

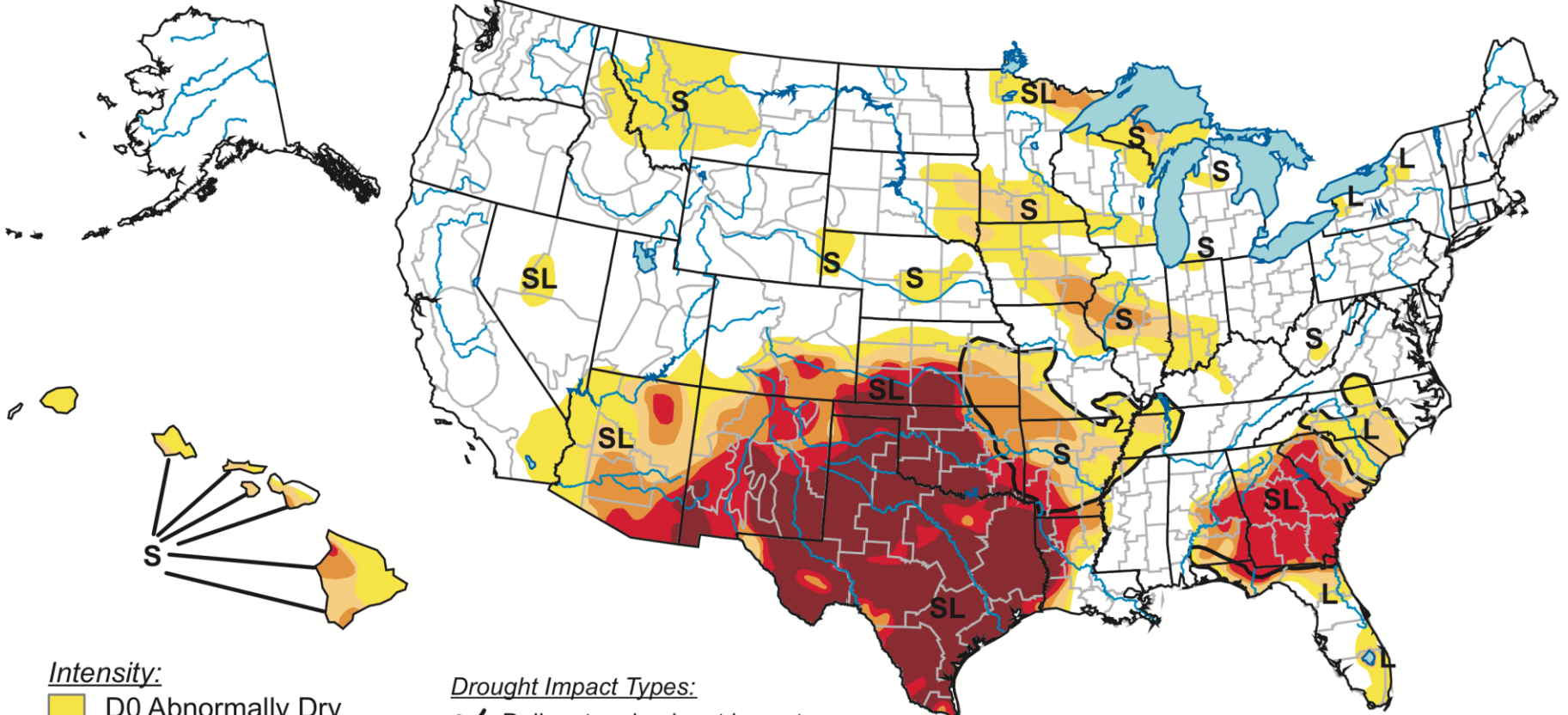
Texas Drought Status and Current Outlook

John W. Nielsen-Gammon
Texas State Climatologist
Texas A&M University
n-g@tamu.edu






U.S. Drought Monitor

September 27, 2011


Valid 8 a.m. EDT



Intensity:

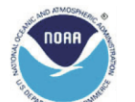
-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

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

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



Released Thursday, September 29, 2011

Author: Michael Brewer/Liz Love-Brotak, NOAA/NESDIS/NCDC

October- September Precipitation

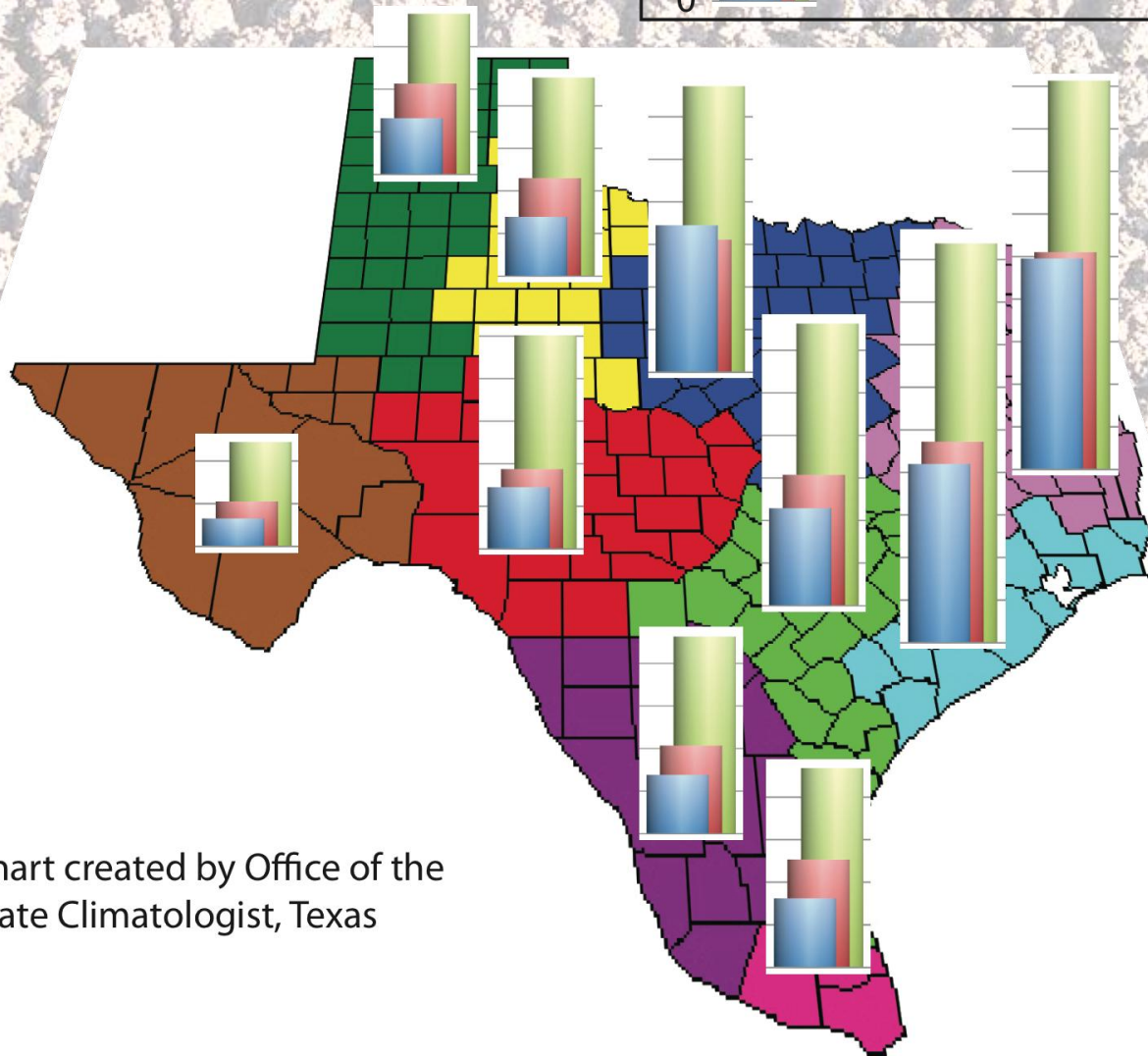
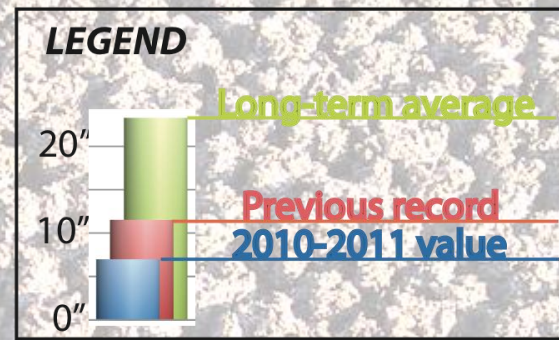
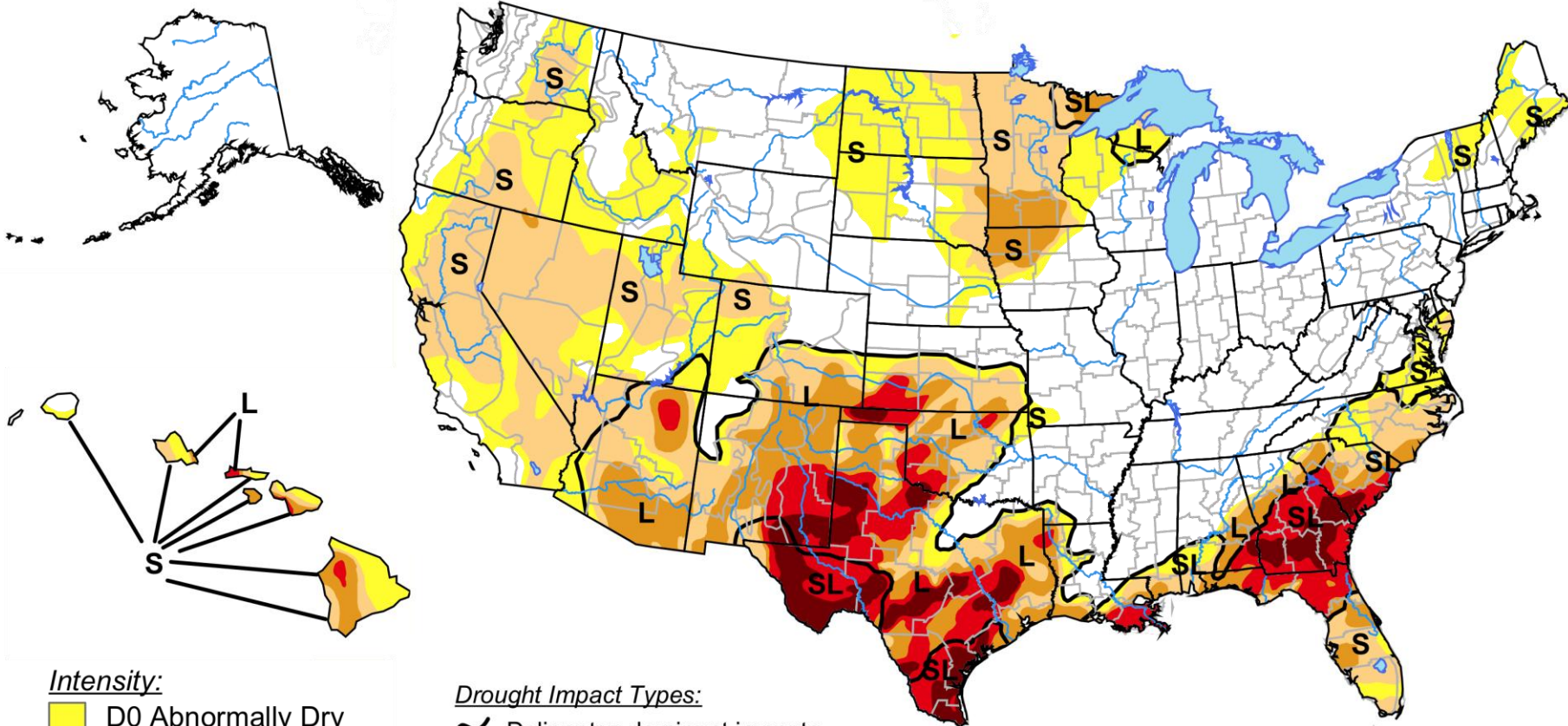


Chart created by Office of the
State Climatologist, Texas






U.S. Drought Monitor

February 7, 2012


Valid 7 a.m. EST



Intensity:

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

Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months
(e.g. hydrology, ecology)

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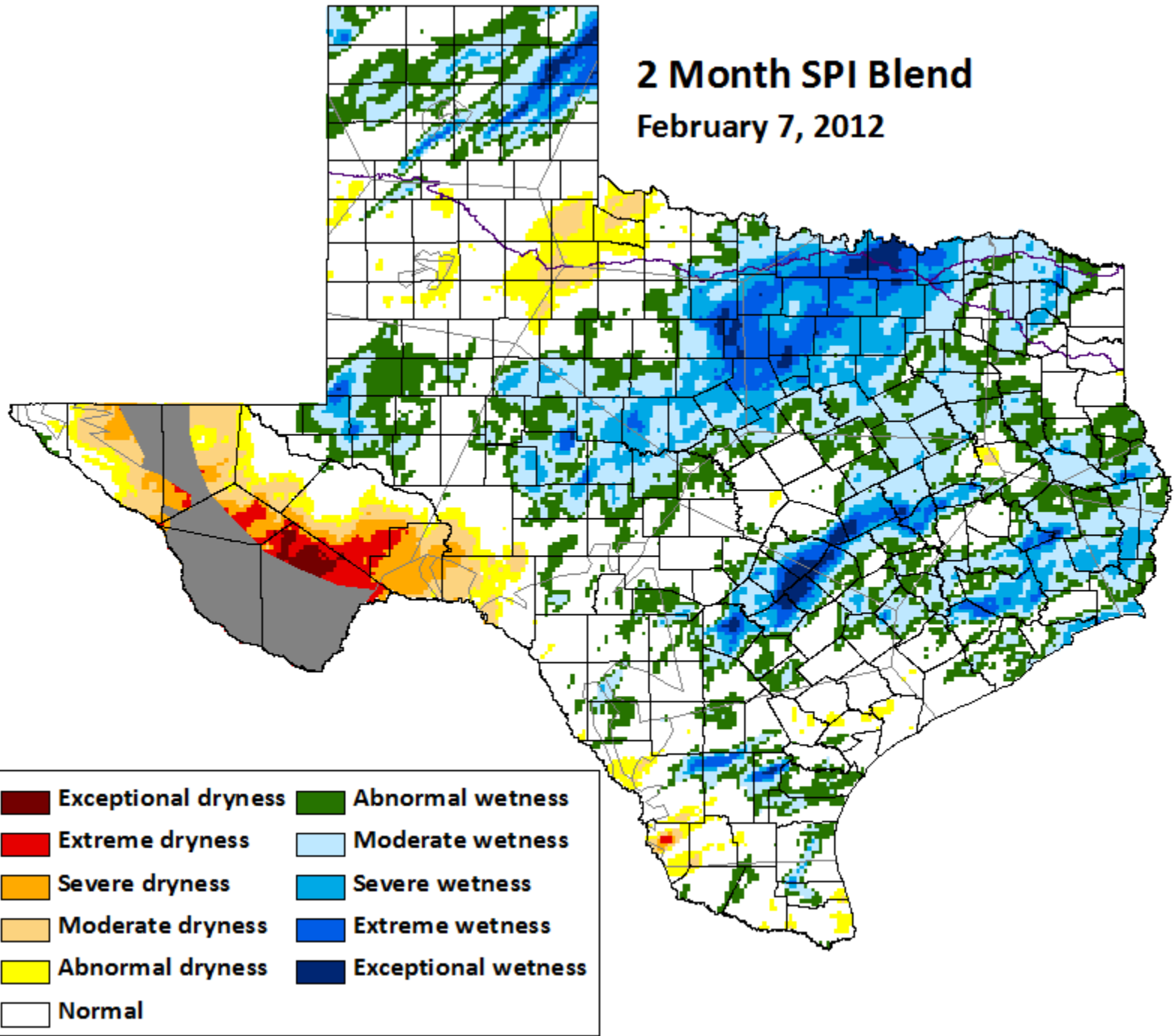
<http://droughtmonitor.unl.edu/>



Released Thursday, February 9, 2012

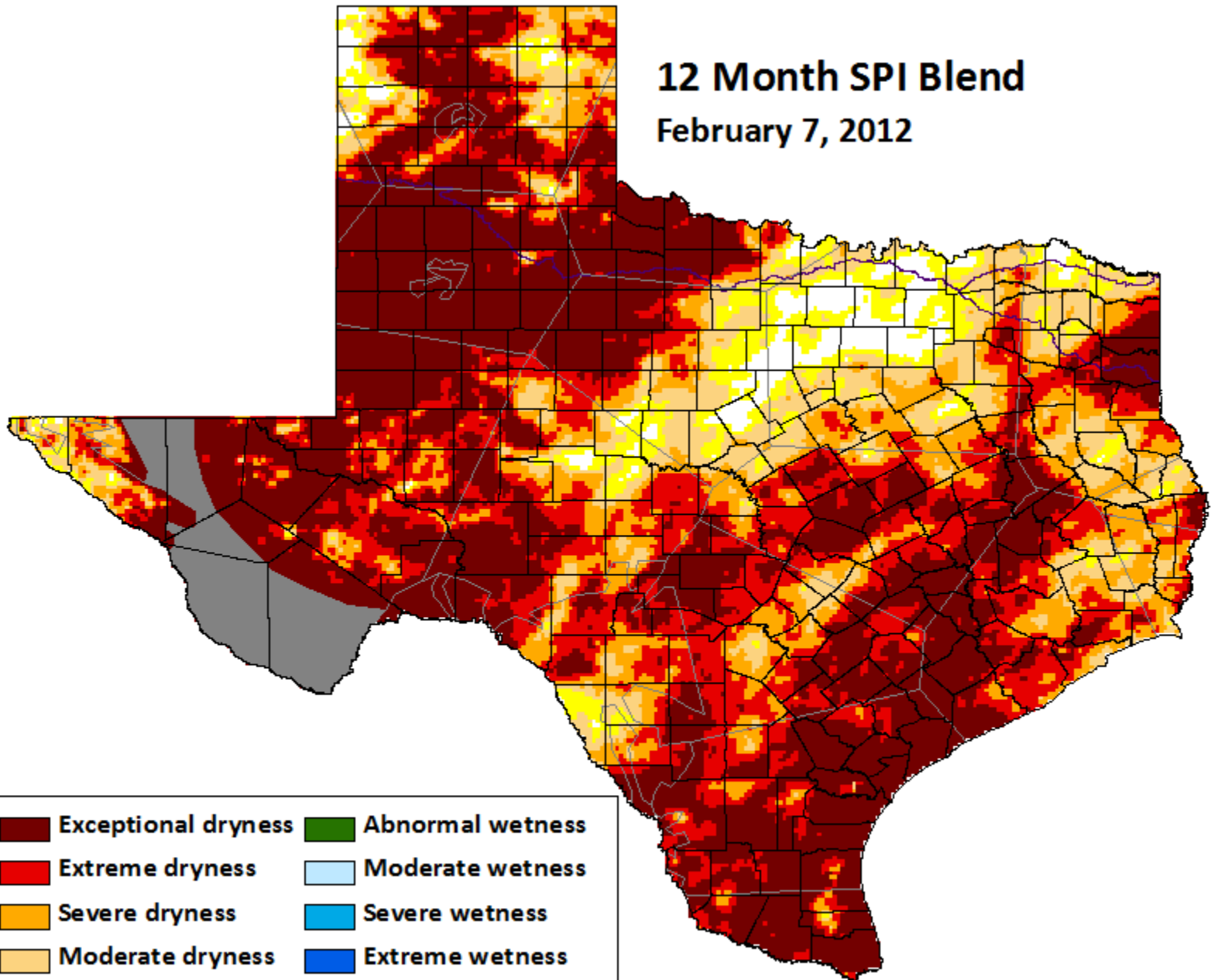
Author: Rich Tinker, NOAA/NWS/NCEP/CPC












2 Month SPI Blend February 7, 2012



12 Month SPI Blend

February 7, 2012

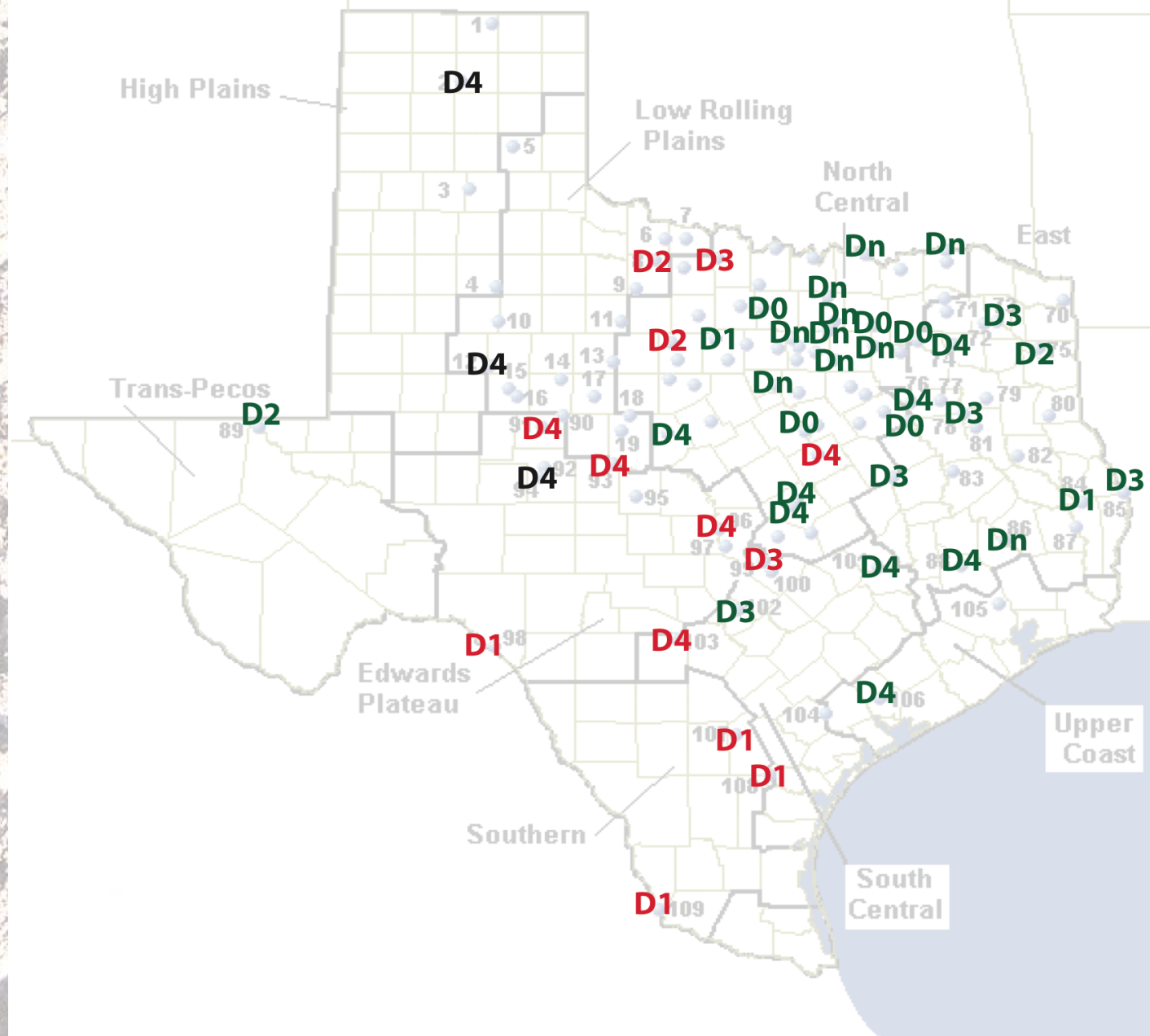


 Exceptional dryness	 Abnormal wetness
 Extreme dryness	 Moderate wetness
 Severe dryness	 Severe wetness
 Moderate dryness	 Extreme wetness
 Abnormal dryness	 Exceptional wetness
 Normal	

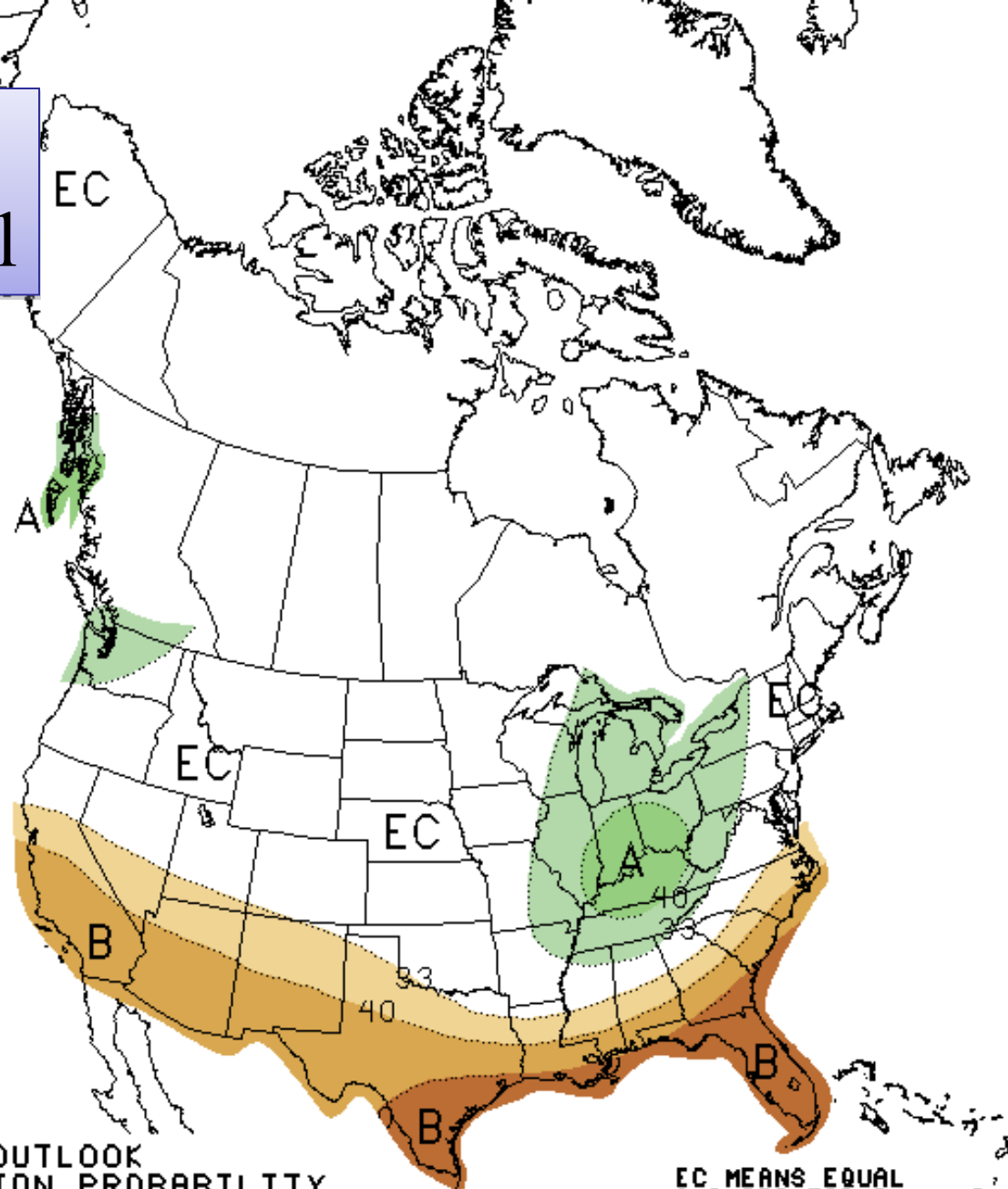
Major Texas Reservoir Status, John Nielsen-Gammon, Jan. 30, 2012

Subjective estimate based on 20 years of reservoir data

Black: empty Red: near 2011-2012 minimum Green: >5% above minimum



February
through April



ONE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID FEB 2012
MADE 19 JAN 2012

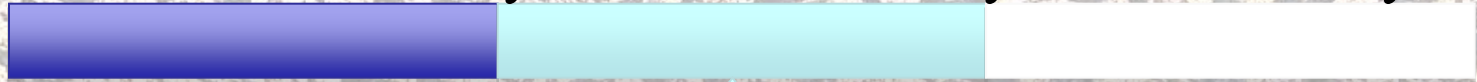
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

Driest in
30 years

Tenth-driest
in 30 years

Tenth-wettest
in 30 years

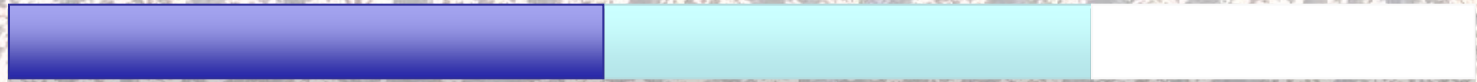
Wettest in
30 years



33%

34%

33%



45%

34%

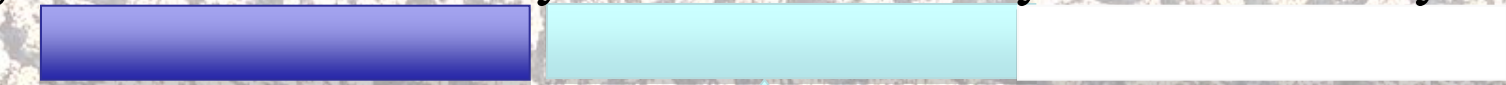
21%

Driest in
30 years

Tenth-driest
in 30 years

Tenth-wettest
in 30 years

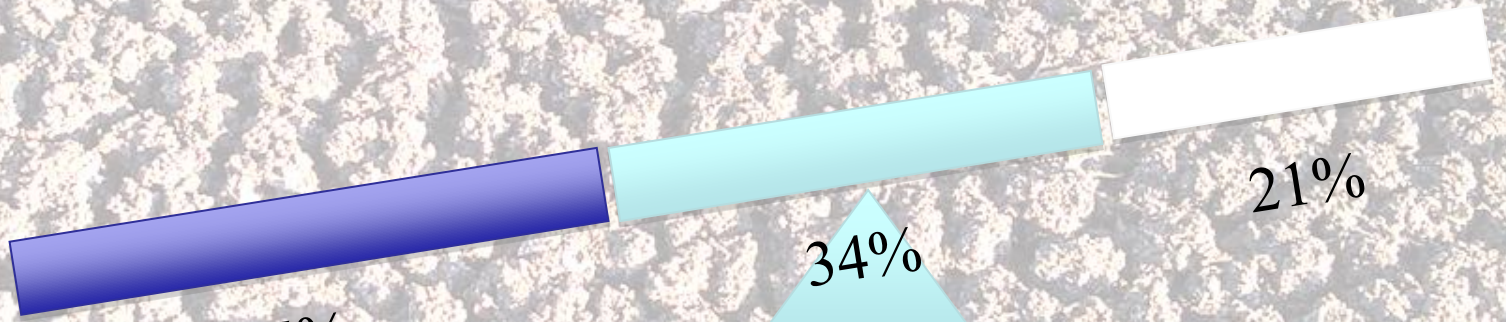
Wettest in
30 years



33%

33%

33%

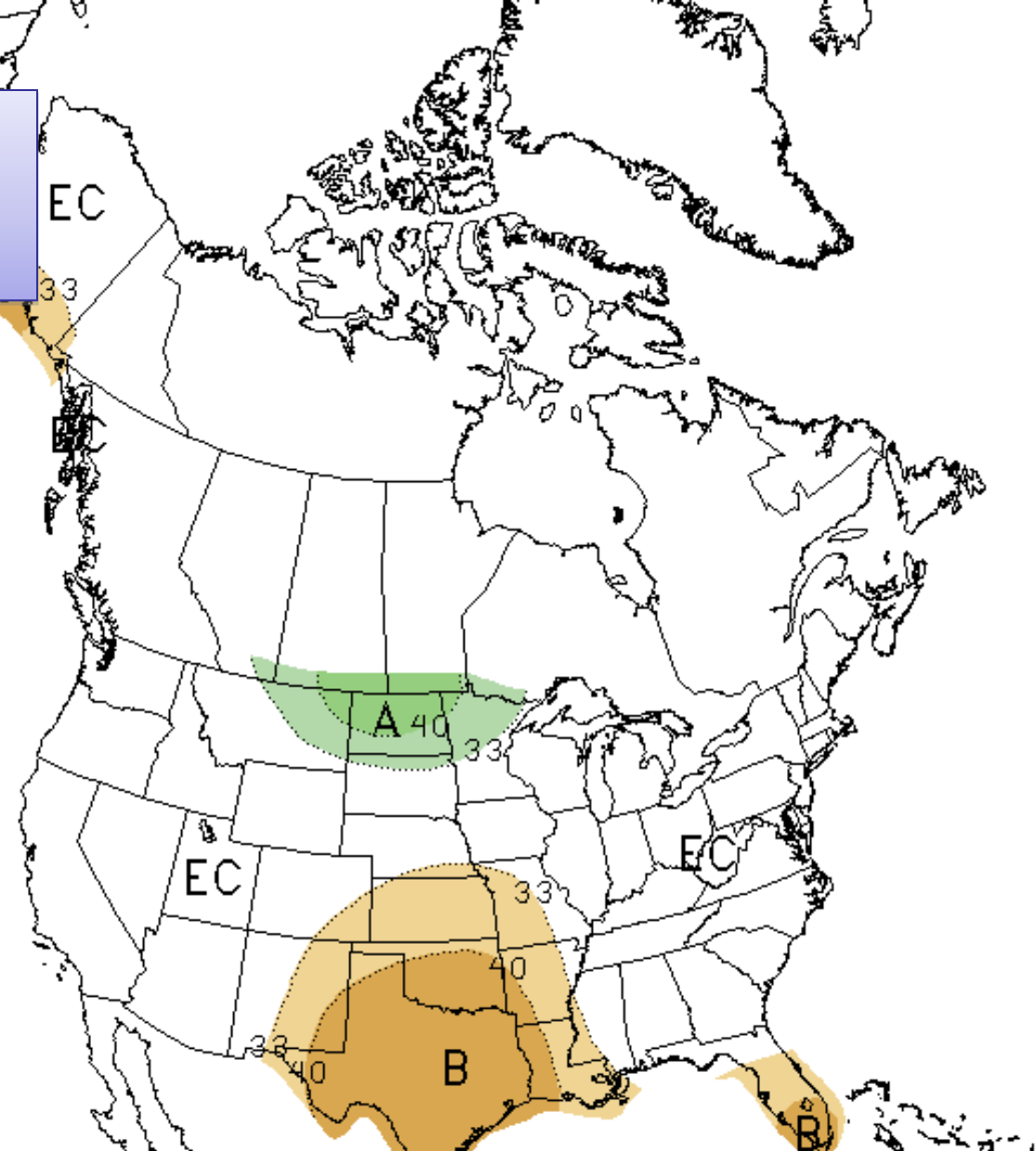


45%

34%

21%

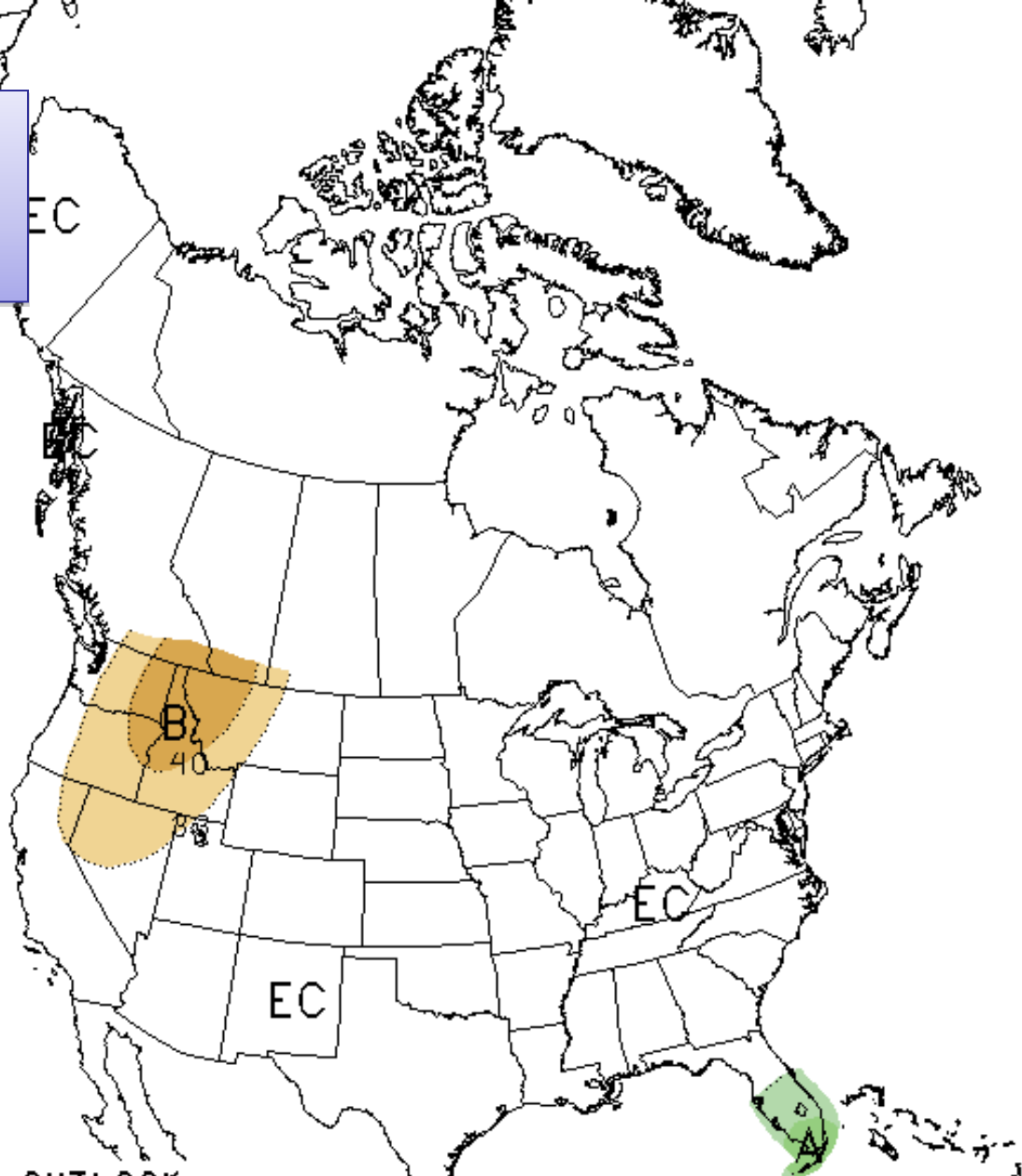
April
through June



THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
2.5 MONTH LEAD
VALID AMJ 2012
MADE 19 JAN 2012

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

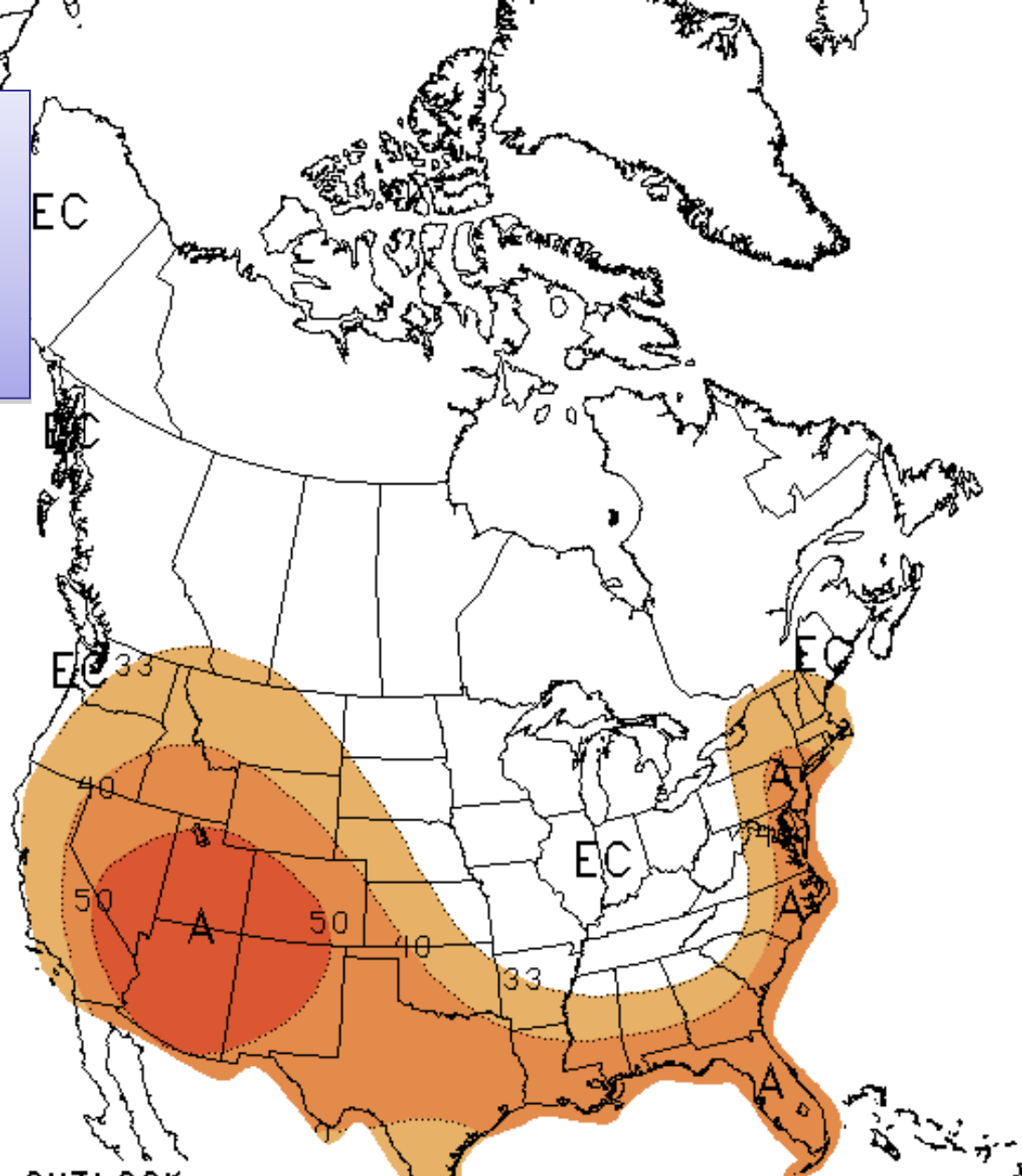
July through
September



THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
5.5 MONTH LEAD
VALID JAS 2012
MADE 19 JAN 2012

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

July through September Temperature

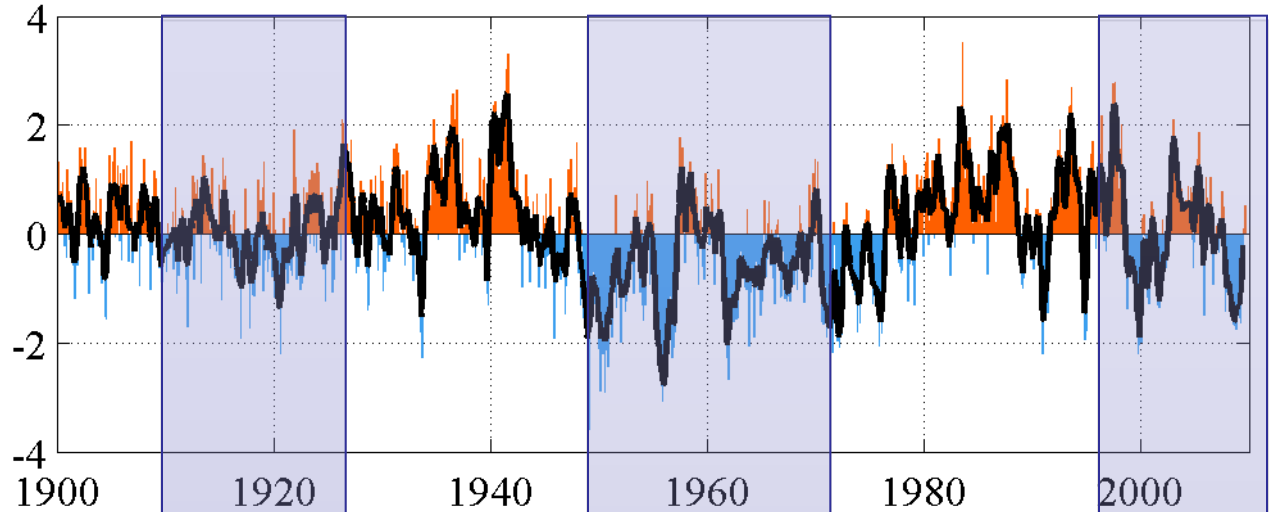


THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
5.5 MONTH LEAD
VALID JAS 2012
MADE 19 JAN 2012

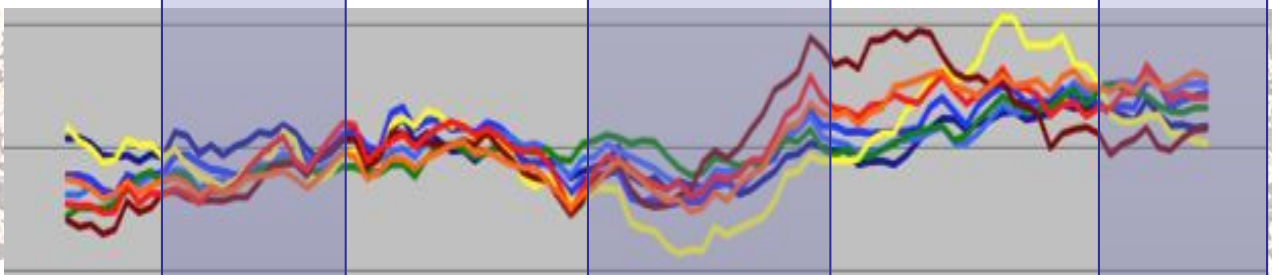
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
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monthly values for the PDO index: 1900-September 2009

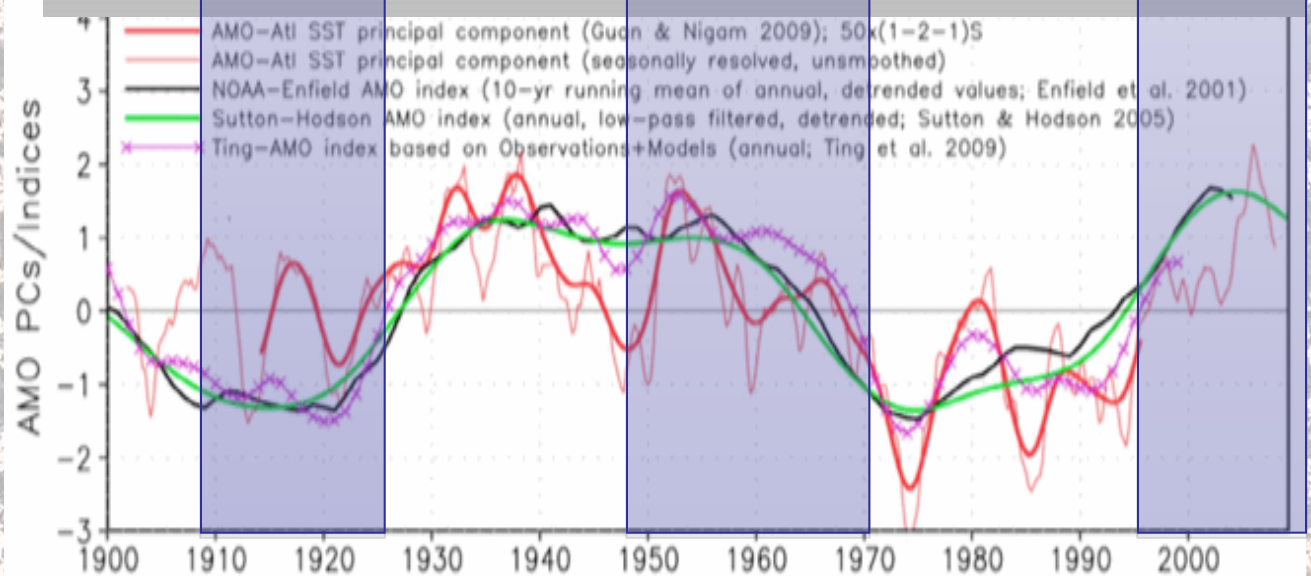
Pacific



Texas



Atlantic



1900

1940

1980

2020

2060

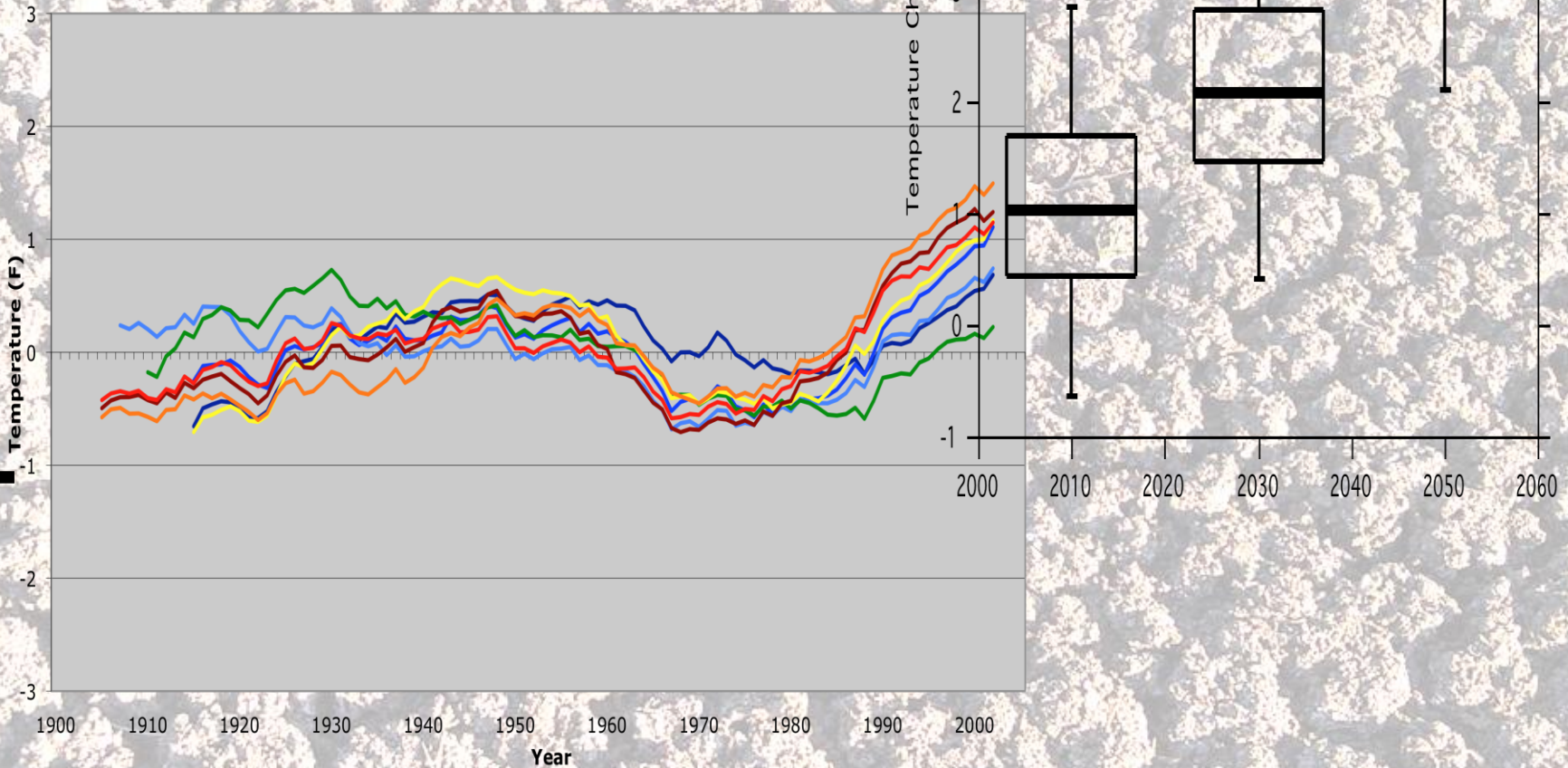
Time →

Annual Mean Temperature

Temperature →

Temperature Change (F)

Texas A1B Projections



- Panhandle and Plains
- West Central Texas
- North Central Texas
- East Texas
- Far West Texas
- South Texas
- South Central Texas
- Southeast Texas

Drought Outlook

- La Niña lasting until spring
- Water supply issues likely to continue in most of Texas through summer
- Nearly 50% chance of 3rd La Niña winter
- Period of drought susceptibility until ???
- Climate trends unfavorable
 - Rainfall? + Temperature [^] = Drought [^]

Contact Information

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- <http://atmo.tamu.edu/osc>
- <http://blog.chron.com/climateabyss>