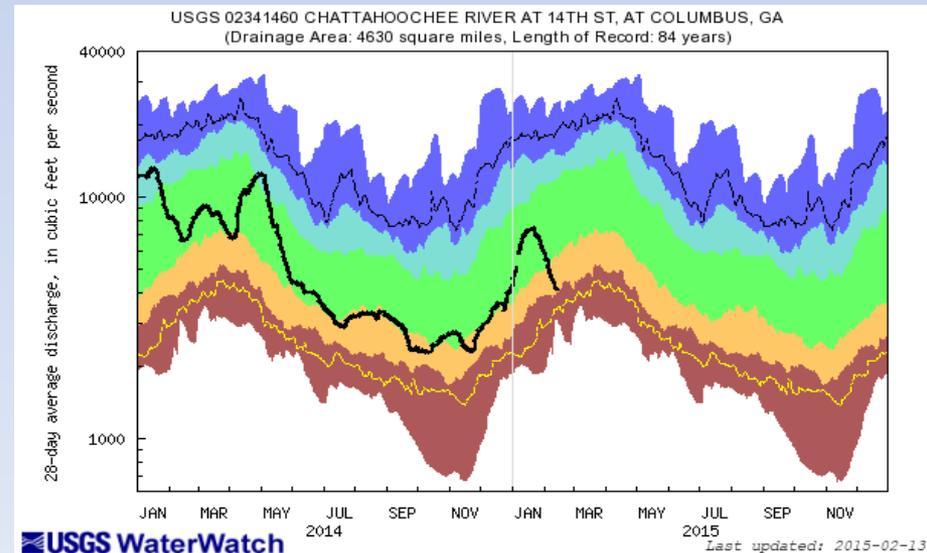
Chattahoochee at West Point (02339500)

<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	90th percentile - highest	



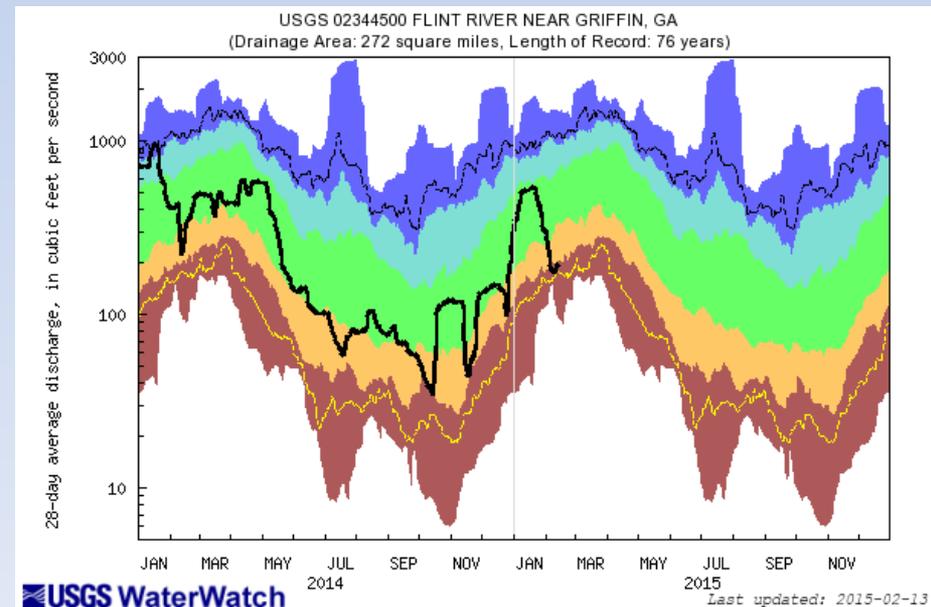
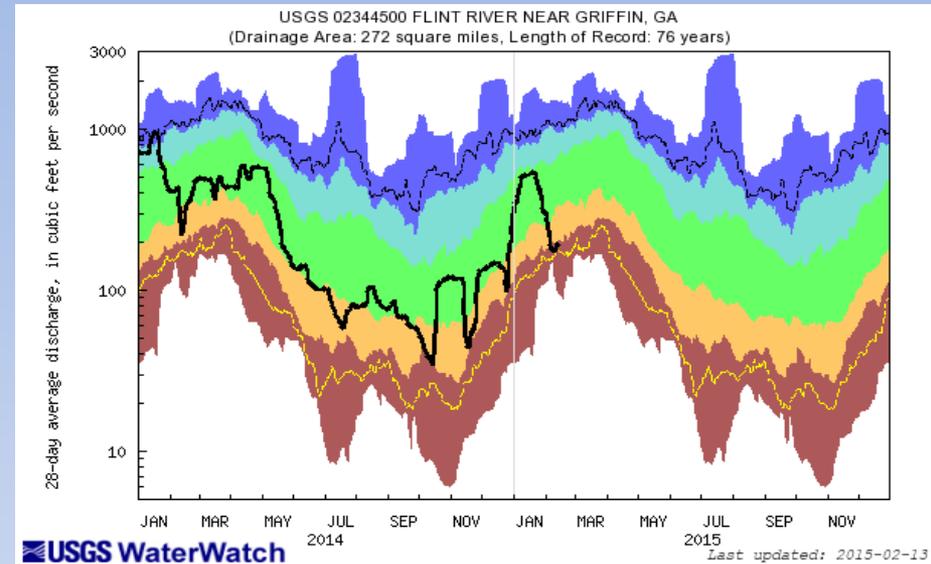
Current Streamflows

Flint River near Griffin (02344500)

<http://waterwatch.usgs.gov>

Flint River near Carsonville (02347500)

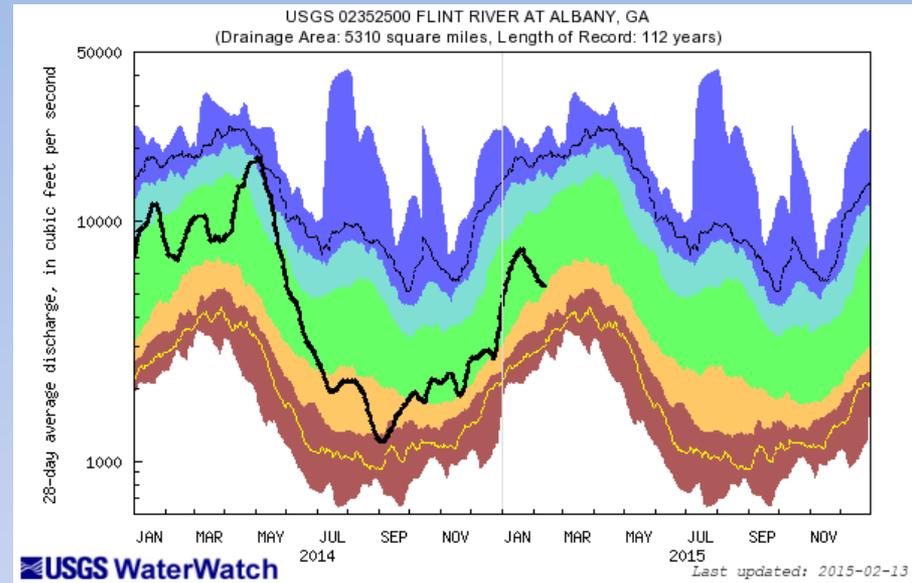
Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above normal	90th percentile - highest	



Current Streamflows

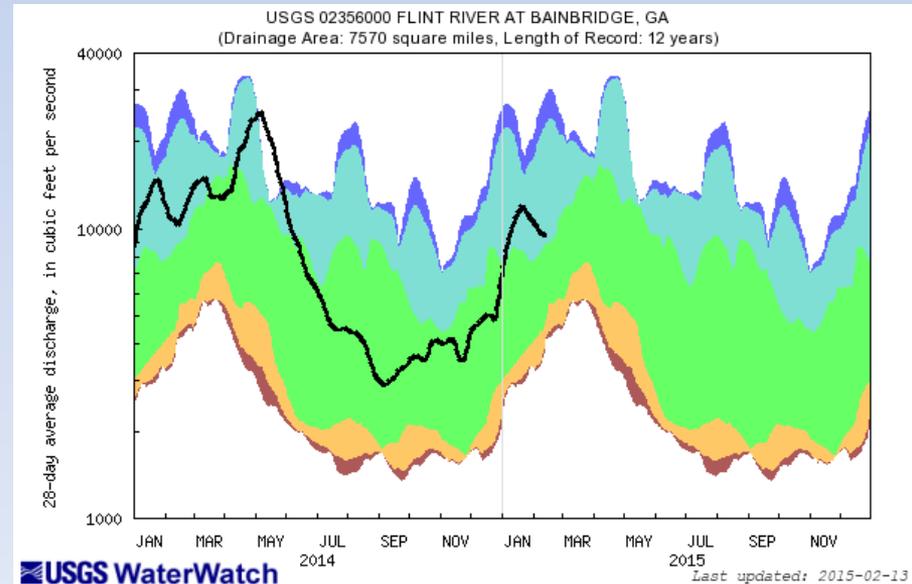
Flint River at Albany (02352500)

<http://waterwatch.usgs.gov>



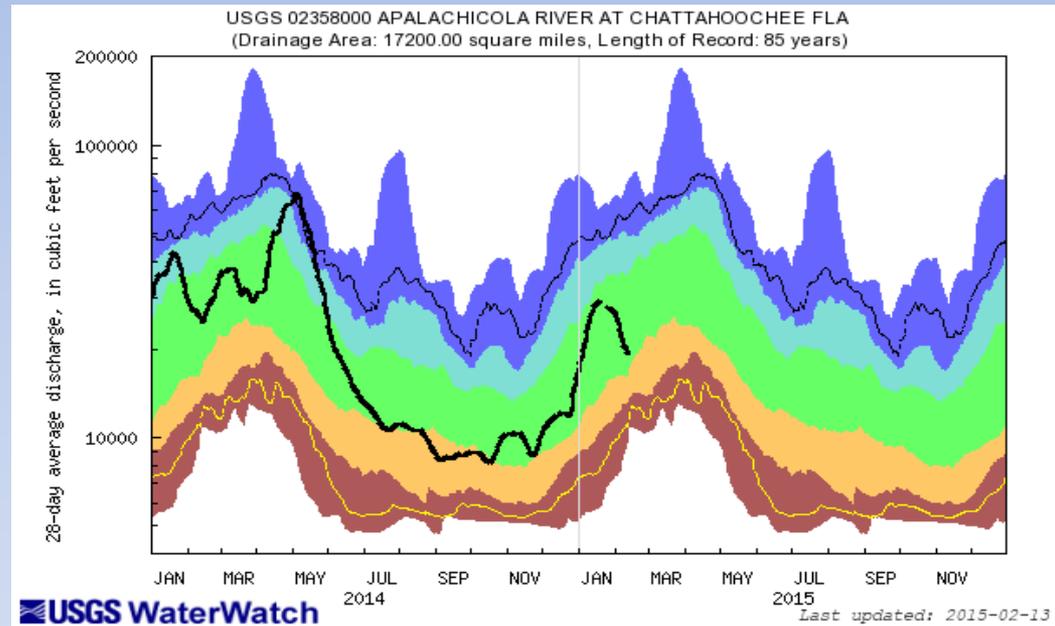
Flint at Bainbridge (02356000)

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

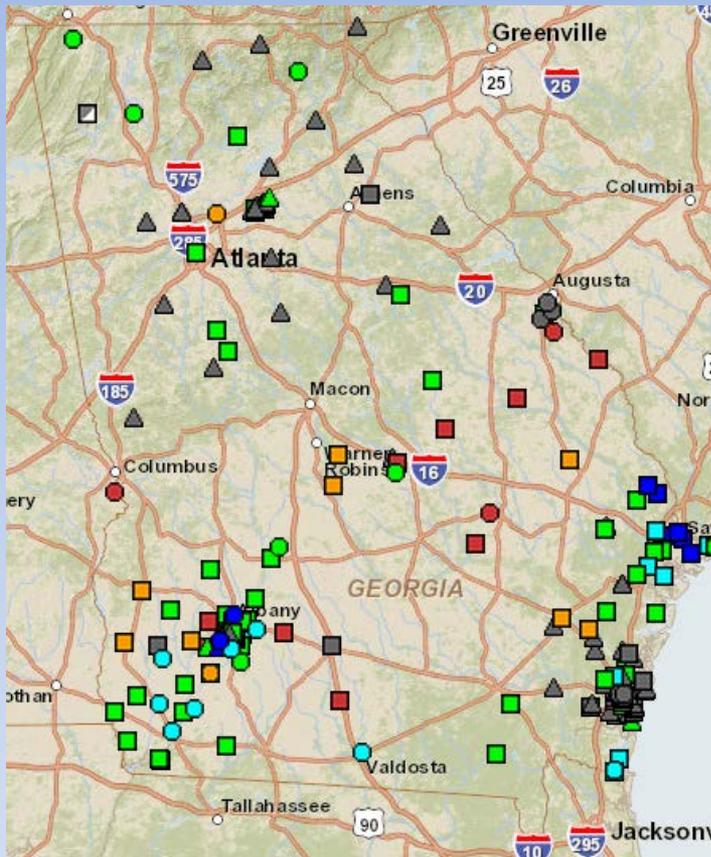
Apalachicola at Chattahoochee (02358000)



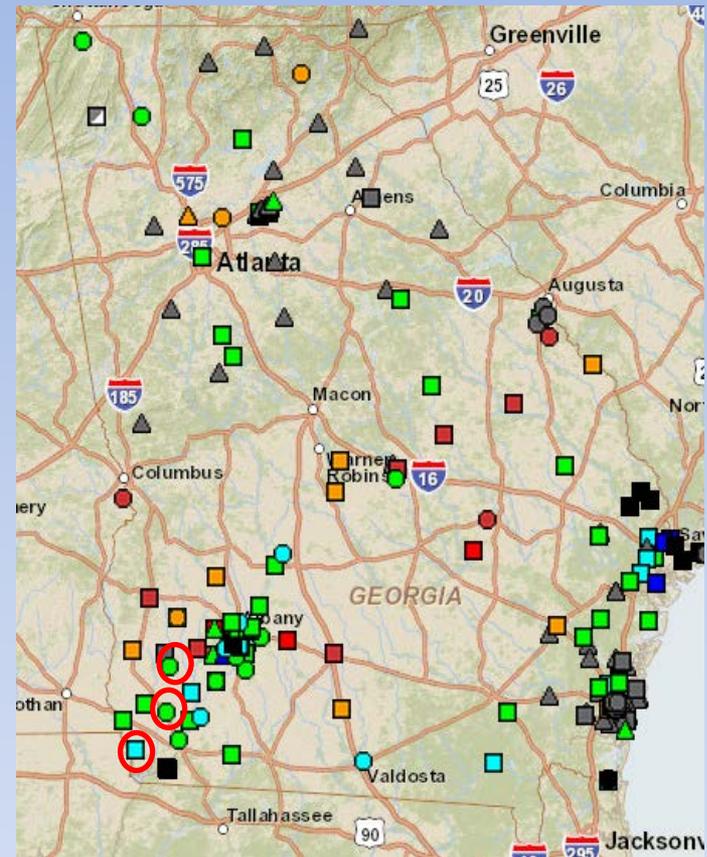
<http://waterwatch.usgs.gov>

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

Groundwater Conditions



Previous brief

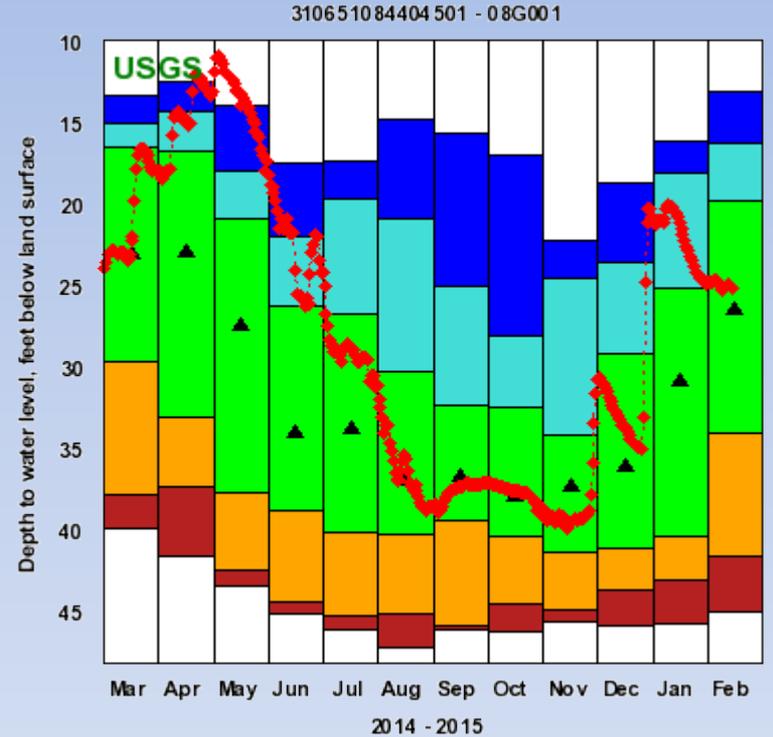
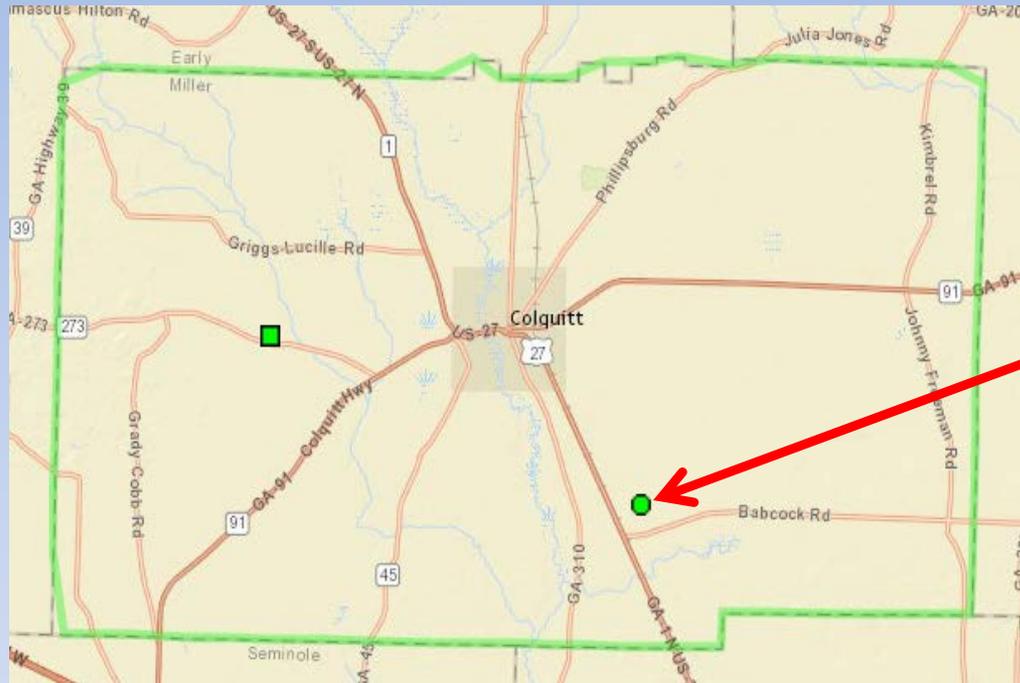


Current brief

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>

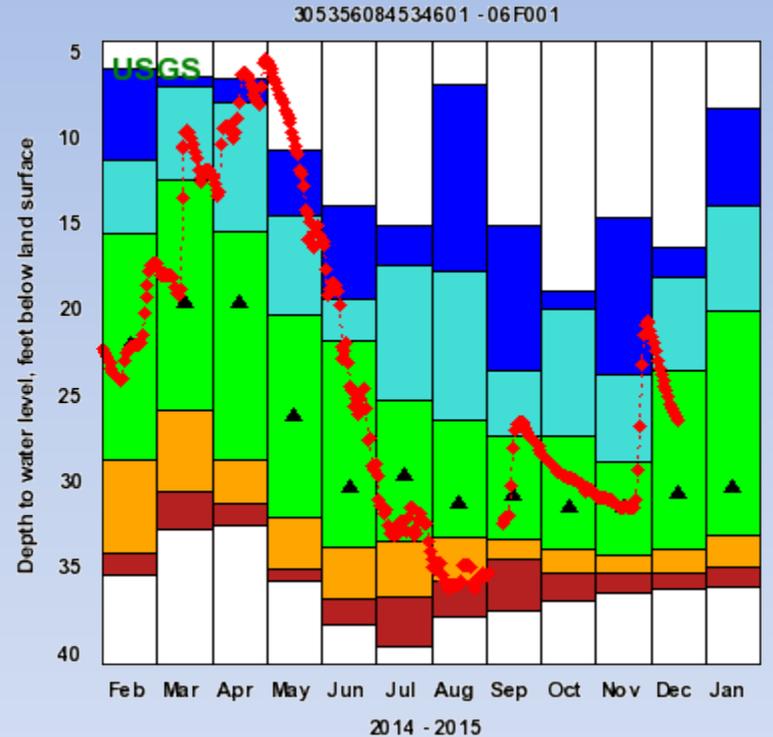
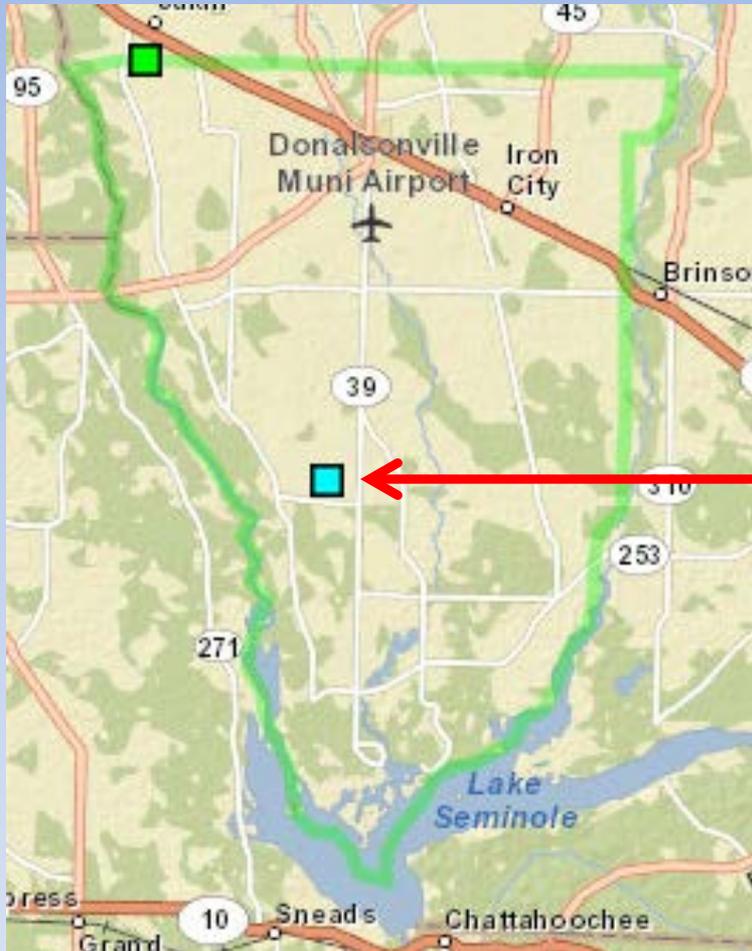
Groundwater Status – Miller County 08G001



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

(Upper Floridan Aquifer)

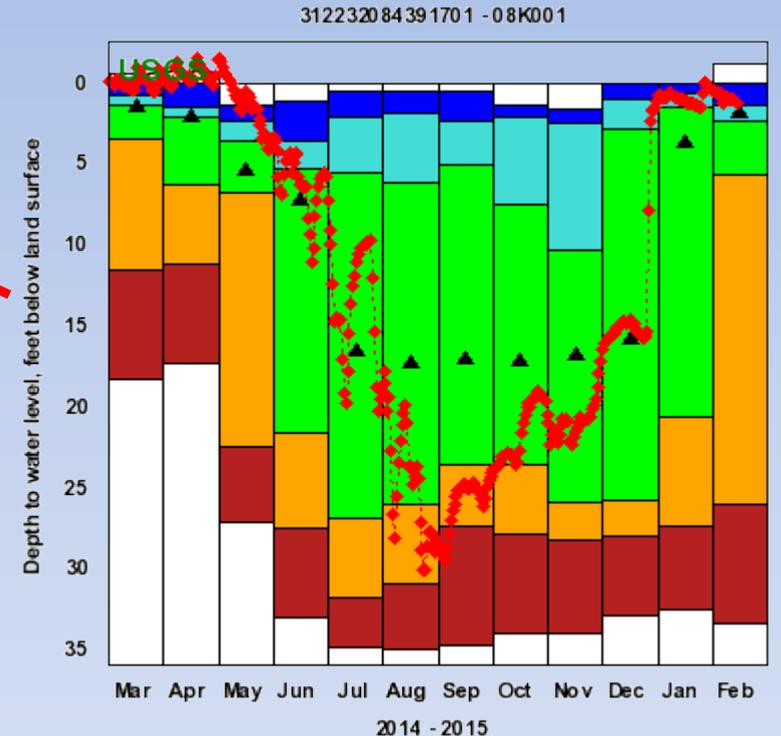
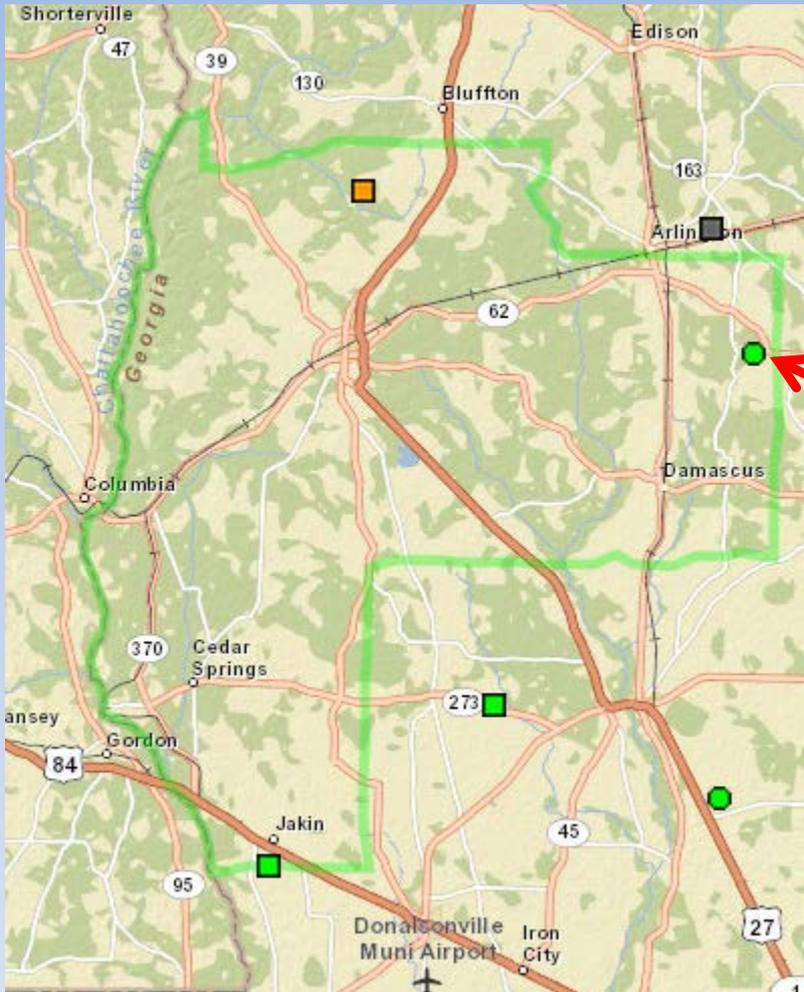
Groundwater Status – Seminole County 06F001



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			□	■	△	■

(Upper Floridan Aquifer)

Groundwater Status – Early County 08K001



Explanation - Percentile classes (symbol color based on most recent measurement)							
●	●	●	●	●	●	●	●
Low	<10	10-24	25-75	76-90	>90	High	Not Ranked
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal		

Wells		Springs	
○	Real-Time	■	
□	Continuous	■	
△	Periodic Measurements	■	

(Upper Floridan Aquifer)

Summary-Tony Gotvald

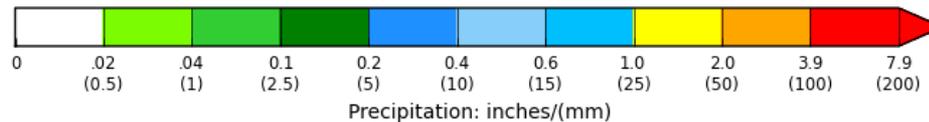
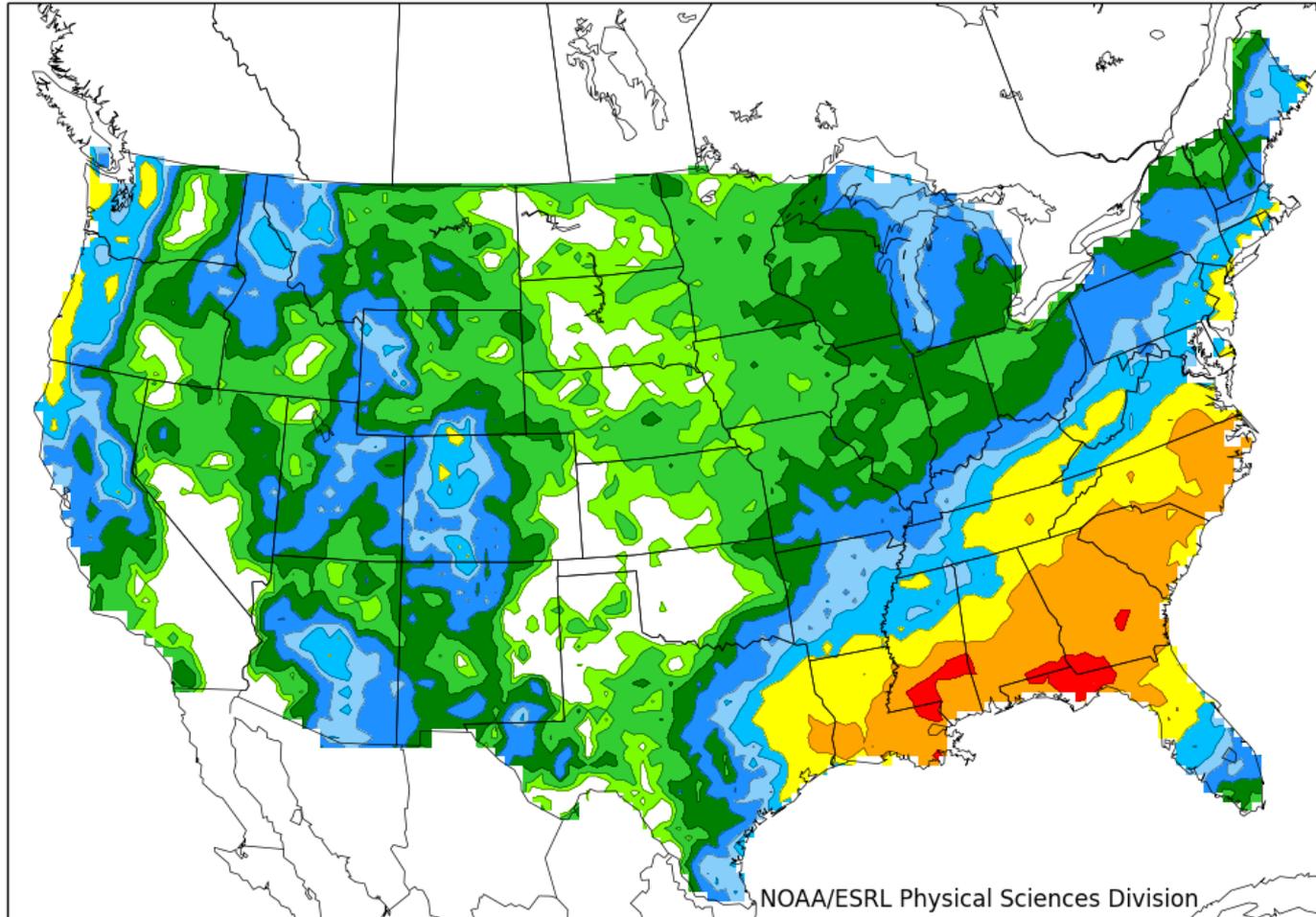
- Realtime streamflows are in the normal to below normal range for most of the ACF basin.
- Inflows into Lake Lanier are in the below normal range for the 28-day average flows.
- Streamflows are in the below normal range throughout the upper Flint River basin and in the normal range in the lower Flint River basin for the 28-day average flows.
- Groundwater levels are in the normal to above normal range in Southwest Georgia.

Deterministic Precipitation

168-336hr fcst from 00Z Tue Feb 17. Valid 00Z Tue Feb 24 - 00Z Tue Mar 03

Calibrated with 1985-2010 Reforecast2 data.

Deterministic Precipitation, from Analogs



Victor Murphy, NOAA

Deterministic Precipitation

The previous slide is an experimental product from the NOAA Earth Systems Resource Lab (ESRL), showing the deterministic week 2 QPF.

As you can see, the 2-week time period from 2/24 to 3/3 is forecast to be very wet for the entire ACF Basin, with widespread 2"-4" totals and localized amounts in the 4"-8" range around Lake Seminole and the FL portion of the basin.

Based on this, I'm confident that in 2 to 3 weeks, all drought conditions currently in GA will be removed, and the danger of short term drought through March will be minimal to near zero.

Questions, Comments, Discussion

References

Speakers

Tony Gotvald, USGS
(other presenters were
unable to attend due to
winter storm conditions)

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

March 17, 2015, 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