

NOAA Climate Science & Services

Monthly Climate Update

A look back at April

A preview of Summer



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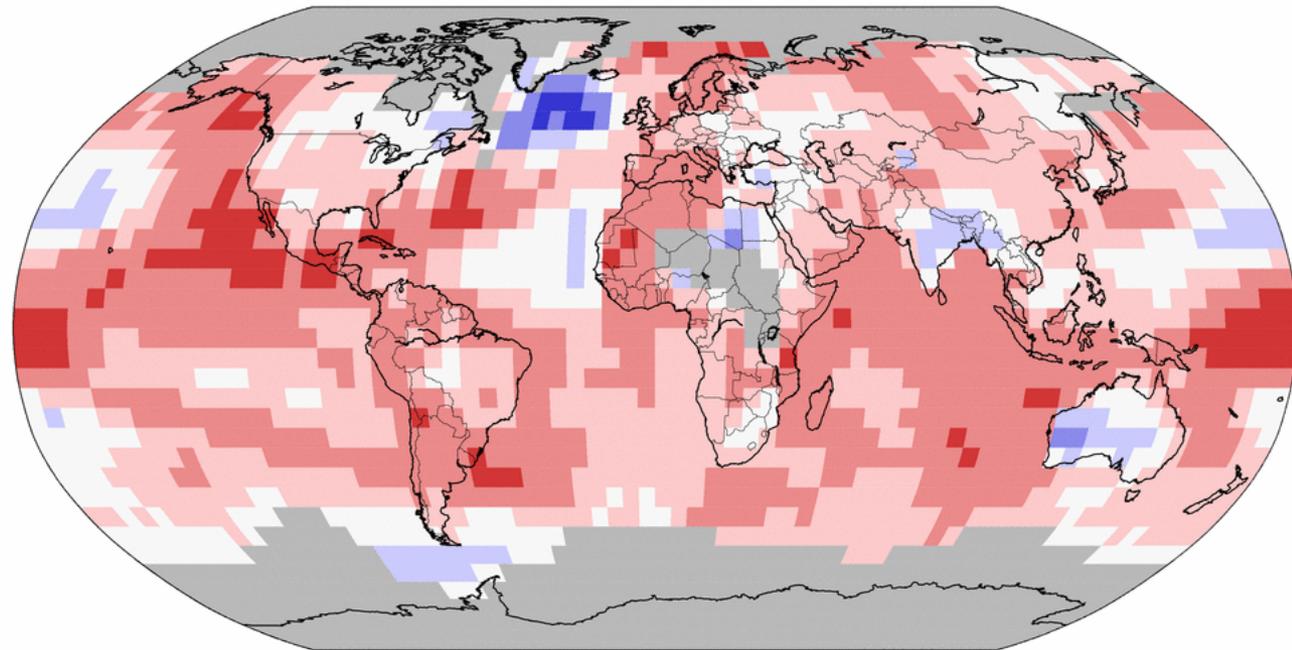
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Global Temperature: April 2015

Land and Ocean Temperature Percentiles January-April 2015



The global temperature record dates to 1880 (136 years)

- April +1.33°F warmer than 20th century average

- 4th warmest April on record

- Land: +2.00°F

- 10th warmest

- Ocean: +1.08°F

- 1st warmest

Global Temperature: Jan-April 2015

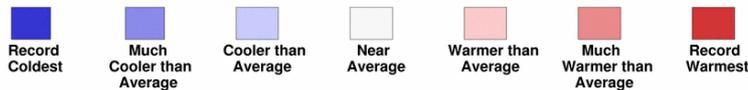
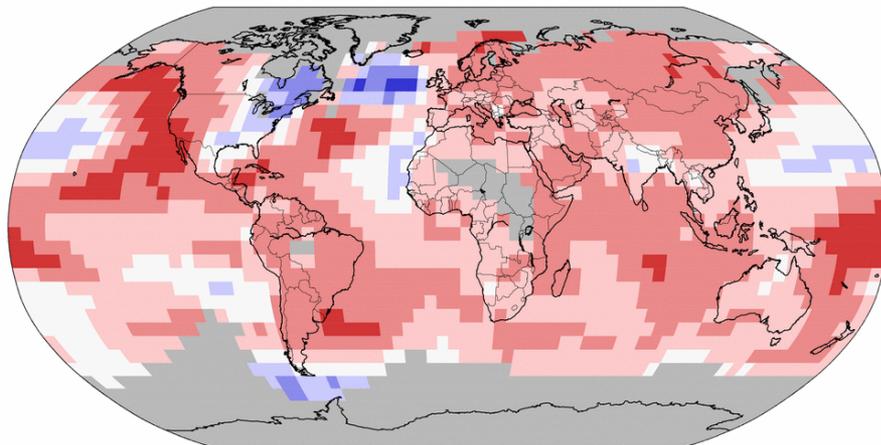
January-April 2015 was record warm for the year-to-date

Land and Ocean Temperature (record warm): +1.44°F

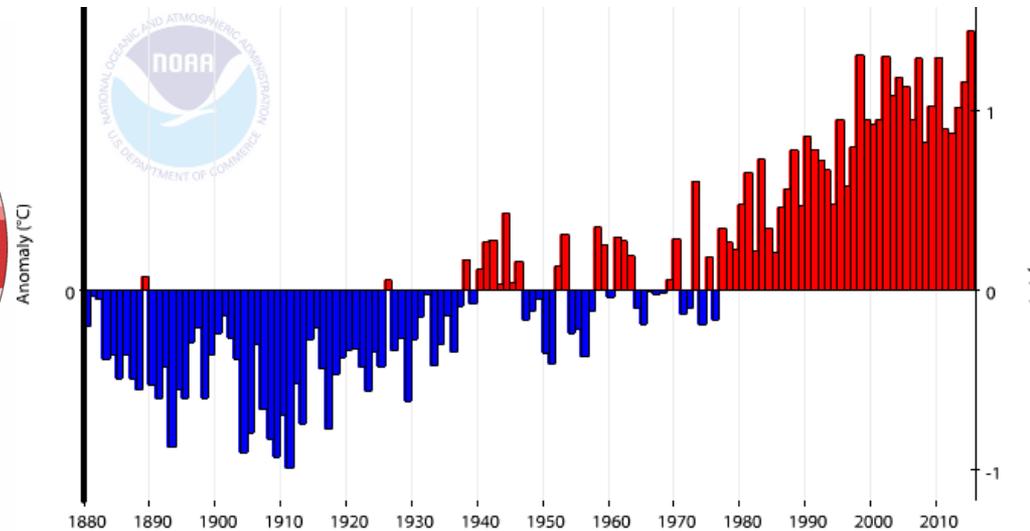
Land Temperature (record warm): +2.66°F

Ocean Temperature (2nd warmest): +0.99°F

Land and Ocean Temperature Percentiles
January-April 2015



Global Land and Ocean Temperature Departure from
20th Century Average, January-April



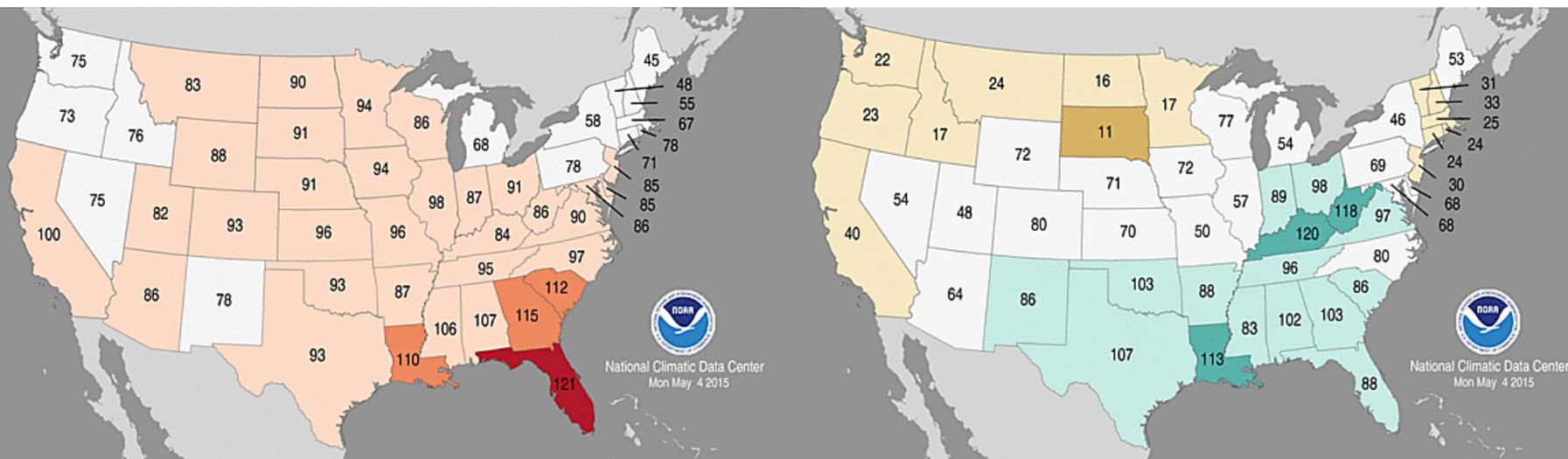
Contiguous U.S. April 2015

Temperature: 53.1°F, +2.1°F, 17th warmest April

Precipitation: 2.78", +0.26", 37th wettest April

Statewide Temperature Ranks, April 2015
Period: 1895-2015 (121 years)

Statewide Precipitation Ranks, April 2015
Period: 1895-2015 (121 years)



- The Southeast was very warm, driven by warm nighttime temperatures
- FL was record warm with a temperature +6.1°F above the 20th century average.
- Large footprint of above-average temperatures, not much 'extreme' warmth or cold.

- The Southern tier and Ohio Valley were wetter than average. KY, LA, and WV were top 10 wet.
- Significant flooding in KY which had its 2nd wettest April.
- The West, Northern tier, and Northeast were dry.
- SD was much drier than average, continuing a record dry year for the state.

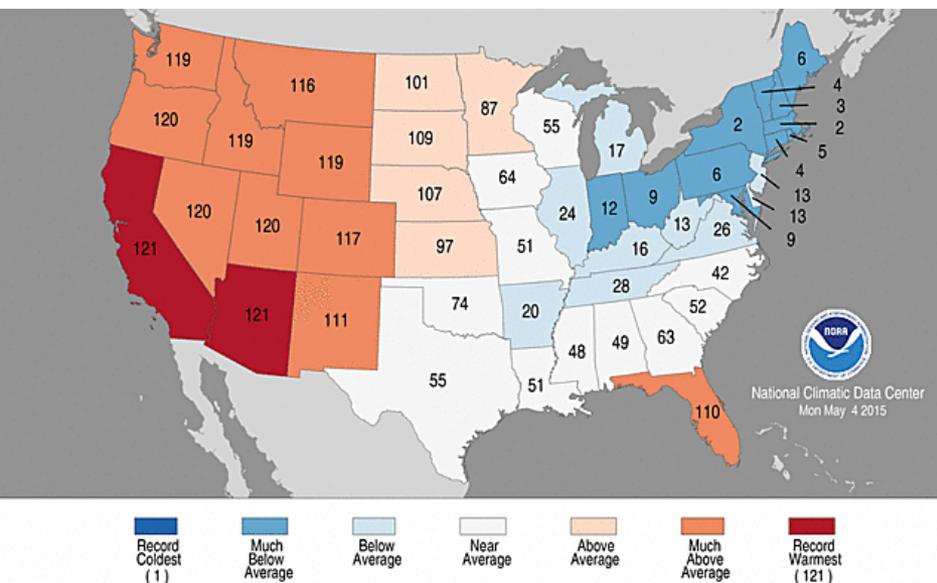


Contiguous U.S. Jan-April 2015

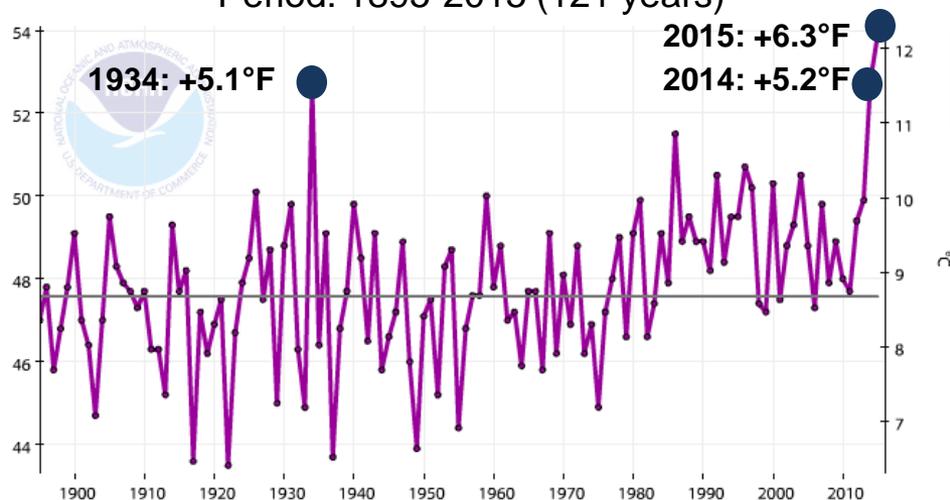
Temperature: 41.1°F, +2.0°F, 20th warmest Jan-Apr

Precipitation: 8.49", -0.99", 18th wettest Jan-Apr

Statewide Temperature Ranks, January-April 2015
Period: 1895-2015 (121 years)



California Average Temperature, January-April
Period: 1895-2015 (121 years)



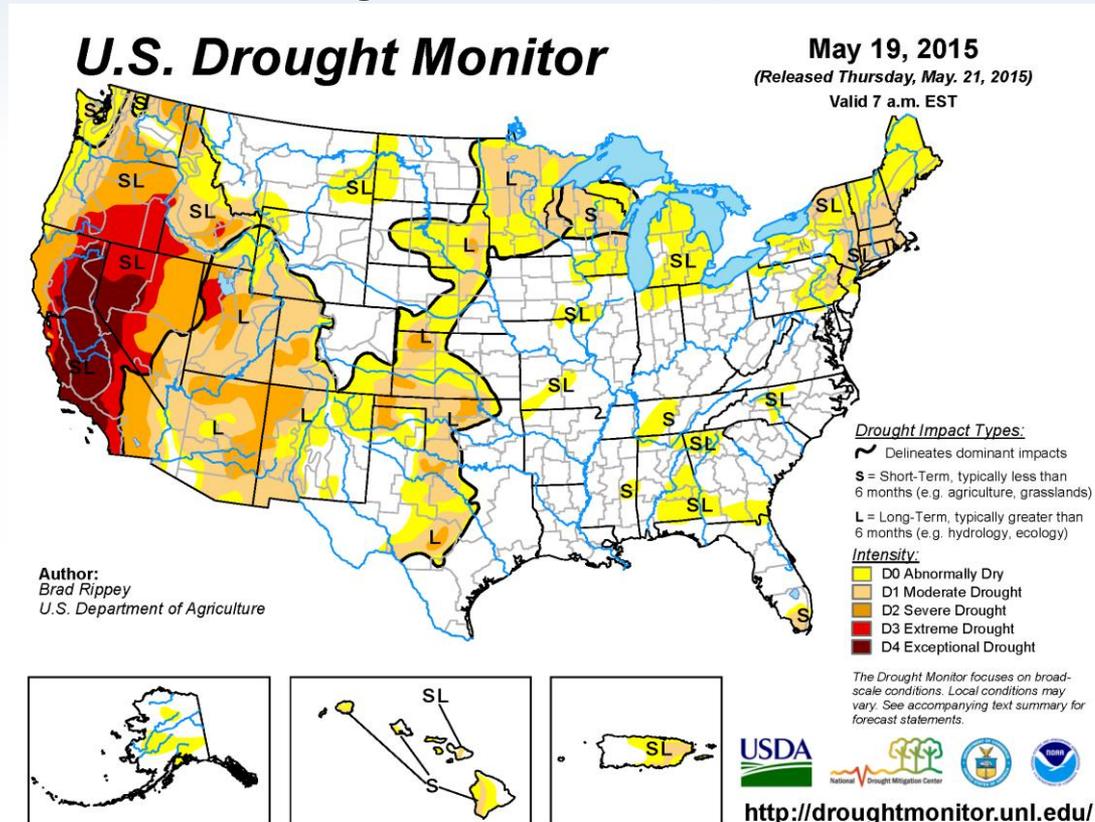
- The West was warm. Arizona and California were record warm. Florida was also warmer than average.
- The Midwest and Northeast were cool, mostly due to record and near-record cold for the first part of 2015
 - Massachusetts and New York had their 2nd coldest January-April.

Current U.S. Drought

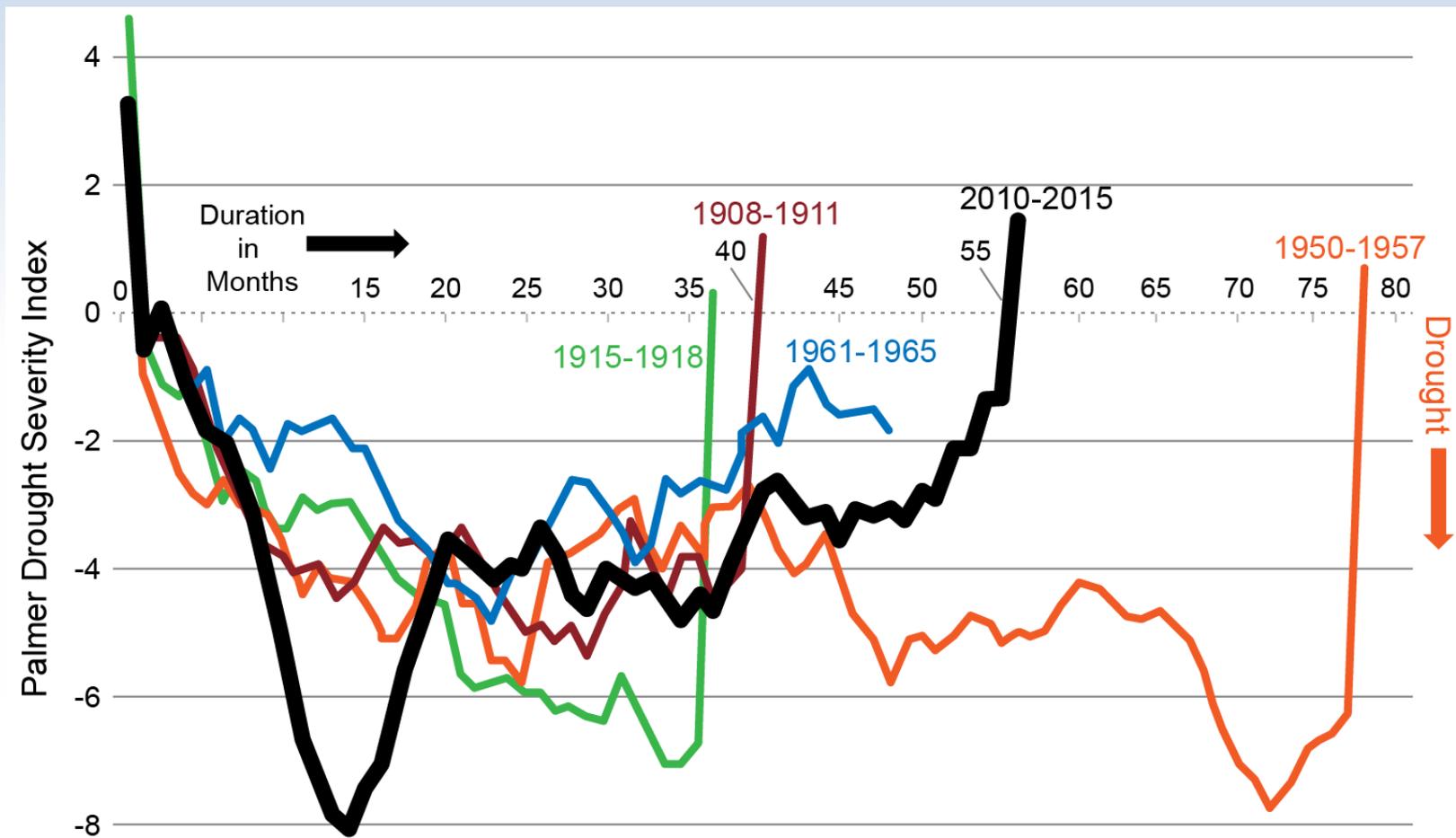
31.5% of Contiguous U.S. in Drought

(↑ ~2.8% since beginning of January)

- **Improvement:** Central and Southern Plains to the Southeast
- **Degradation:** Parts of the Northern Rockies, Upper Midwest, Northeast, and Puerto Rico
- **Status quo:** The West Coast, through the Great Basin, and into the Southern Rockies

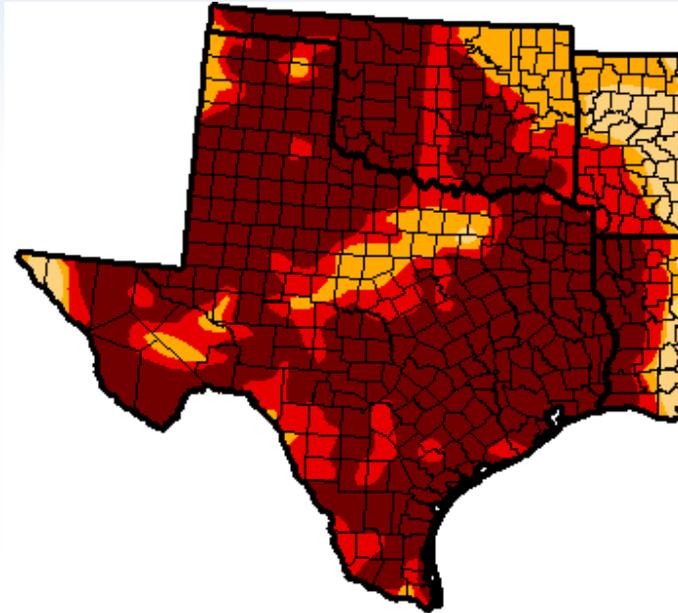


The TX Drought of October 2010 to May 2015 is clearly the 2nd worst on record since 1900



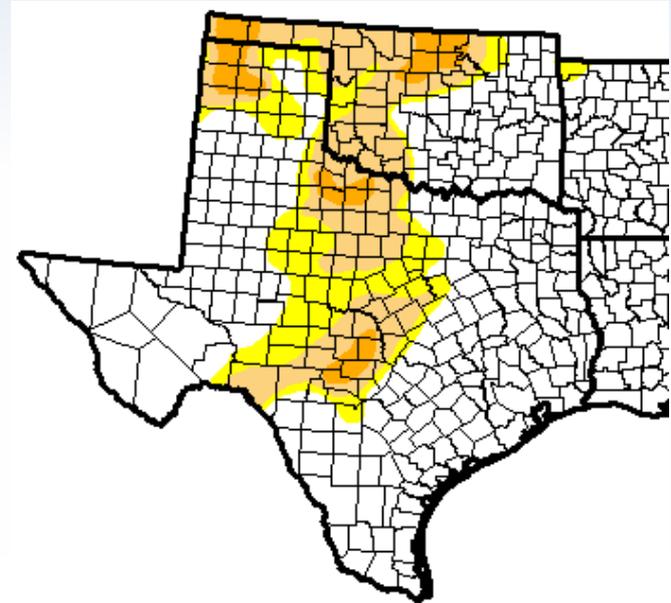
A comparison of drought in TX/OK from October 2011 to May 2015

October 11, 2011



99% of TX in severe drought
100% of OK in severe drought.

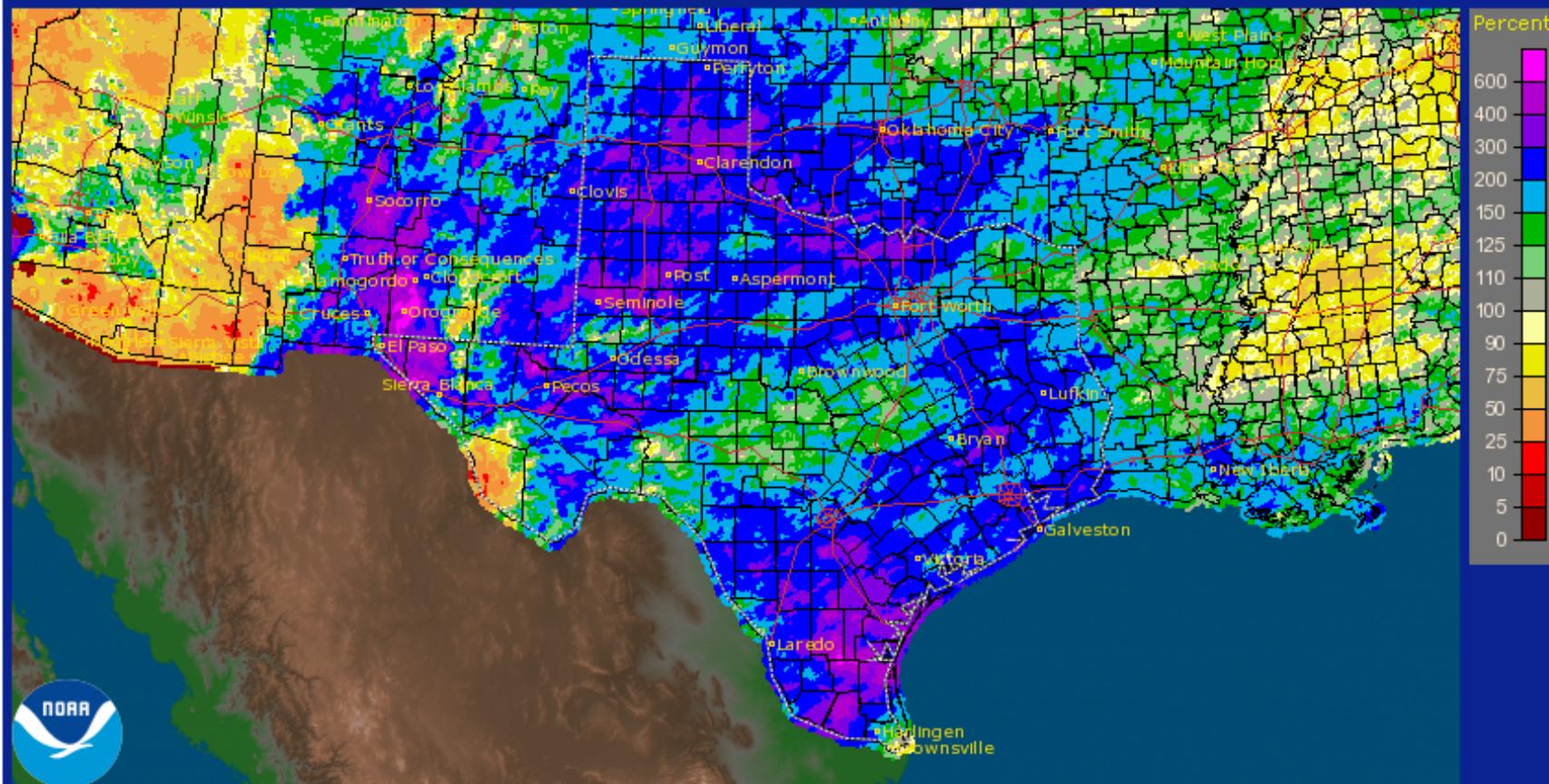
May 19, 2015



3% of TX in severe drought.
9% of OK in severe drought.

All of TX/OK have seen above normal rainfall in the past 60 days. Most areas >200% of normal

Texas: Current 60-Day Percent of Normal Precipitation
Valid at 5/20/2015 1200 UTC - Created 5/20/15 18:33 UTC



Topo Pcpn Amount Counties Rivers States Highway/City RFC Boundary

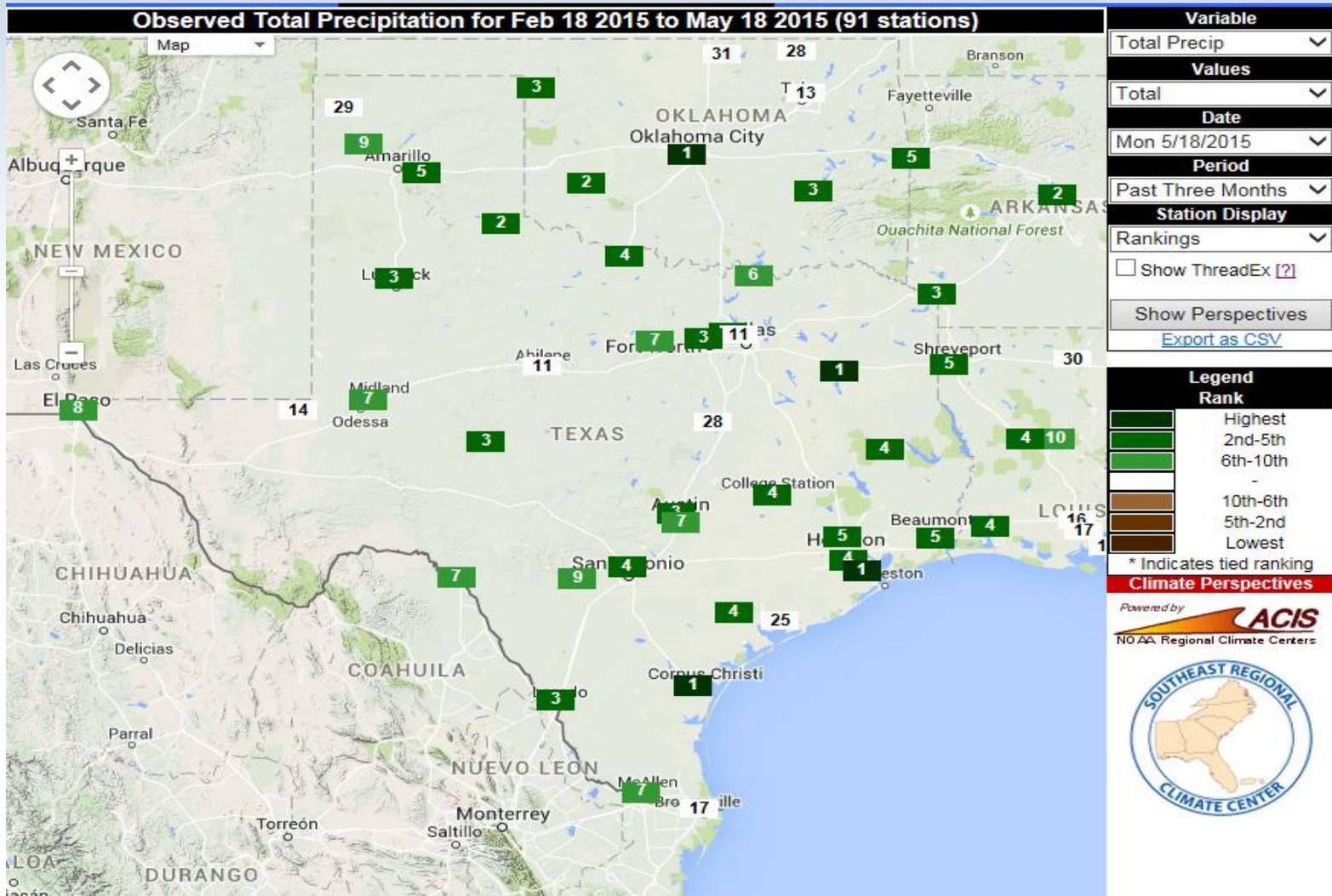
1. Timeframe » 2. Product » 3. Location » 4. Units

Current Data States English



Ranking rainfall totals for the last 90 days compared to all years since 1948

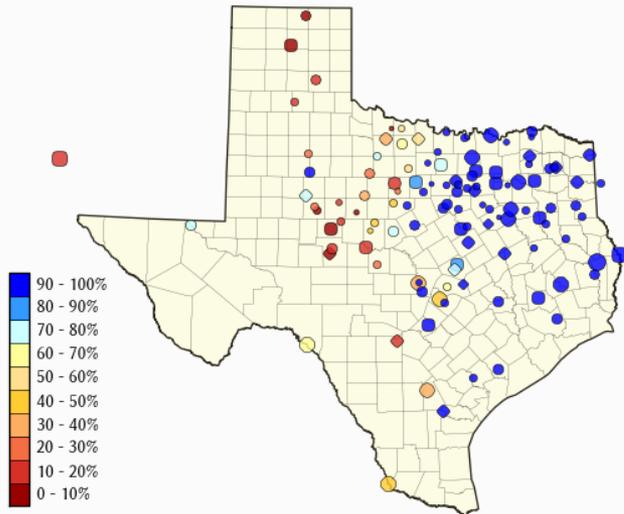
OKC, Tyler, and Corpus Christi are all the wettest on record



TX Reservoir Storage has increased from near record lows in February to 78% full. An increase of 3.3 Trillions Gallons!

Texas Reservoirs

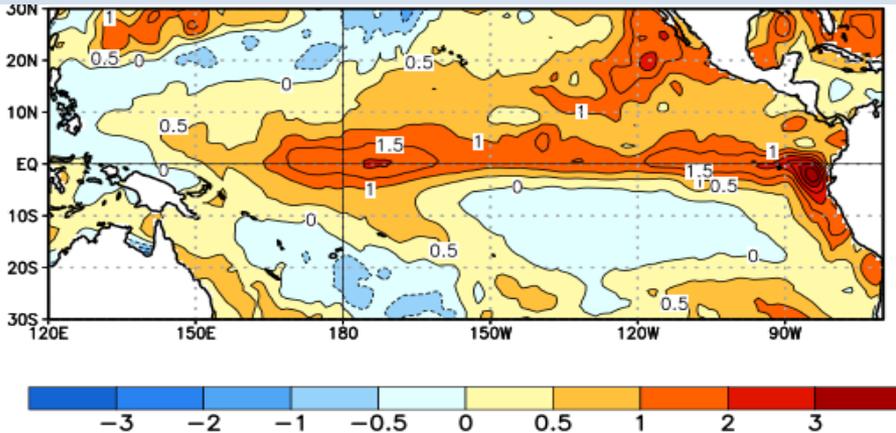
- Monitored Water Supply Reservoirs are 78.5% full on 2015-05-20



May 2015

Sea Surface Temperatures and ENSO

Average SST Anomalies
19 Apr 2015 – 16 May 2015



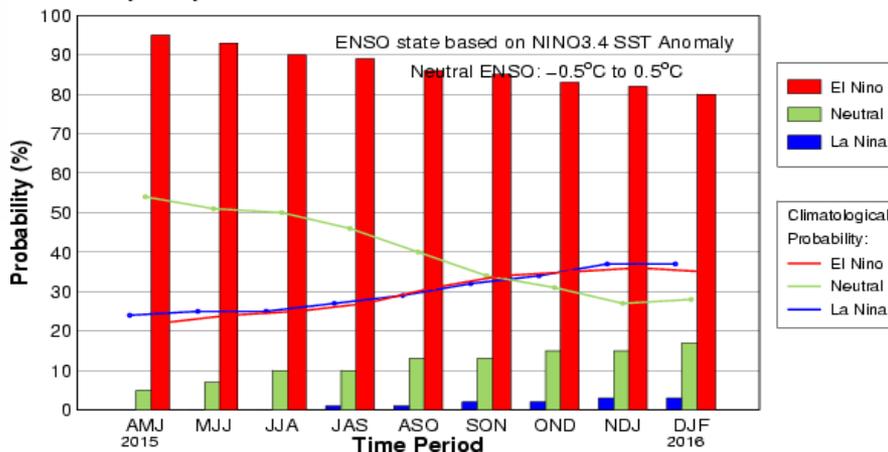
- **Sea surface temperatures**

- Above normal SSTs across the equatorial Pacific
- Above normal SSTs along the west coast of North America

- **ENSO forecast**

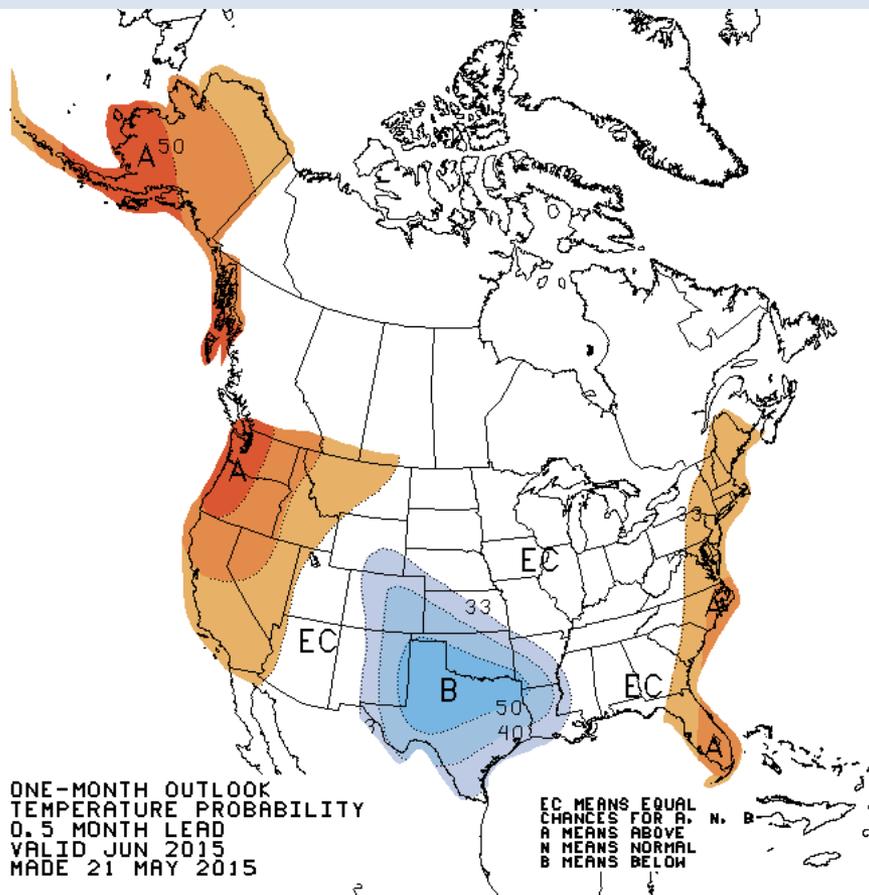
- 90% chance of El Niño this summer
- Strength is uncertain at this point
- Large spread among predicted peak SST anomaly magnitudes

Early May CPC/IRI Consensus Probabilistic ENSO Forecast

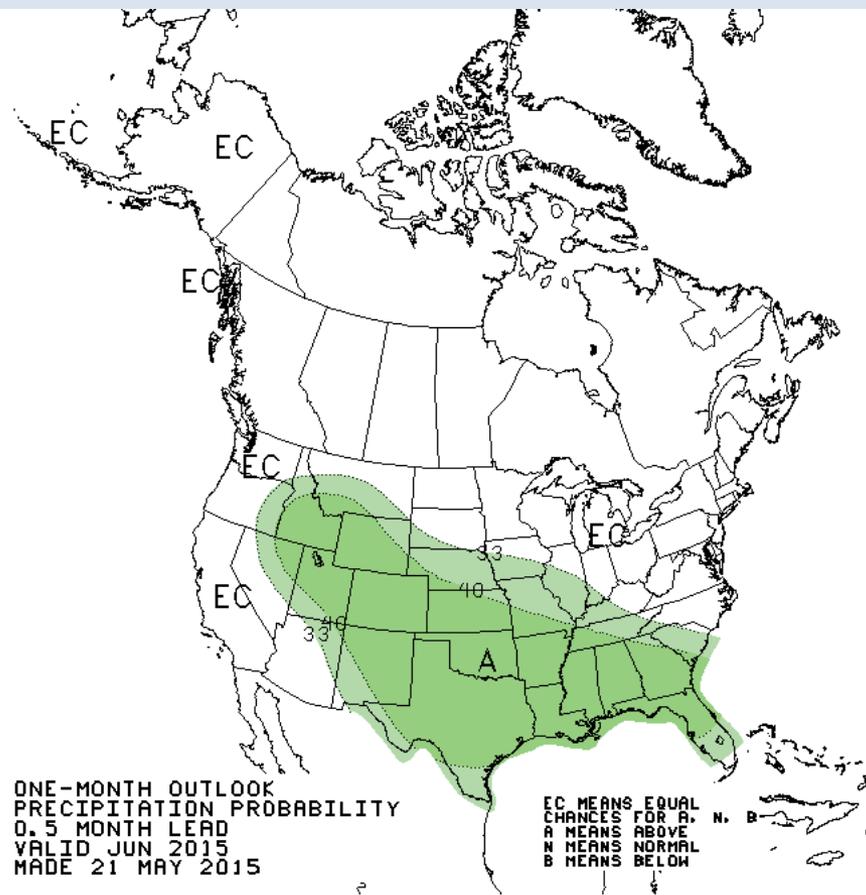


Monthly Forecast (June)

June Average Temperature Probability

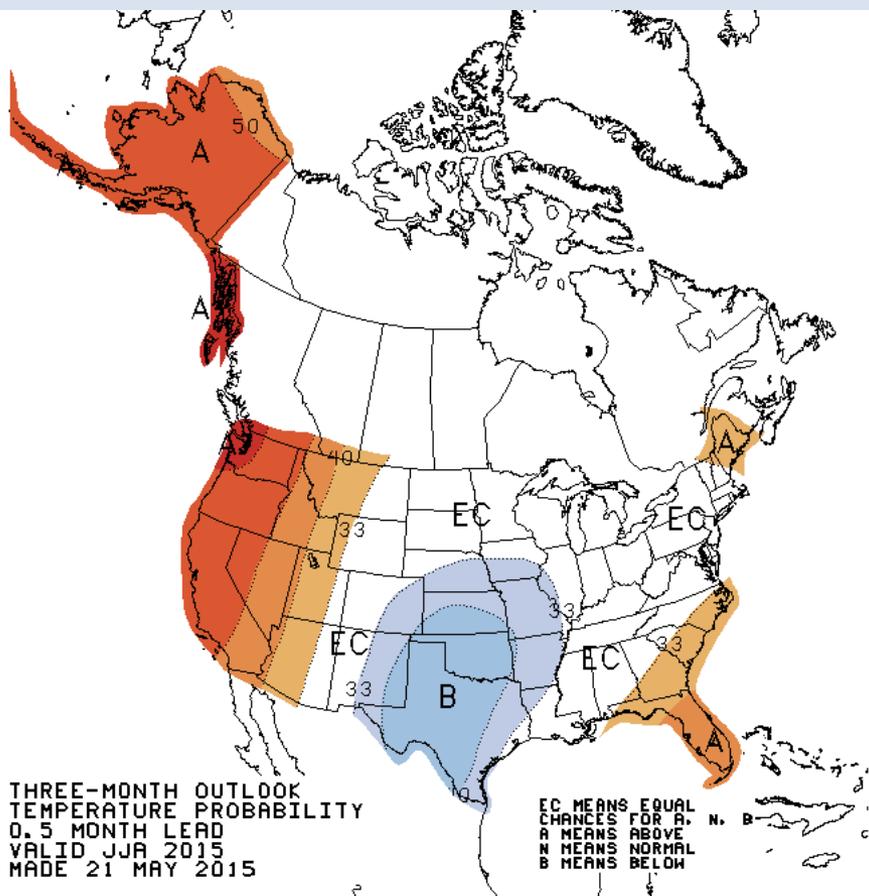


June Total Precipitation Probability

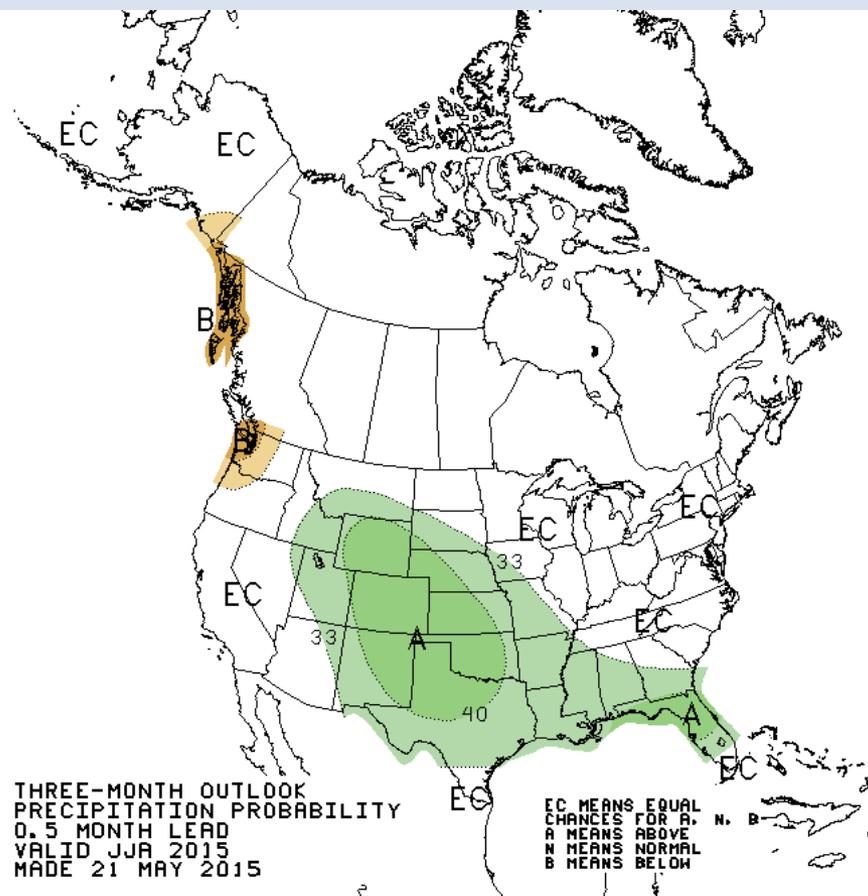


Seasonal Forecast (June-July-August)

June-August Average Temperature Probability



June-August Total Precipitation Probability

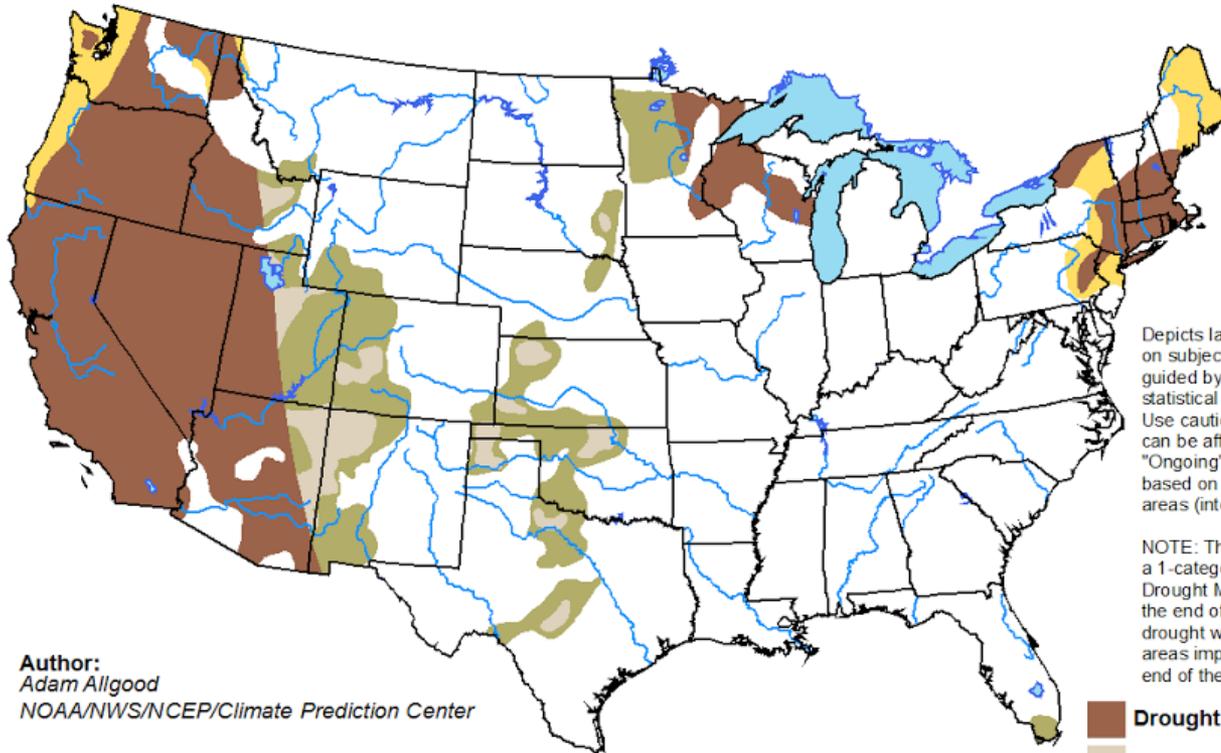


U.S. Drought Outlook

Drought Tendency During the Valid Period
May 21– August 30, 2015; Released May 21, 2015

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

Valid for May 21 - August 31, 2015
Released May 21, 2015

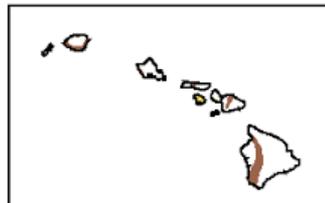
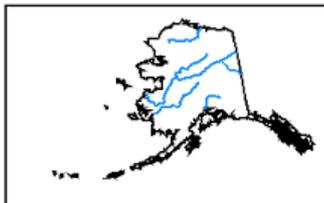


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

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



<http://go.usa.gov/hHTe>

For More Information



TODAY'S PRESENTATION:

- <http://www.ncdc.noaa.gov/sotc/briefings>

NOAA's National Centers for Environmental Information

www.ncdc.noaa.gov

- Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- Dates for upcoming reports: <http://www.ncdc.noaa.gov/monitoring-references/dyk/monthly-releases>

NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov

U.S. Drought Monitor: <http://drought.gov>

Climate Portal: www.climate.gov

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