Southeast Climate Consortium

Southeast Climate Consortium Efforts for the Apalachicola-Chattahoochee-Flint River Basin NIDIS Pilot

KT Ingram

US Drought Monitor Forum

16-18 April 2013, West Palm Beach, FL

UF UNIVERSITY of FLORIDA IFAS

UNIVERSITY OF Miami

NC STATE UNIVERSITY

AUBURN UNIVERSITY

FLORIDA STATE UNIVERSITY 1851

UAHuntsville The University of Alabama in Huntsville

CLEMSON UNIVERSITY

1785

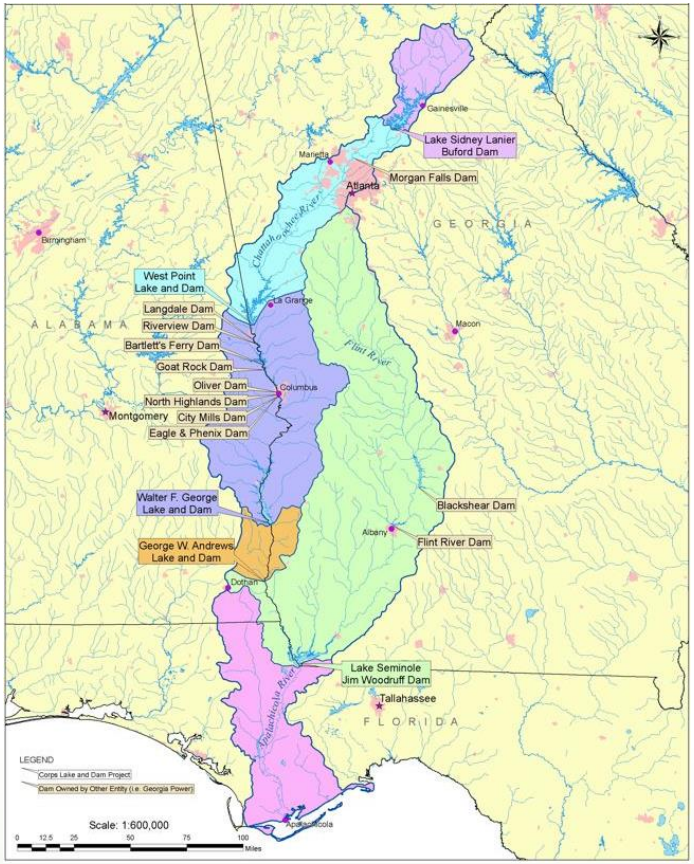
Outline

- Drought and the Apalachicola-Chattahoochee-Flint River Basin (ACF)
- ACF Pilot History and Activities
- Future Activities

NIDIS
NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM

ACF

- Major reservoirs along the Chattahoochee River
  - Lake Lanier
  - West Point
  - WF George
  - Woodruff
- The Flint River is mostly unmanaged
- Mostly surface water use in the north and groundwater use in the south



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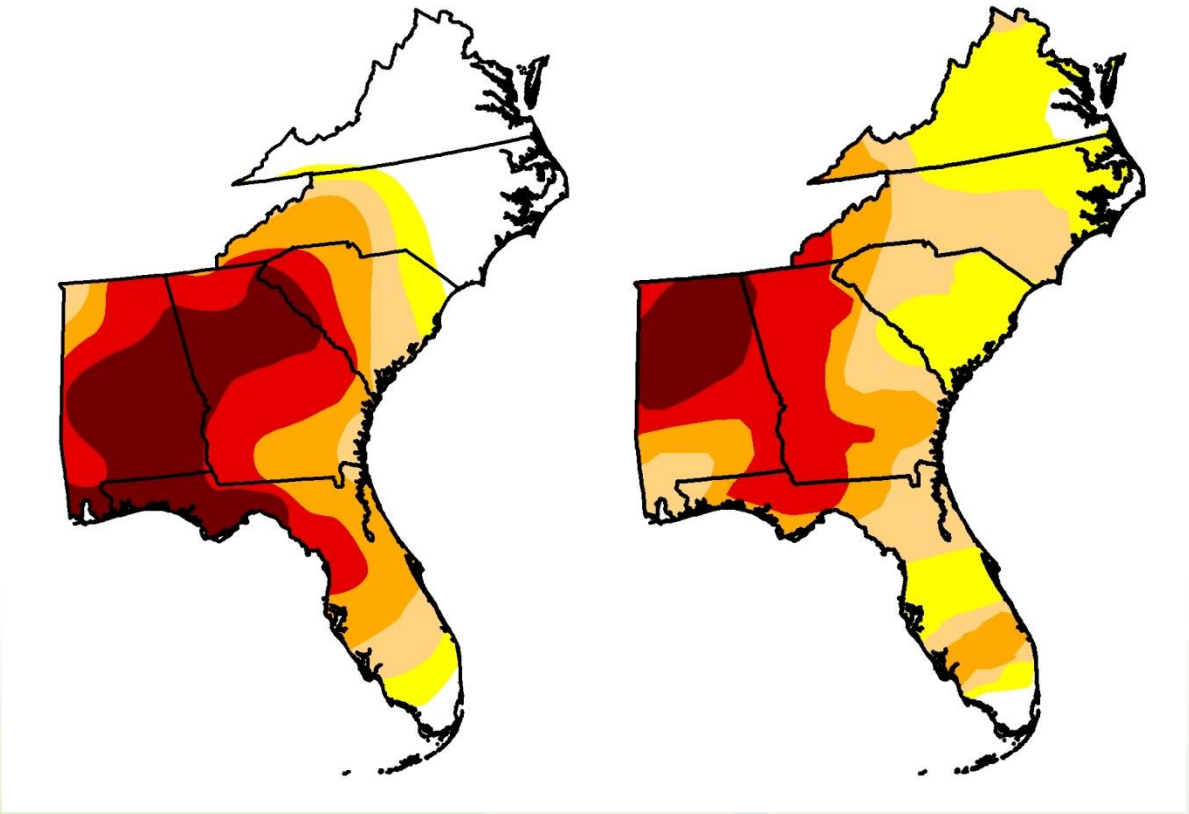
Recent Multi-year ACF Droughts

1998-2000

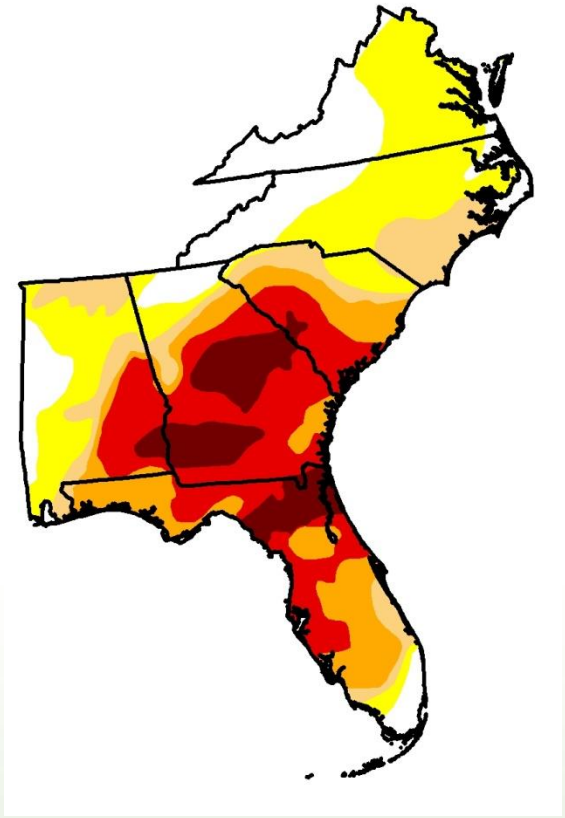


July 25, 2000

2006-2009

June 27, 2007

2010-2013



May 14, 2015

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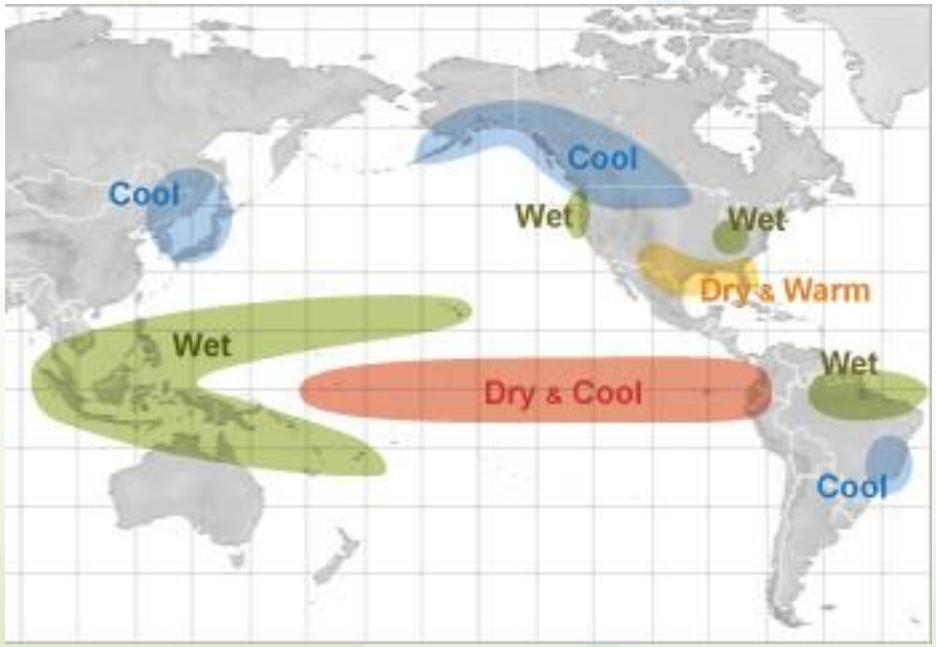
Factors affecting drought in the ACF

- El Niño Southern Oscillation phase



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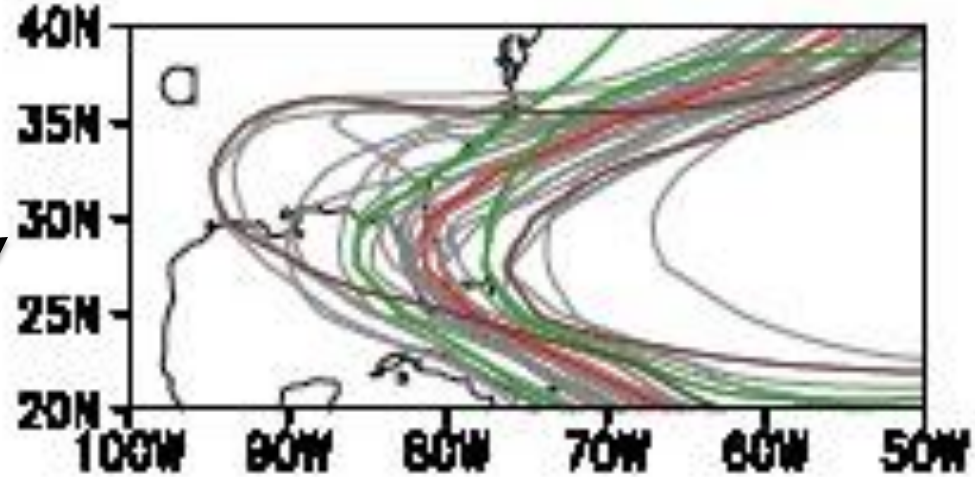
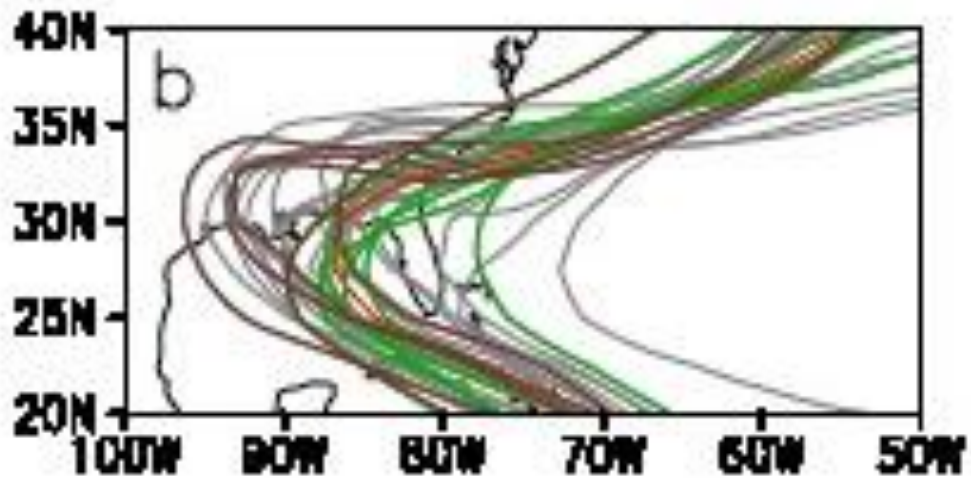
Factors affecting drought in the ACF

- Position of the Bermuda High

1948 to 1977

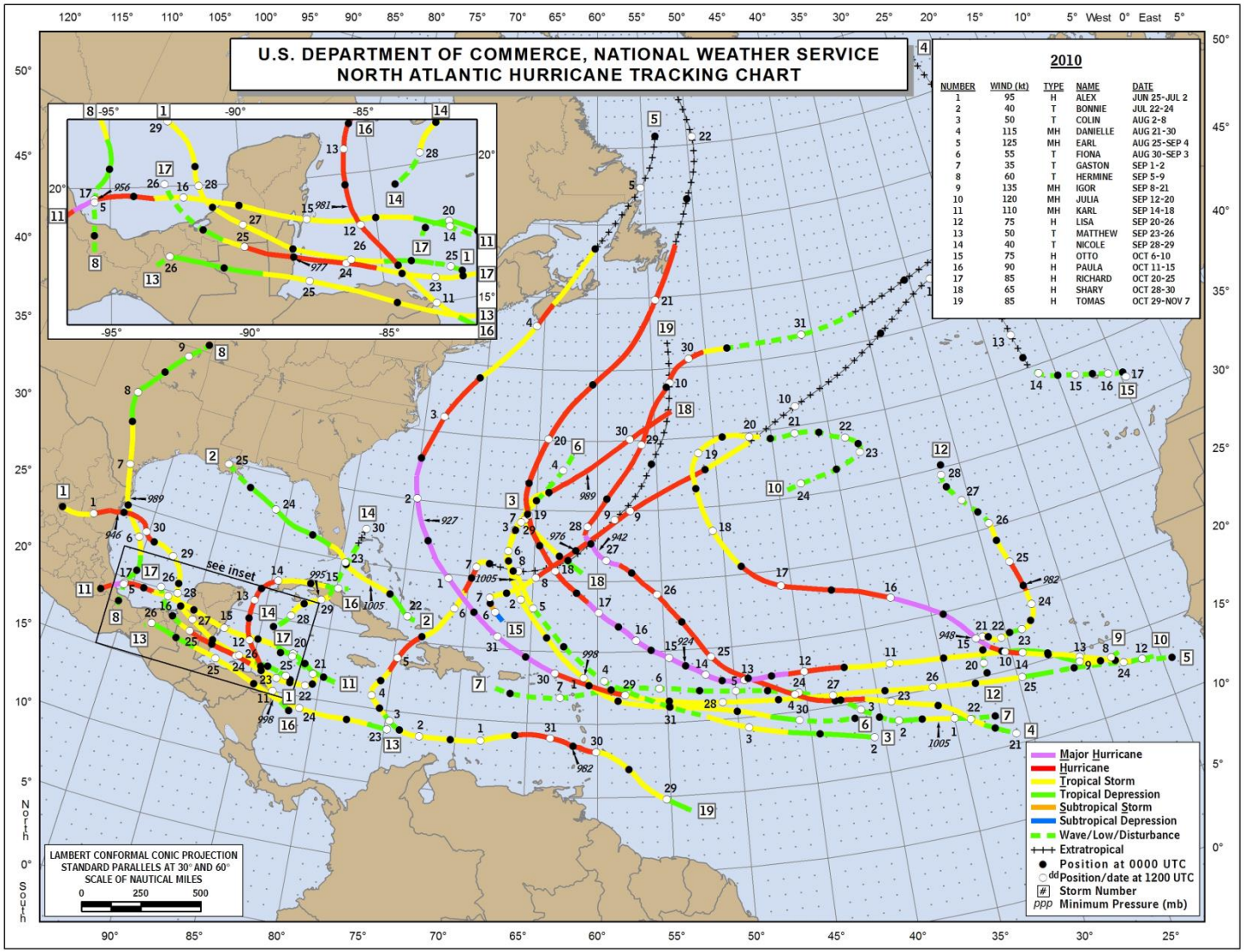


1978 to 2007



Factors affecting drought in the ACF

Tropical systems, 2010



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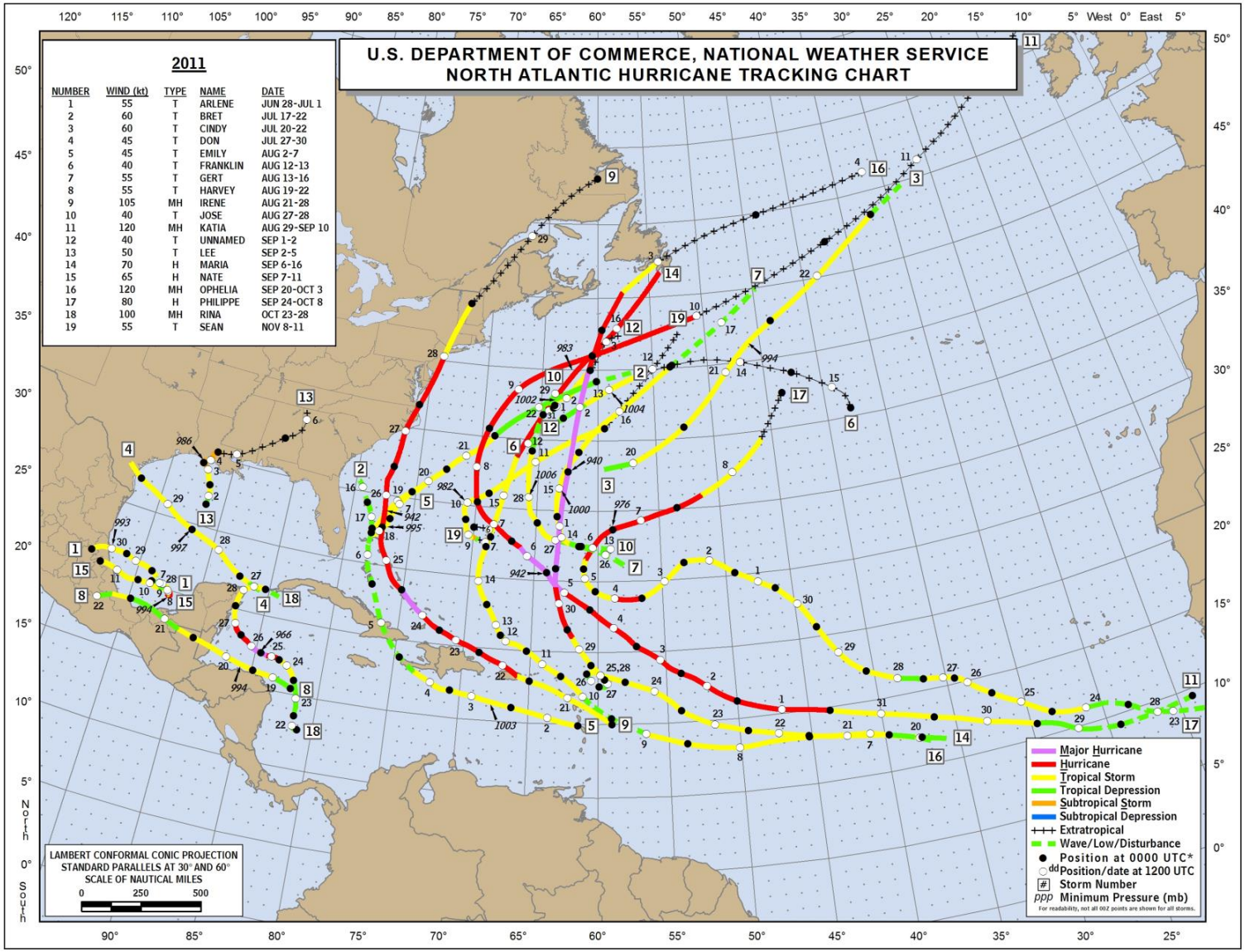
Factors affecting drought in the ACF

Tropical systems, 2011



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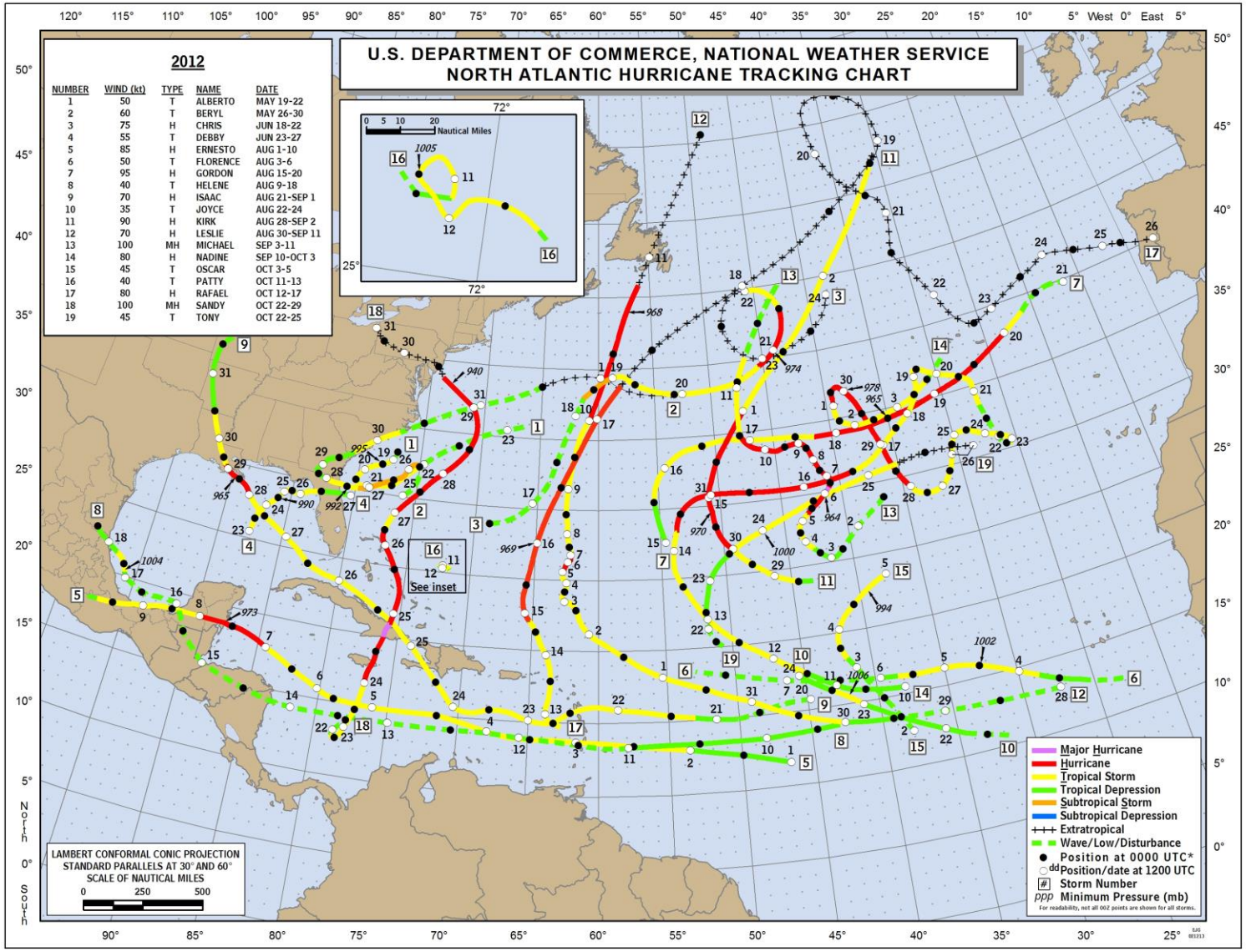
Factors affecting drought in the ACF

Tropical systems, 2012



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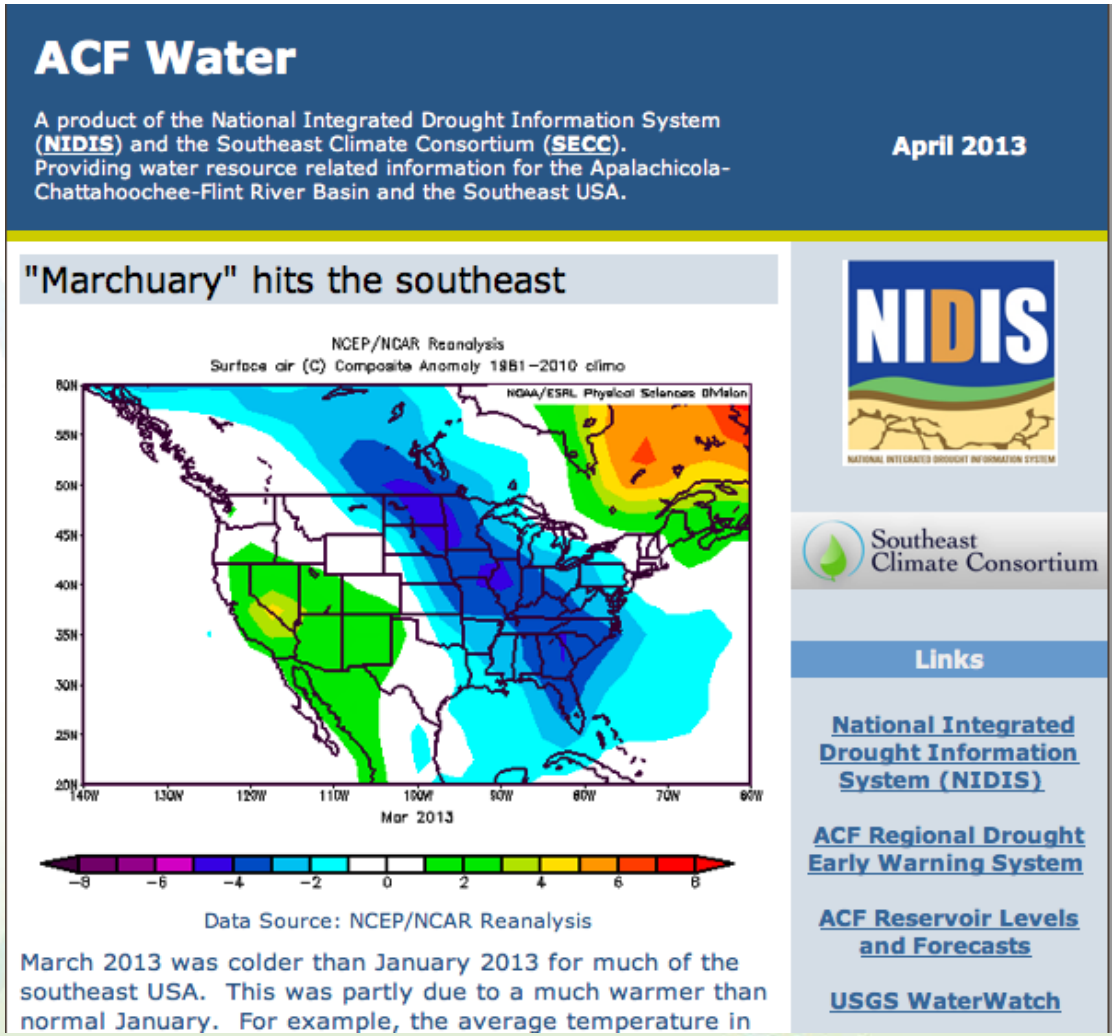
ACF Pilot

- Seeds planted with series of workshops beginning in 2009 and continuing until the presentation of a Drought Outlook Forum in fall 2010
- Original pilot activities
  - Survey of available data and sources
  - Webinars and summaries
  - Newsletter



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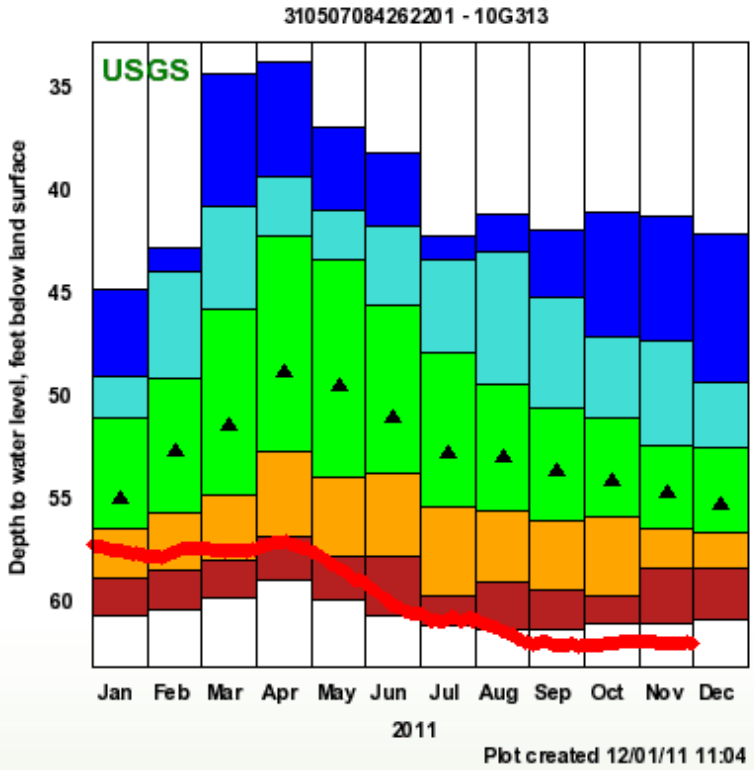
Webinar evolution and summary

- Based on inputs from committee members, webinar participants, and communications experts, we have tried to develop a body of information that both gives a full context of the basin, and focuses specifically on the basin



Ground water depth, Mitchell Co, GA
USGA 1 Dec 2011

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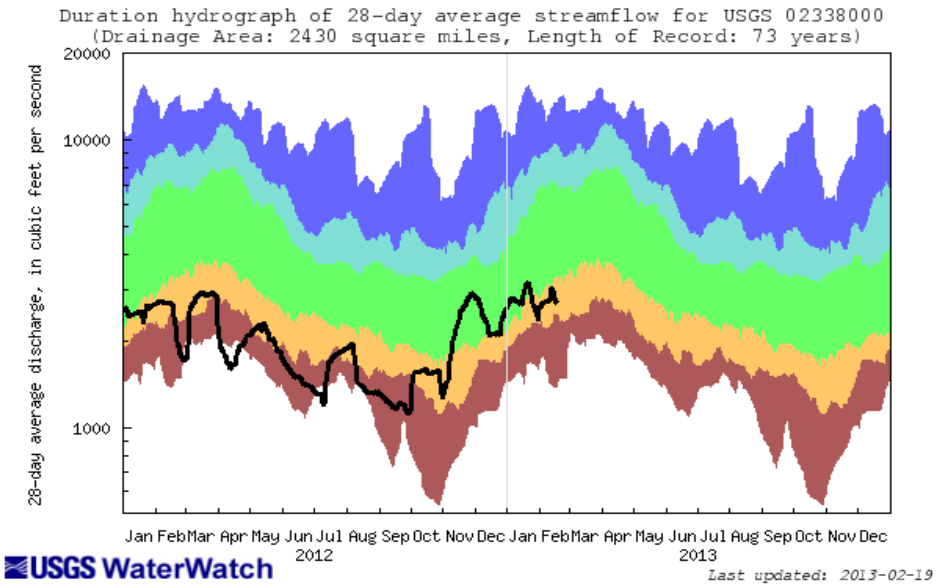
Webinar format

- Introduction
- Current drought status
- Conditions that led up to the current status
- Projections
- Discussion of impacts
- Summary

28-day streamflow
Chattahoochee near Whitesburg



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	

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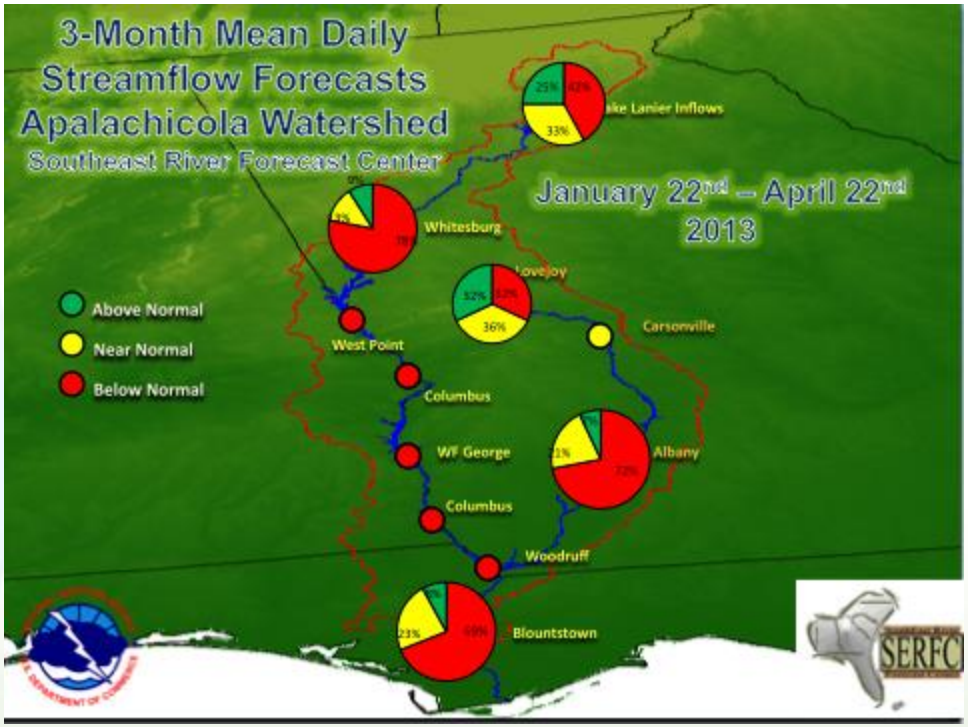
Who has been involved?

- The initial design committee included about 20 participants, including technical experts and decision makers
- Webinar standard content providers include:
  - Florida Climate Center
  - US Geological Survey
  - Army Corps of Engineers
  - SE River Forecast Center
  - Apalachicola National Estuarine Research Reserve
- Special content:
  - UCO-Boulder/CIRES
  - NWS Southern Region
  - Tallahassee NWS
  - FL DEP



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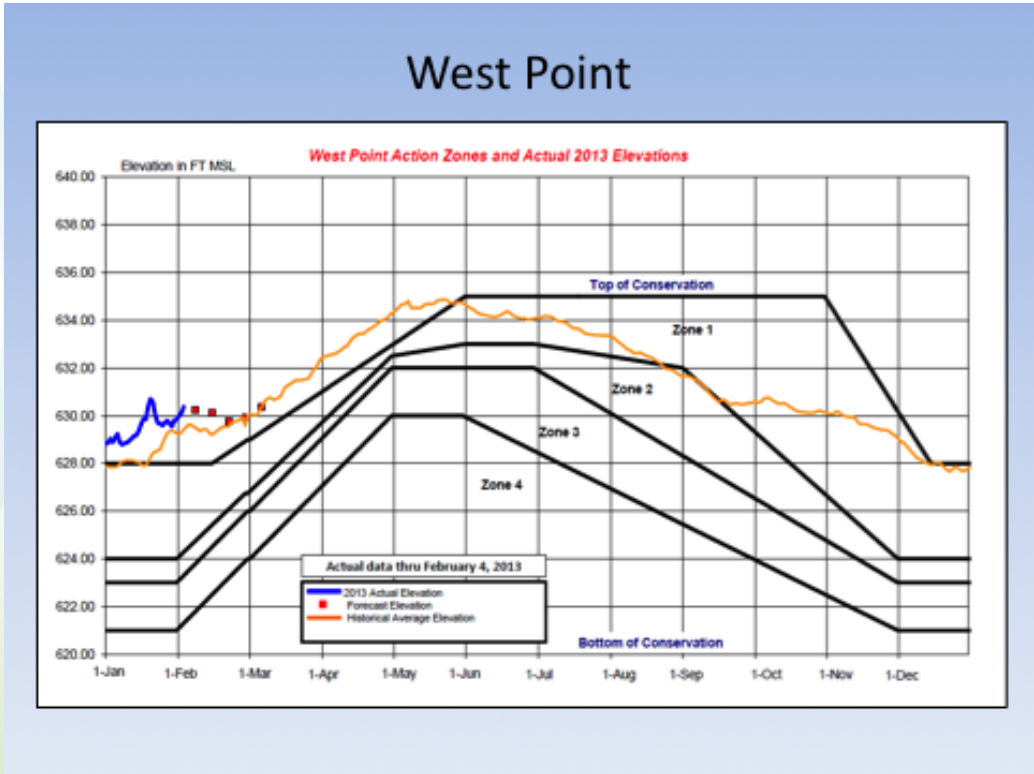
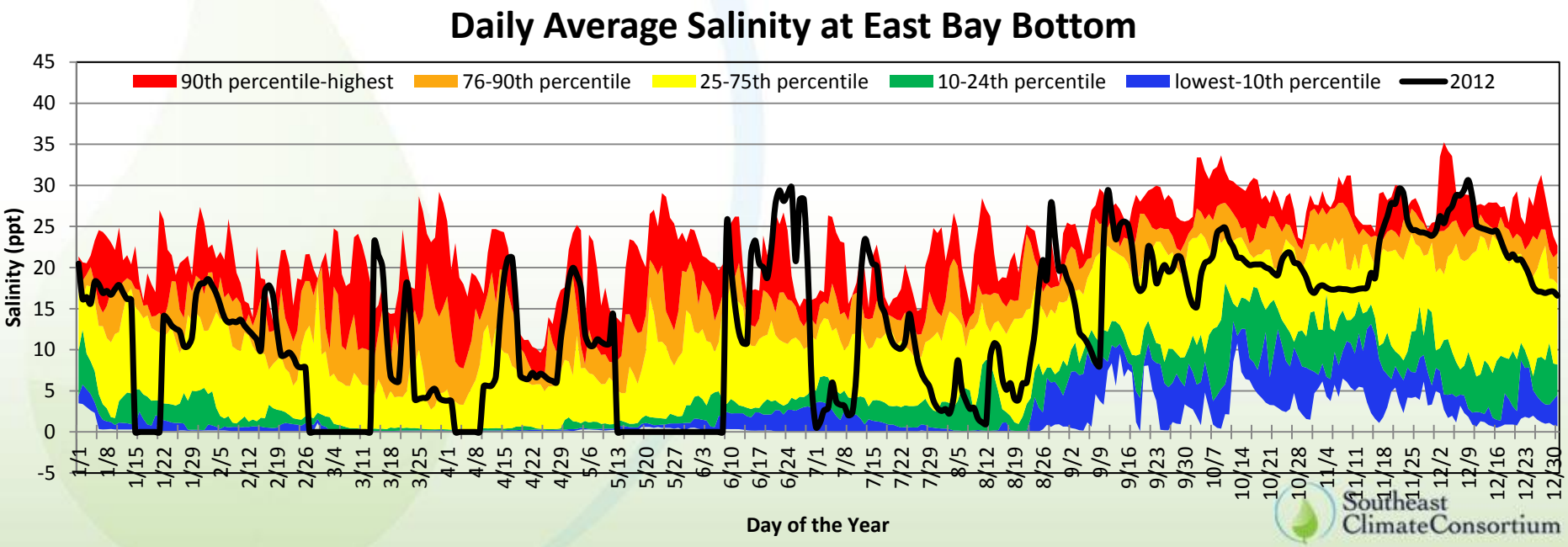
Challenges for the future

- When does a drought end?
- Maintaining interest and conservation efforts between drought periods
- Developing new tools and indices for drought monitoring and forecasting, both seasonal and long-range



Challenges for the future

- Assessing and reporting drought impacts
- Archiving



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Thanks!