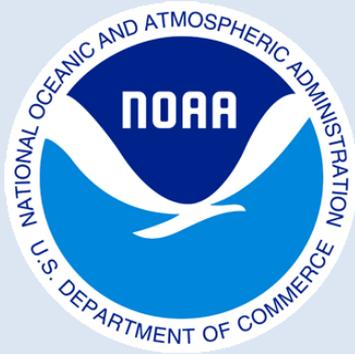


NOAA Climate Science & Services

Monthly Climate Update



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NOAA's Climate Prediction Center

Global Temperature: April 2016

- April: +1.10°C above 20th century average

- Warmest April on record
- 12th consecutive record warm month
- 4th largest monthly departure from average

- Land: +1.93°C

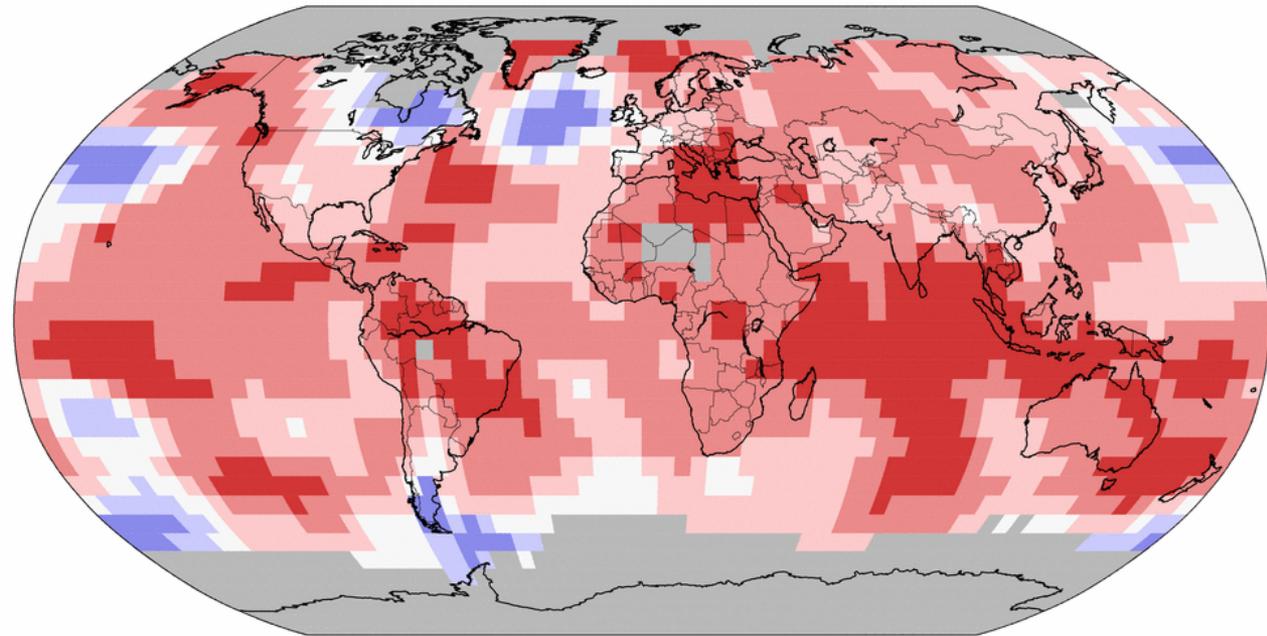
- Warmest April on record
- 3rd largest monthly departure from average

- Ocean: +0.80°C

- Warmest April on record
- 0.23°C warmer than 1998 with similar El Niño

Land and Ocean Temperature Percentiles April 2016

Data Source: GHCN-M version 3.3.0 & ERSST version 4.0.0



Record Coldest

Much Cooler than Average

Cooler than Average

Near Average

Warmer than Average

Much Warmer than Average

Record Warmest



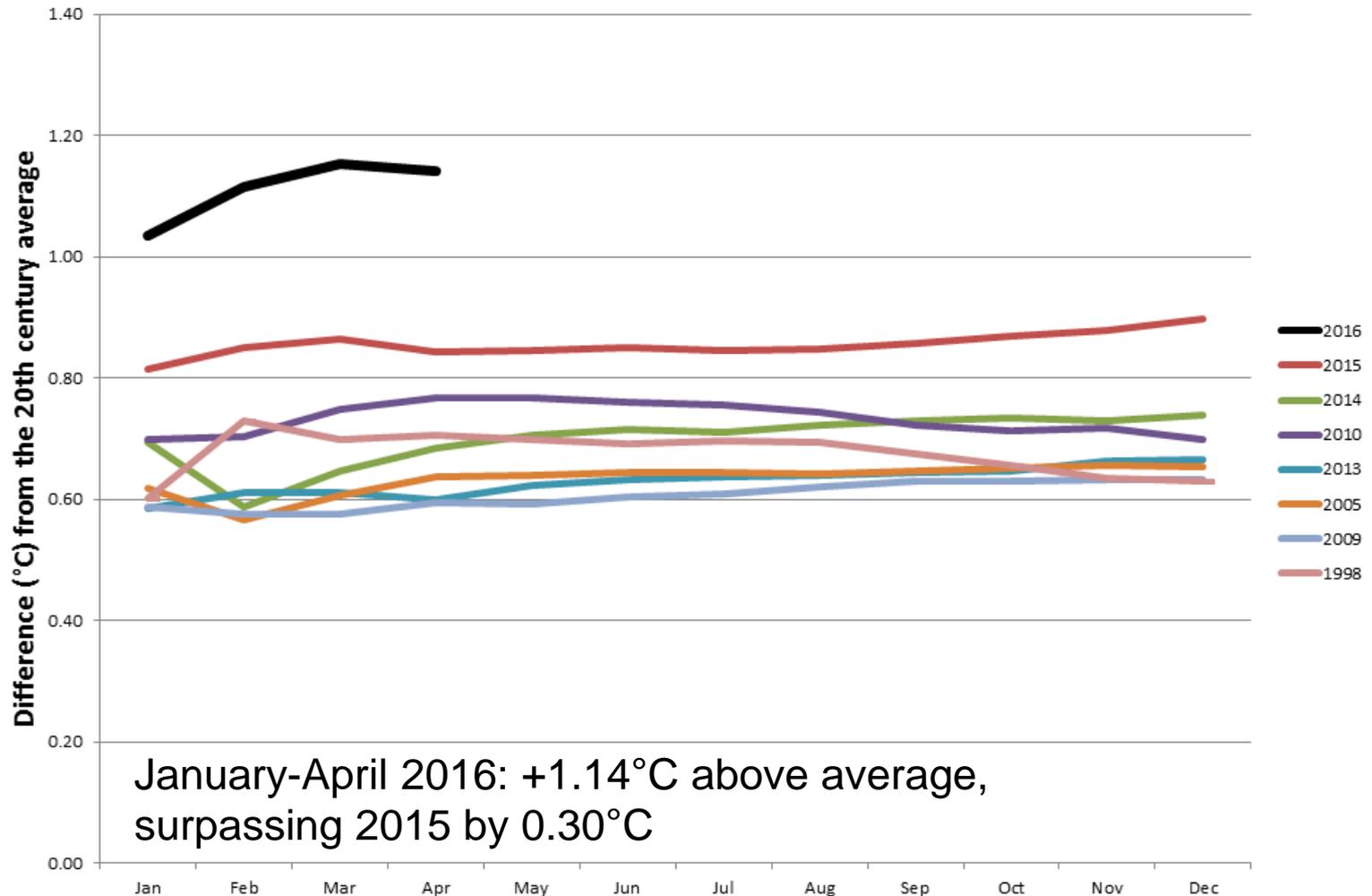
Fri May 13 07:05:57 EDT 2016

The global temperature record dates to 1880 (137 years)



Global Temperature: Jan-Apr 2016

Year-to-Date Global Temperature
for 2016 and the other seven warmest years on record



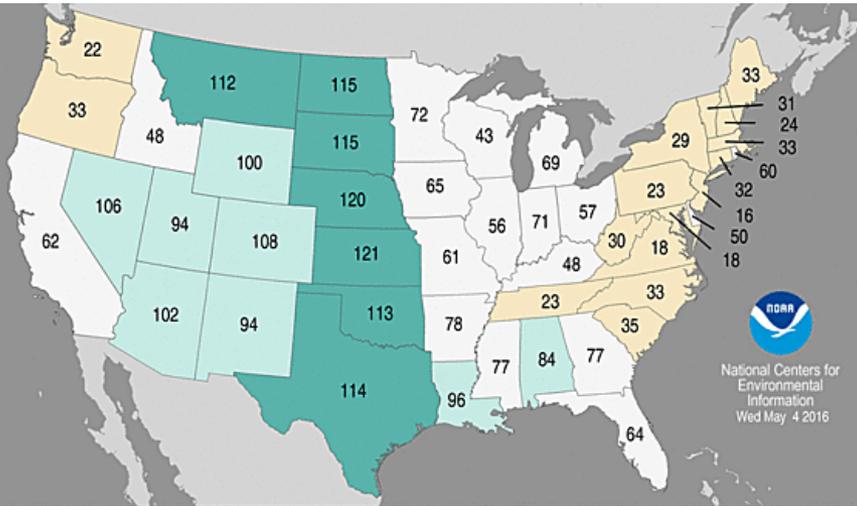
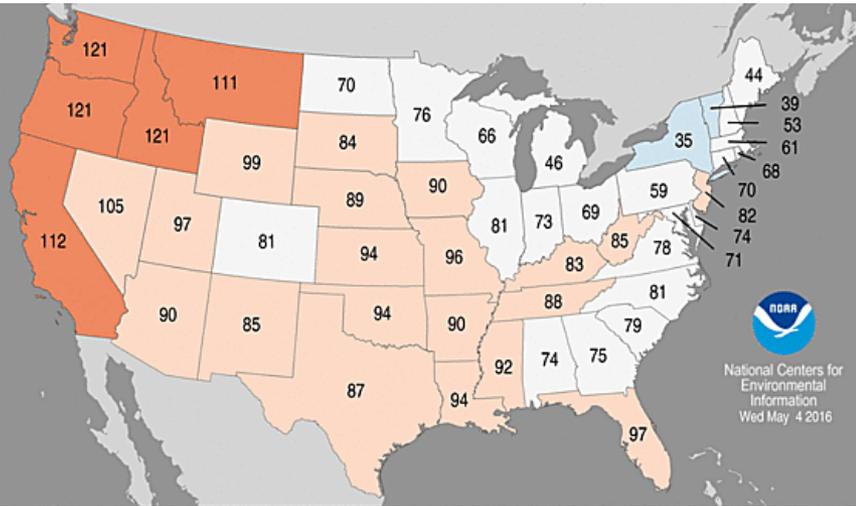
Contiguous U.S. April 2016

Temperature: 53.2°F, +2.2°F, 18th warmest April on record

Precipitation: 2.95", +0.43", 21st wettest April on record

Statewide Temperature Ranks April 2016
Period: 1895-2016 (122 years)

Statewide Precipitation Ranks, April 2016
Period: 1895-2016 (122 years)



- West Coast and Northern Rockies were very warm
- Above-average temperatures across the Rockies, Great Plains, and parts of the Ohio Valley
- Cool conditions in the Midwest and Northeast
- There were 3x more warm daily temperature records than cold daily temperature records

- Southwest and Great Plains were wet
 - Flooding in/around Houston, Texas
- Drier than average in Northwest and along East Coast
- Warm and dry conditions in the Northwest was associated with an early melting of the snowpack

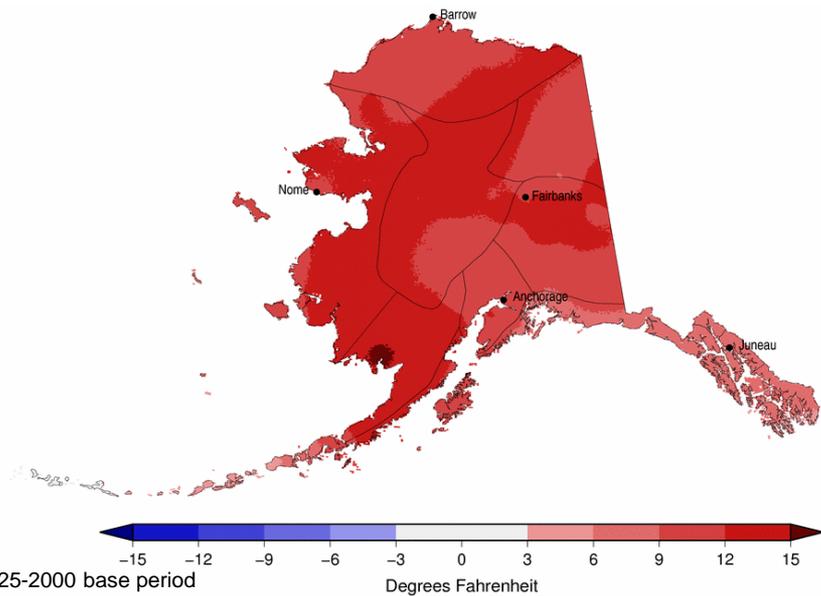


Baked Alaska

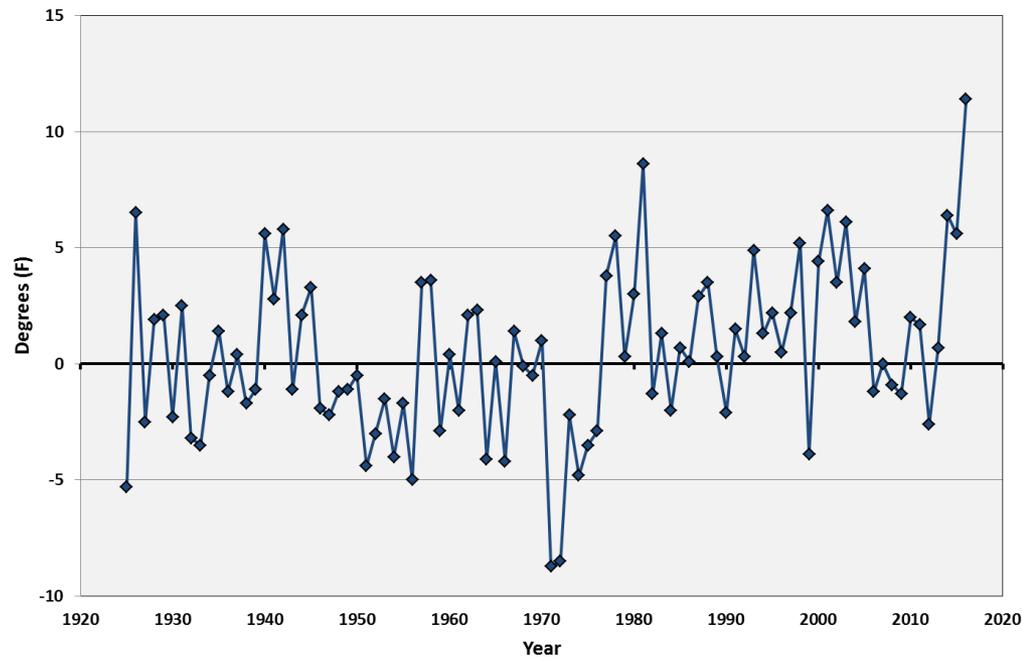
April: 33.3°F, +10.0°F, warmest April on record

January-April: 21.7°F, +11.4°F, warmest Jan-Apr on record

Alaska Temperature Departures from Average
January-April 2016



Alaska Statewide Temperature Departures
Period: 1925-2016 (92 years)



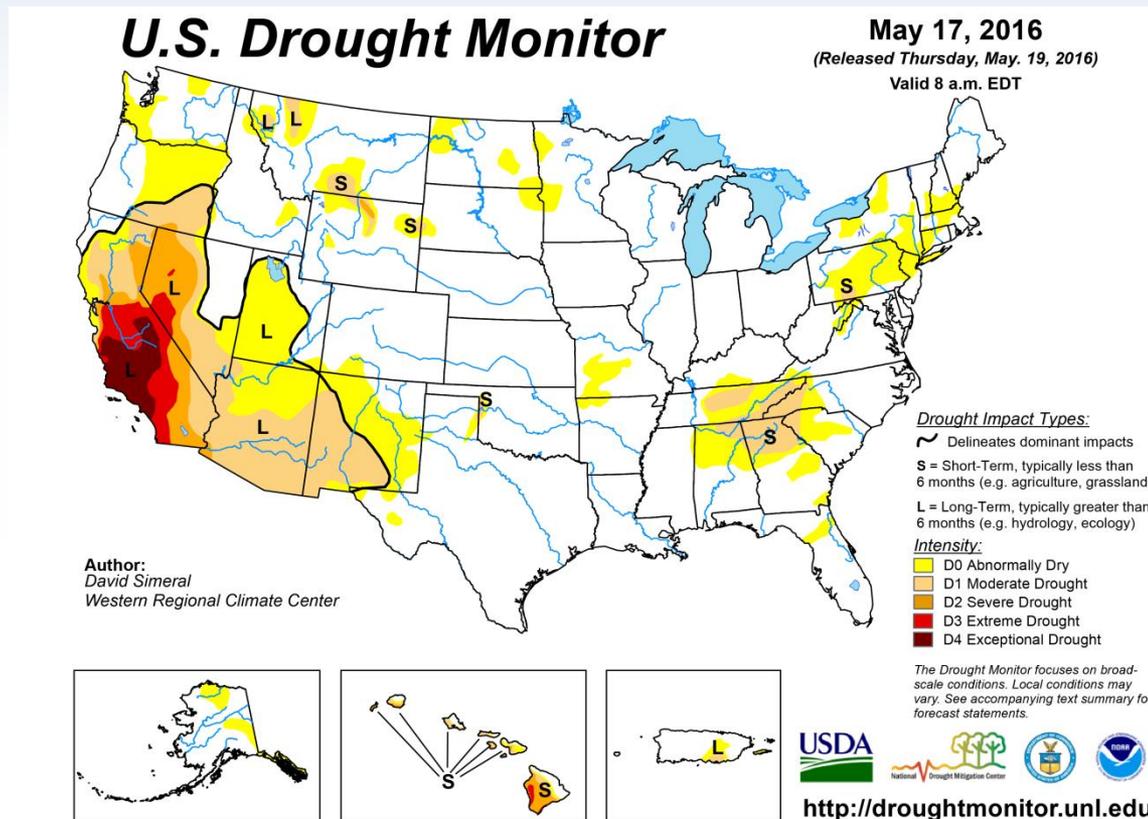
- Record early start to the growing season in central Alaska
- Record early breakup of ice along parts of the Yukon River

Current U.S. Drought

13.9 of Contiguous U.S. in Drought

(↓ 1.2 percentage points since late March)

- Improvement: Northern and Southern Great Plains and parts of the West (including CA)
- Degradation: Southeast and Mid-Atlantic
- Outside CONUS: Improving drought for parts of Hawaii and Puerto Rico

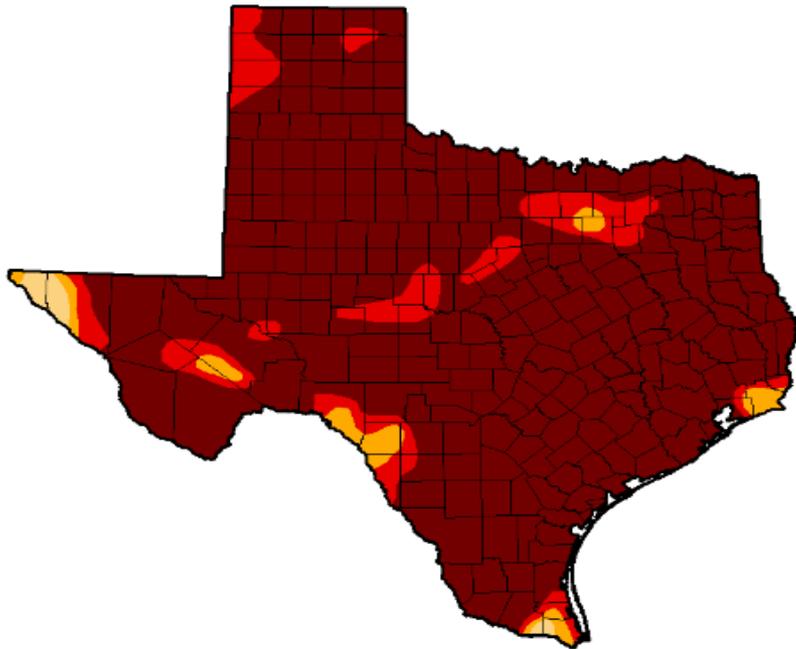


May 2016

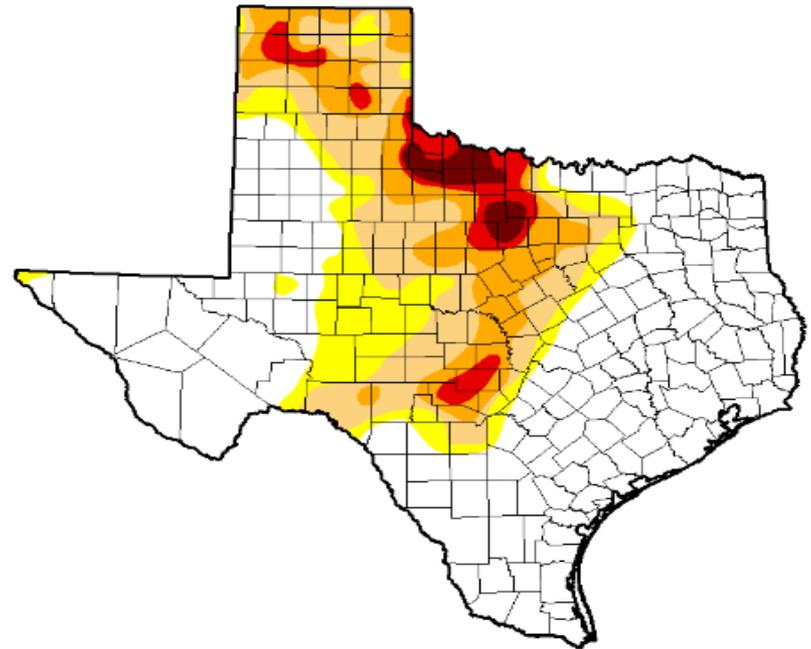
Monthly Climate Webinar

The Texas Rollercoaster

In September 2011, TX had just wrapped up its hottest and driest 12 month Oct-Sept period on record. The USDM showed 99+% of TX in severe drought. Improvements came in fits and starts through April 2015, but at least 20+% of TX remained in D2 or worse from late 2011 until April 2015.



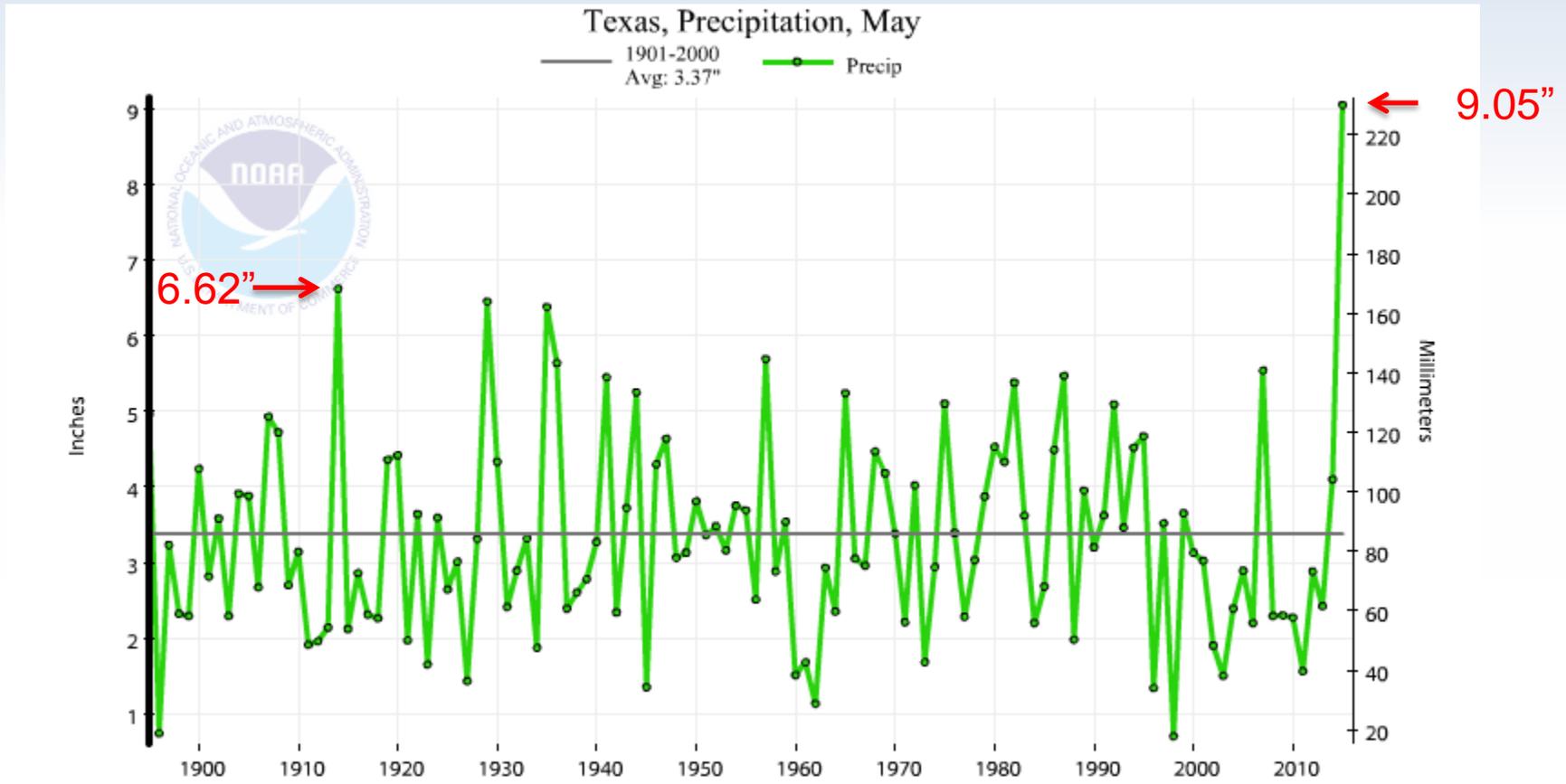
September 13, 2011



May 5, 2015

The Spigot Came on in May 2015...

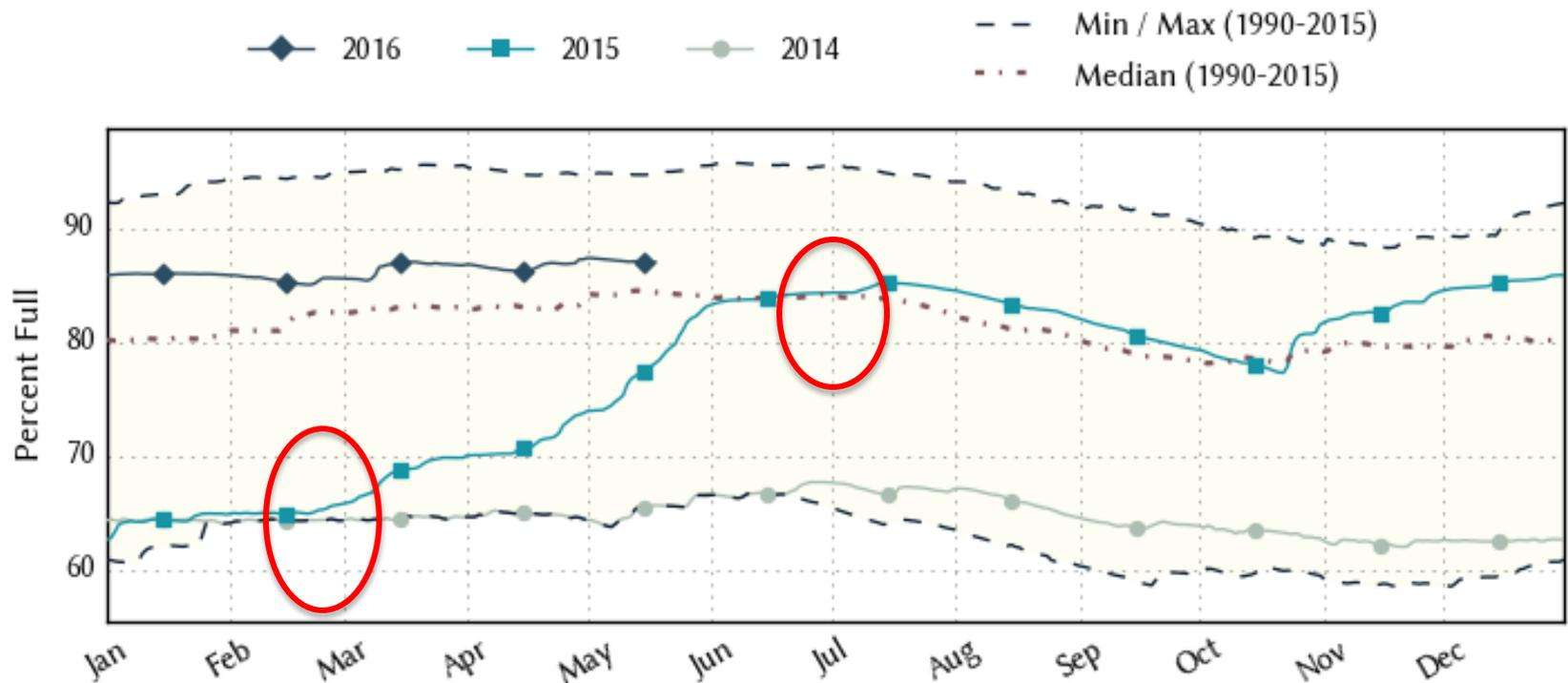
May 2015 was far and away the wettest on record, with 9.05" the statewide average, or about 40% wetter than the previous wettest. This is also the wettest month ever recorded in TX



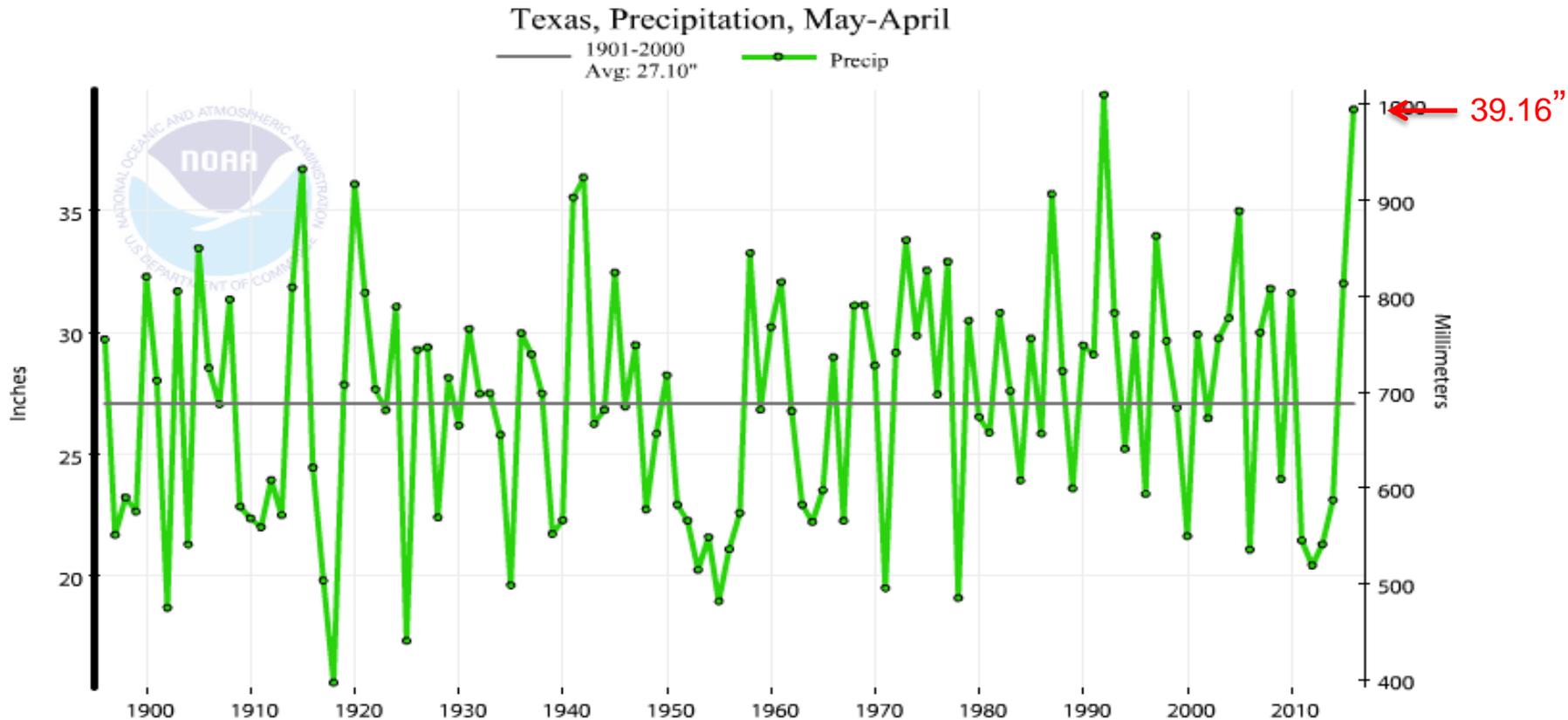
...and has stayed on since...

As recent as March 2015, TX reservoir levels were languishing at about 66% of capacity, or at all-time seasonal lows. By June 2015, levels were at the 25 year median, and are now at 87% full.

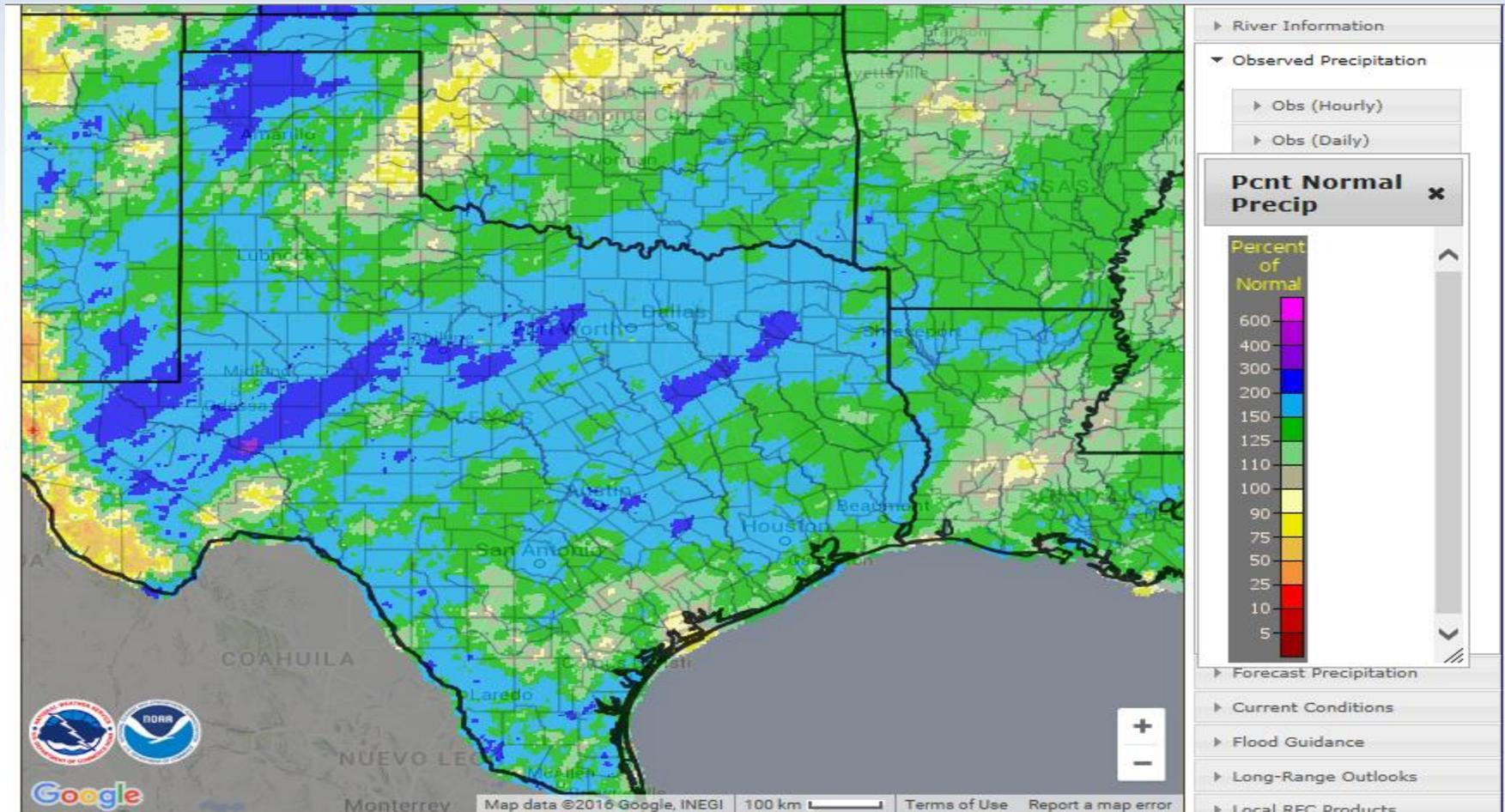
Texas Reservoir Levels



Most recent rolling 12 month period from May 2015-April 2016 the 2nd wettest on record. Almost 50% above average.



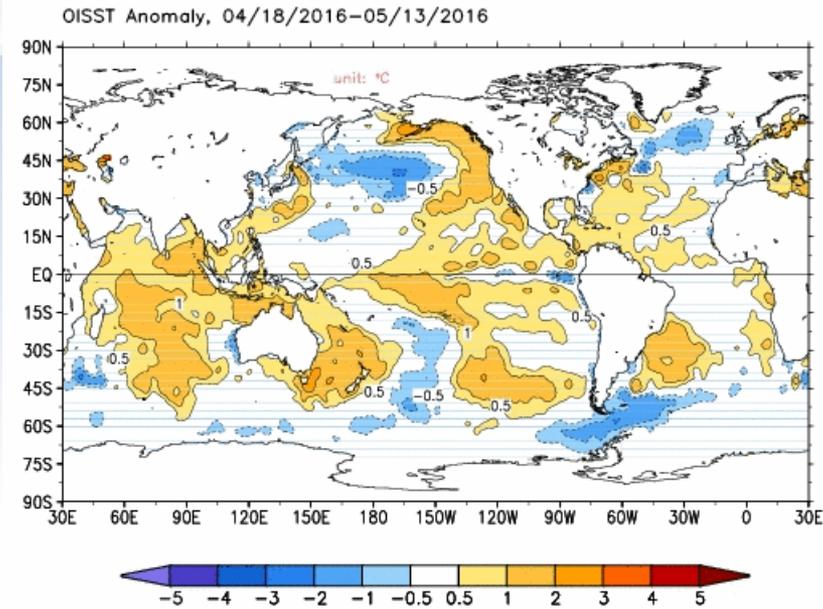
Since October 1st, nearly all of TX, OK, LA, and AR have seen 125% of normal precipitation, with some areas above 200%.



Summary

- Within the past 5 years, TX has seen precipitation variability on the yearly time scale that has only been matched in the 1910s and 1950s.
- With May and June being the two wettest months in TX, and the forecast into June calling for continued above average rainfall, TX remains very vulnerable to heavy rains and flash floods.
- The ability for society to adapt to and mitigate the impacts of this climate variability is key.

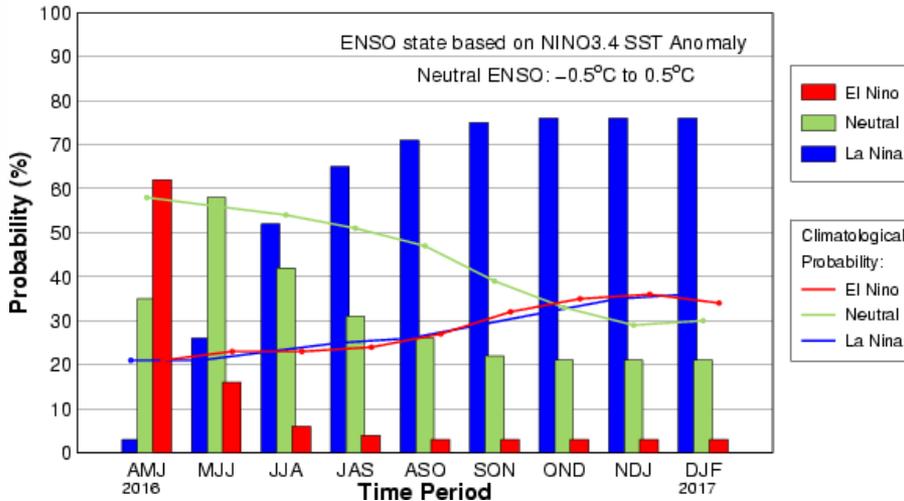
Sea Surface Temperatures and ENSO



- Sea surface temperatures

- Above-normal SSTs linger across much of the Pacific Basin, but a narrow strip of below-normal SSTs has emerged in the East Pacific
- Above-normal SSTs along the west coast of North America
- El Niño Advisory remains in place

Early-May CPC/IRI Official Probabilistic ENSO Forecast

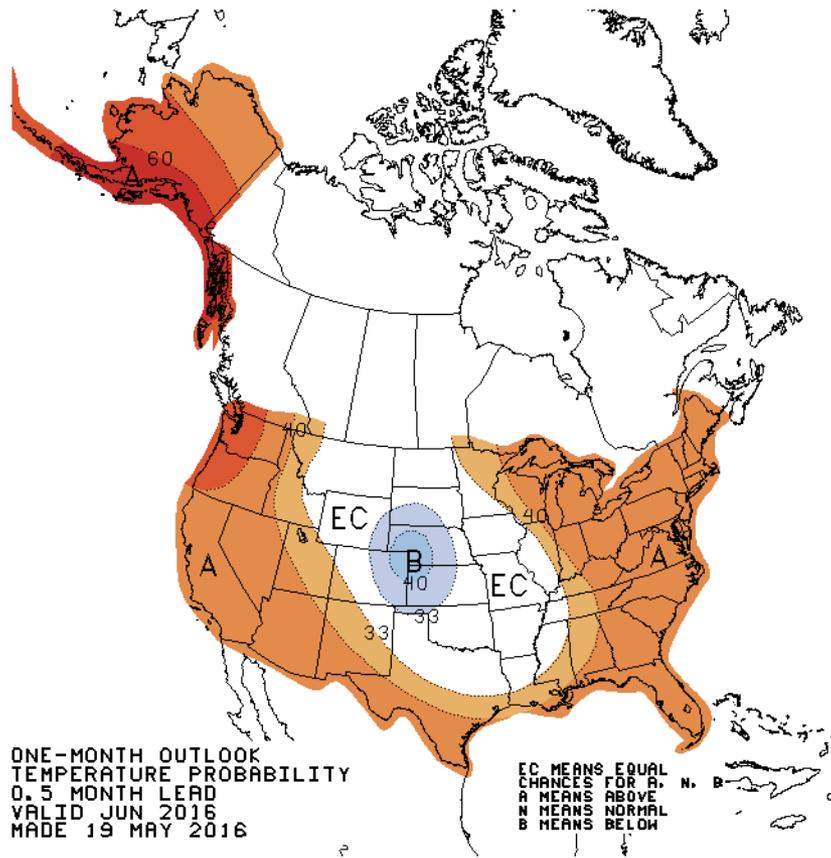


- ENSO forecast

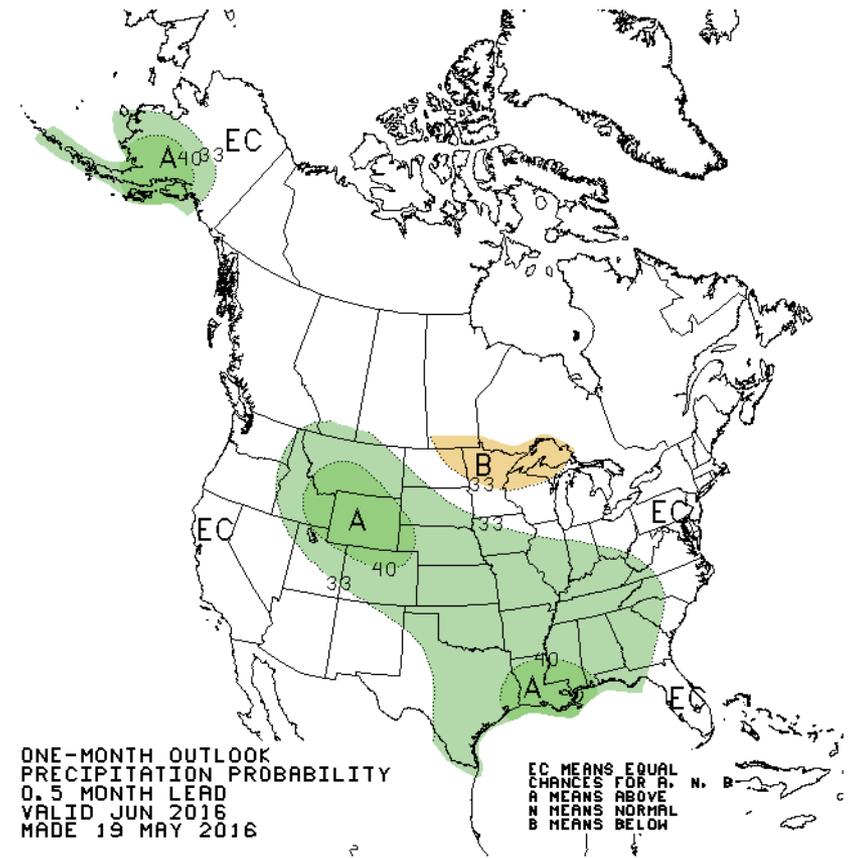
- The transition to ENSO neutral is underway
- La Niña conditions are expected to develop this summer
- There is a ~75% chance of La Niña for the upcoming autumn and winter

Monthly Forecast (June)

June Average
Temperature Probability

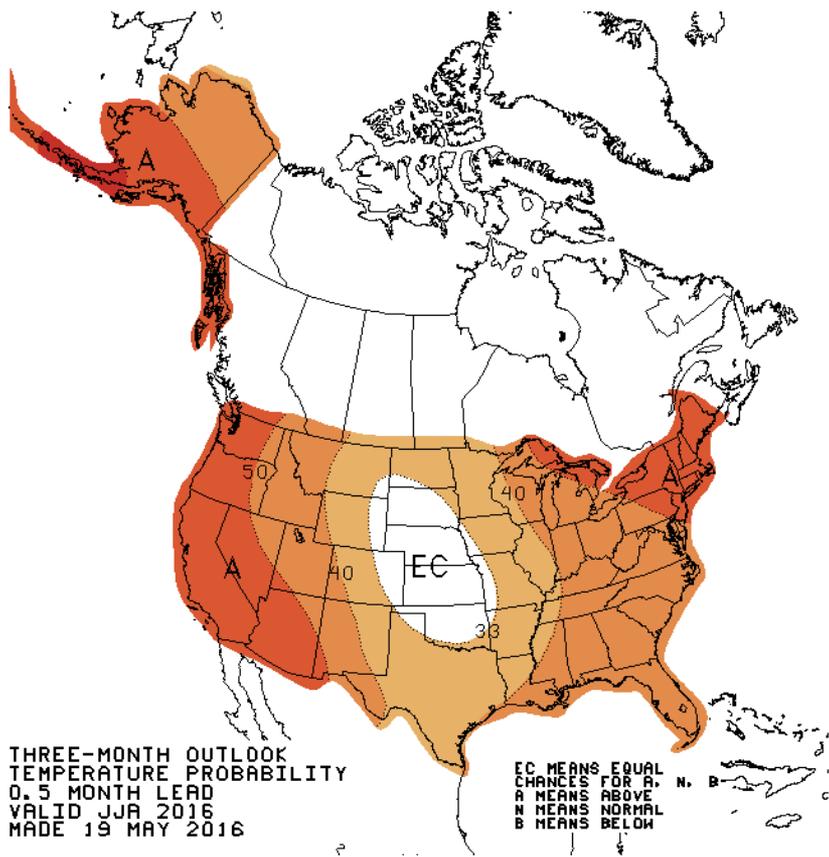


June Total
Precipitation Probability

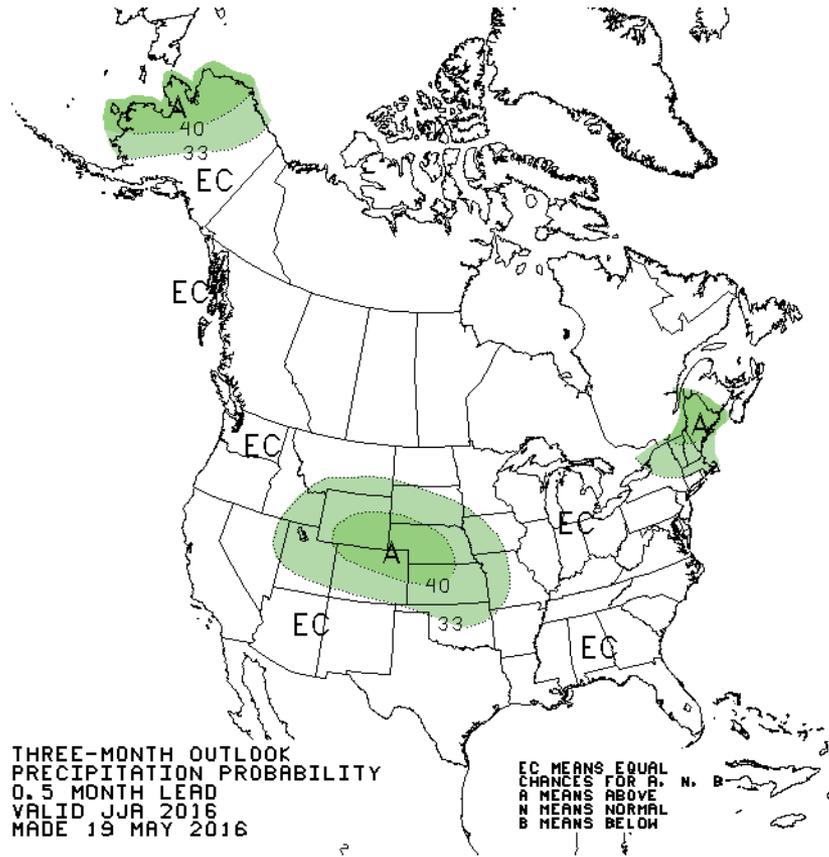


Seasonal Forecast (Jun-Jul-Aug)

Jun-Jul-Aug Average Temperature Probability



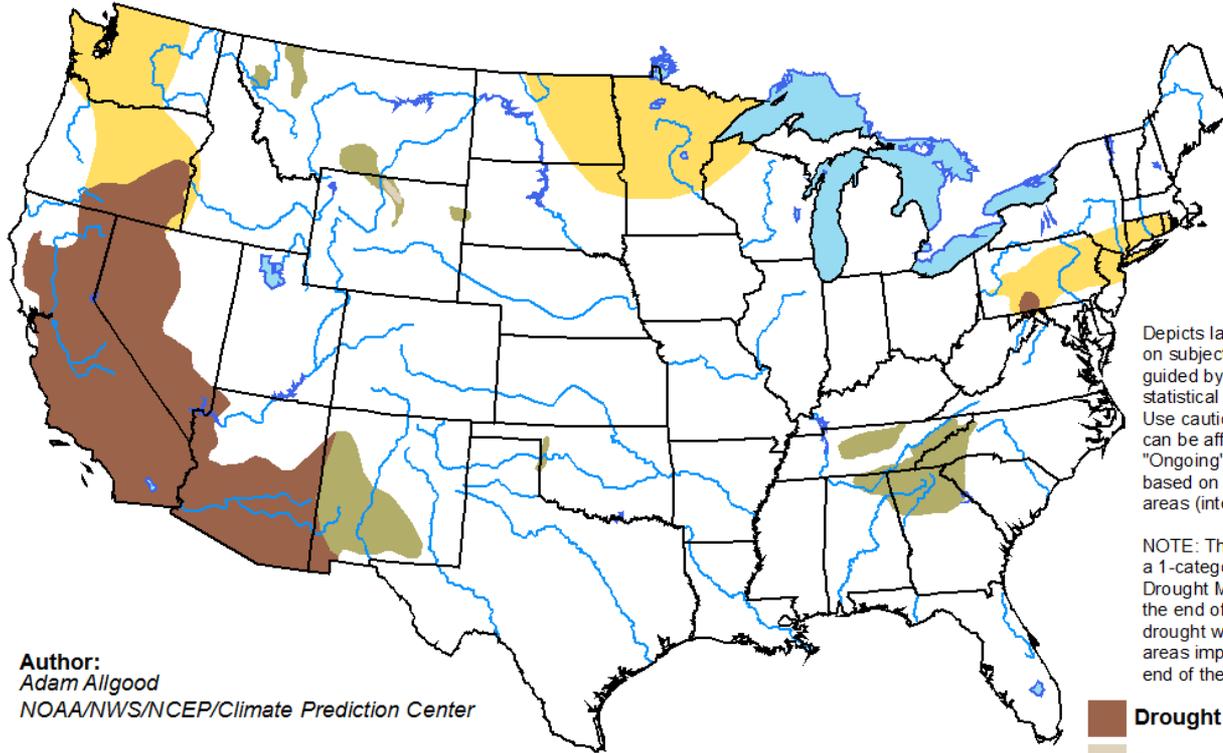
Jun-Jul-Aug Total Precipitation Probability



U.S. Drought Outlook

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

Valid for May 19 - August 31, 2016
Released May 19, 2016

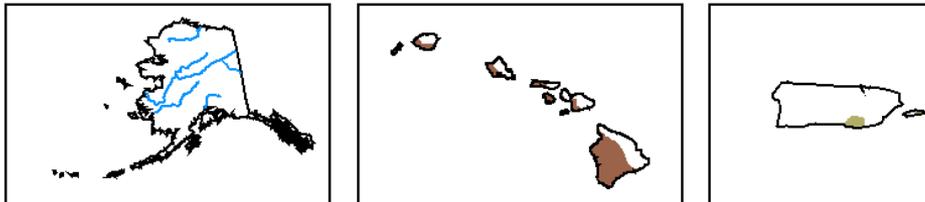


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

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



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

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

National Weather Service – Southern Region: <http://www.srh.noaa.gov/>

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

Climate Portal: www.climate.gov

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- Brady.Phillips@noaa.gov, 202-482-2365 (NOAA Office of Communications/HQ)