

NOAA Climate Science & Services

Monthly Climate Update

A look back at April and Year-to-Date

A preview of June-August

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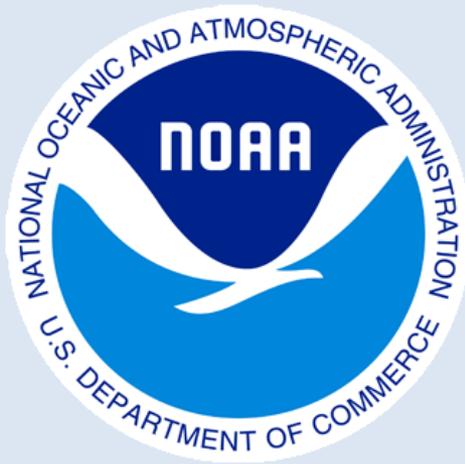
Climate Scientist

NOAA's National Climatic Data Center

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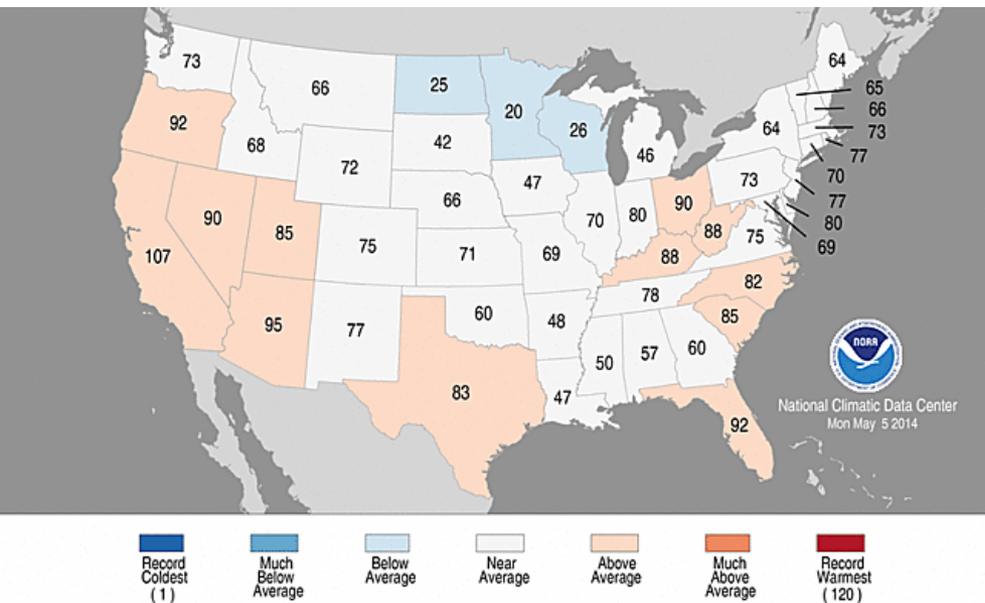
NOAA's Climate Prediction Center



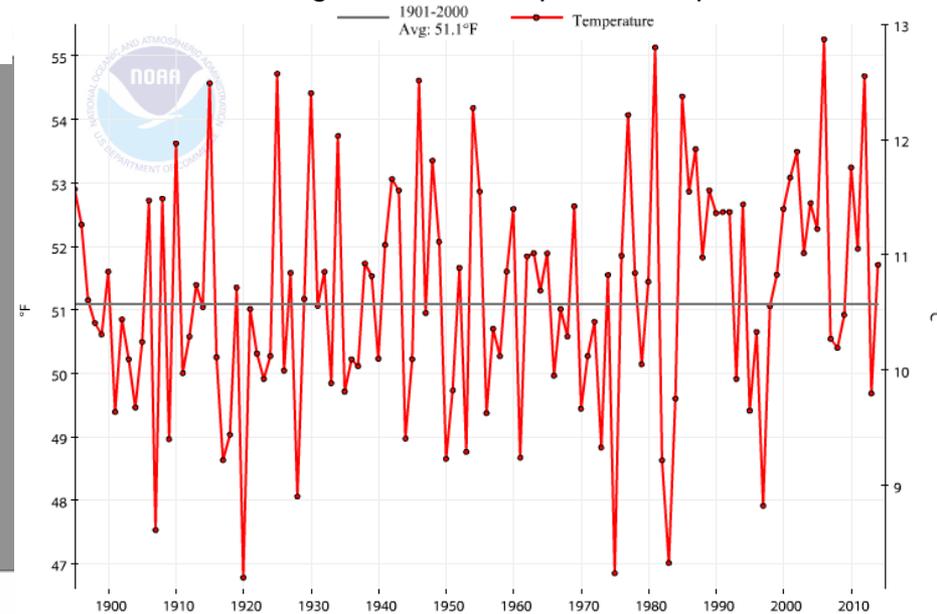
U.S. Temperature: April 2014

Temperature: 51.7°F, 0.7°F above 20th century average
Most of the contiguous U.S. had near-average temperatures

Statewide Temperature Ranks April 2014
Period: 1895-2014



Contiguous U.S. Temperature, April

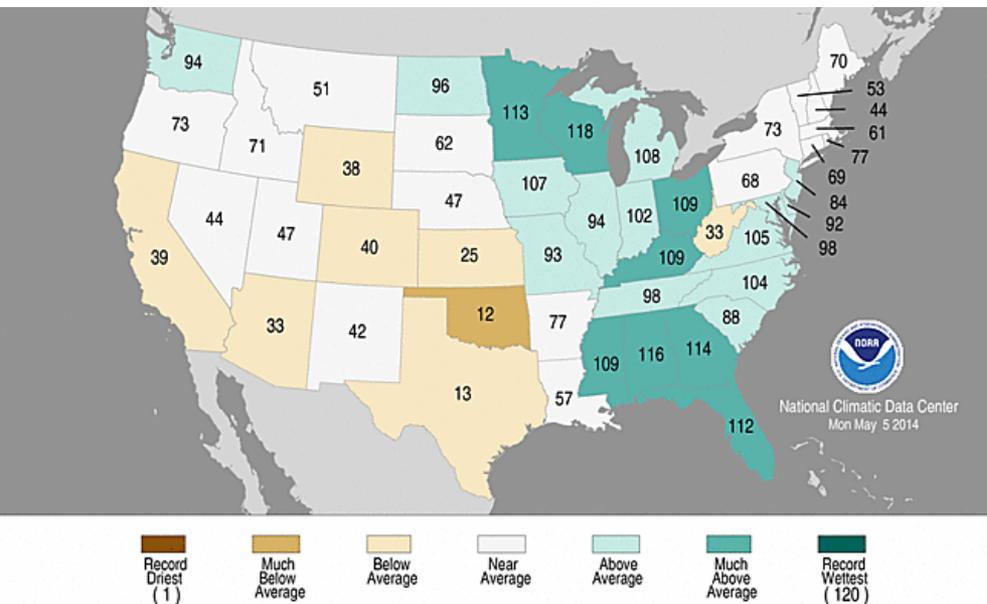


- Areas of above-average temperatures in West, Southern Plains, Ohio Valley, and Southeast.
- Cooler than average across parts of the Northern Plains and Upper Midwest.
 - Most of Lake Superior still frozen in late April.

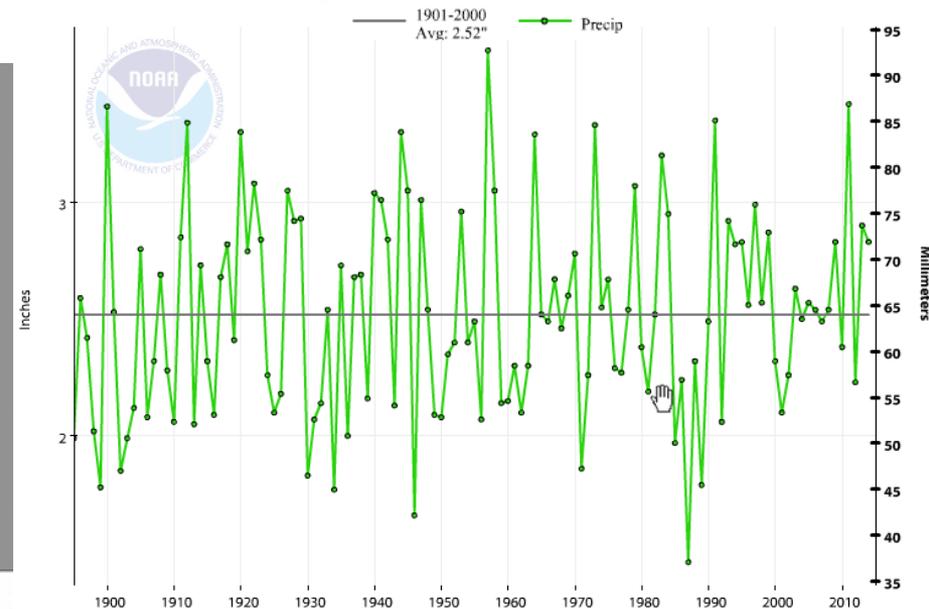
U.S. Precipitation: April 2014

Precipitation: 2.83", 0.31" above 20th century average
 West and Southern Plains dry; Midwest and Southeast wet

Statewide Precipitation Ranks April 2014
 Period: 1895-2014



Contiguous U.S. Precipitation, April



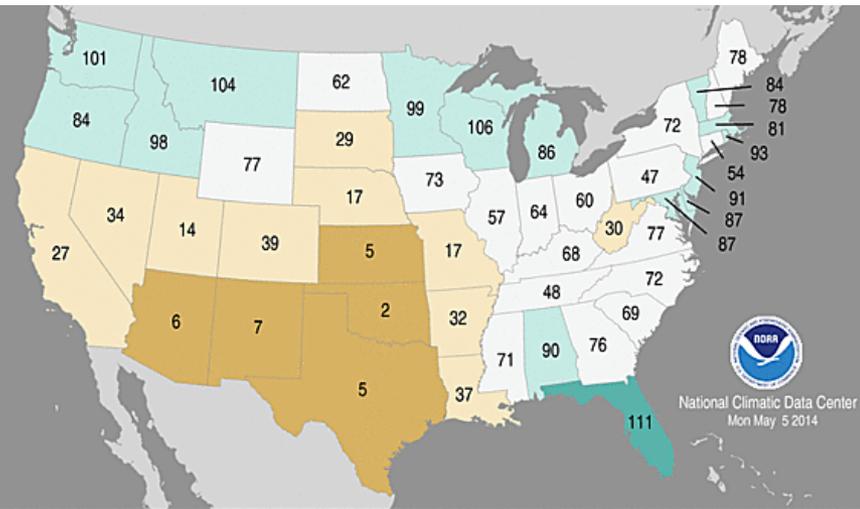
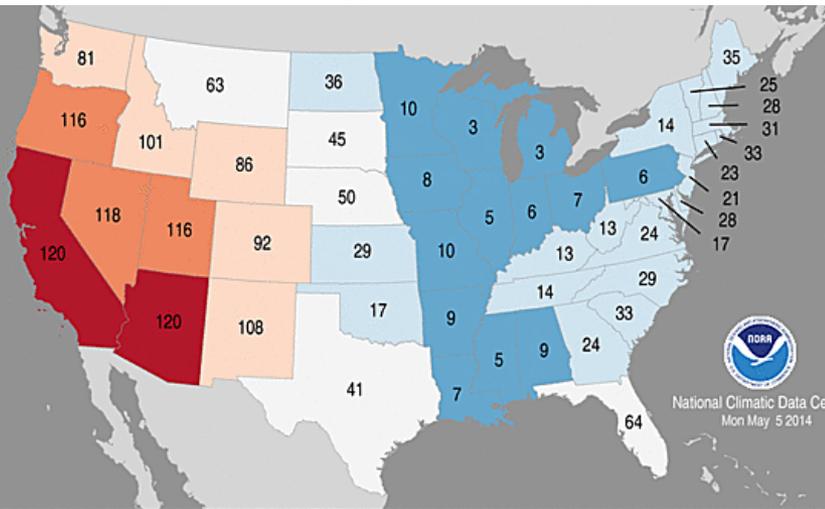
- Minnesota, Wisconsin, Alabama, Georgia, and Florida were top 10 Wet.
 - Much of the rain in the Southeast fell during the last days of April.
- Dryness in the Southern Plains intensified drought conditions.

Year-to-Date Temperature and Precipitation

Temperature: 0.4°F below average – coldest start to year since 1993.
 Precipitation: 0.69” below average – 33rd driest Jan-Apr on record.

Statewide Temperature Ranks Jan-Apr 2014
 Period: 1895-2014

Statewide Precipitation Ranks Jan-Apr 2014
 Period: 1895-2014



Record Coldest (1) Much Below Average Below Average Near Average Above Average Much Above Average Record Warmest (120)

Record Driest (1) Much Below Average Below Average Near Average Above Average Much Above Average Record Wettest (120)

- Warm in the West – AZ and CA record warm. NV, OR, UT were top 10 warm.
- Cool in the East – 13 states had a top 10 cold start to the year.

- Dry in the Southern Plains and Southwest – 5 states top 10 dry. OK had 2nd driest Jan-Apr.
- Wet in the Northwest, Upper Midwest, parts of Northeast and Southeast. FL 10th wettest.



April 2014 US Drought

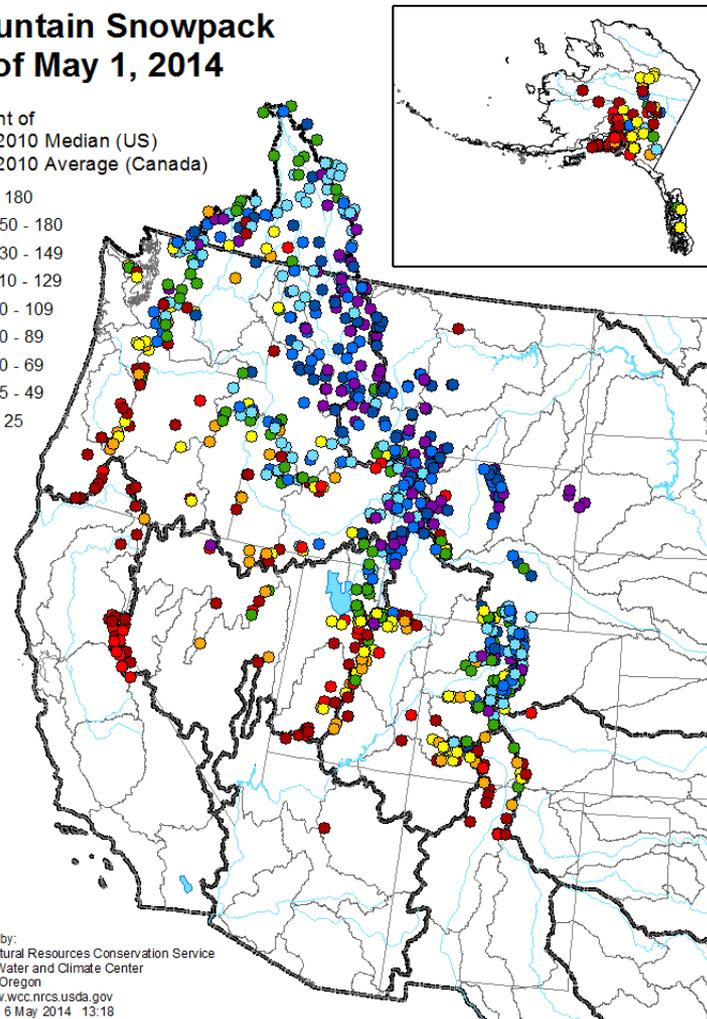
38.1% of CONUS in Drought

- Drought intensified in parts of the Central and Southern Plains but improved in the Midwest.
- Wet season is mostly over in CA, with little hope of exiting drought in the next few months.

Mountain Snowpack as of May 1, 2014

Percent of
1981-2010 Median (US)
1981-2010 Average (Canada)

- > 180
- 150 - 180
- 130 - 149
- 110 - 129
- 90 - 109
- 70 - 89
- 50 - 69
- 25 - 49
- < 25

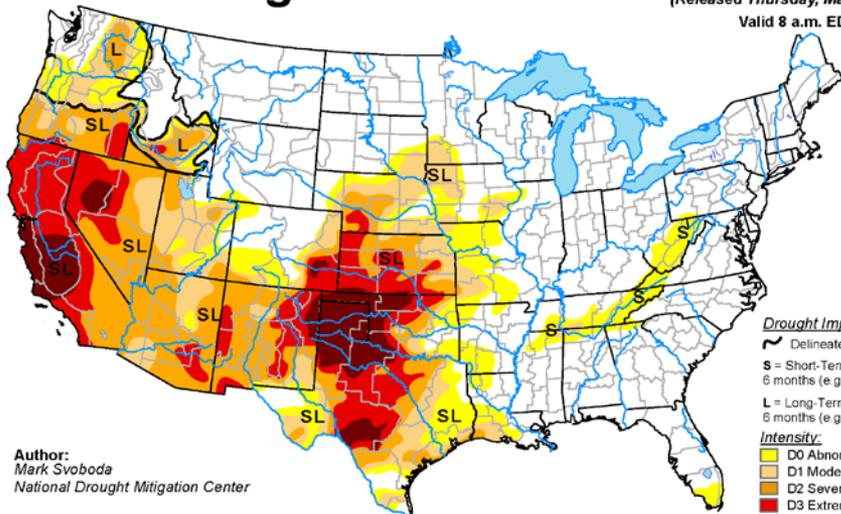


U.S. Drought Monitor

May 13, 2014

(Released Thursday, May 15, 2014)

Valid 8 a.m. EDT



Drought Impact Types:

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

Intensity:

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

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

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

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Created: 6 May 2014 13:18



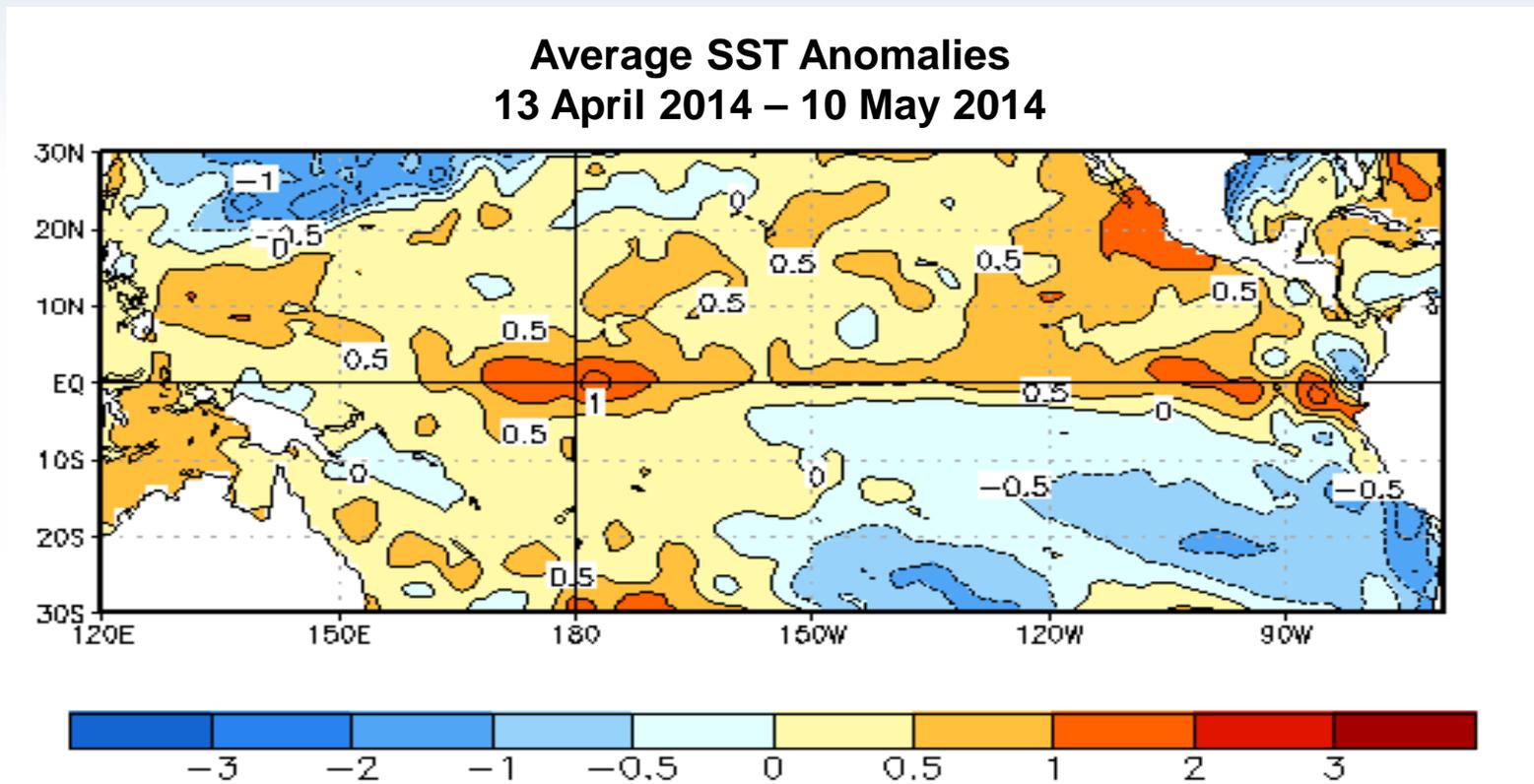
May 2014

Monthly Climate Webinar

ENSO Diagnostics Discussion

(State of Tropical Pacific)

- Chance of El Niño increases during the remainder of the year, exceeding 65% during summer.

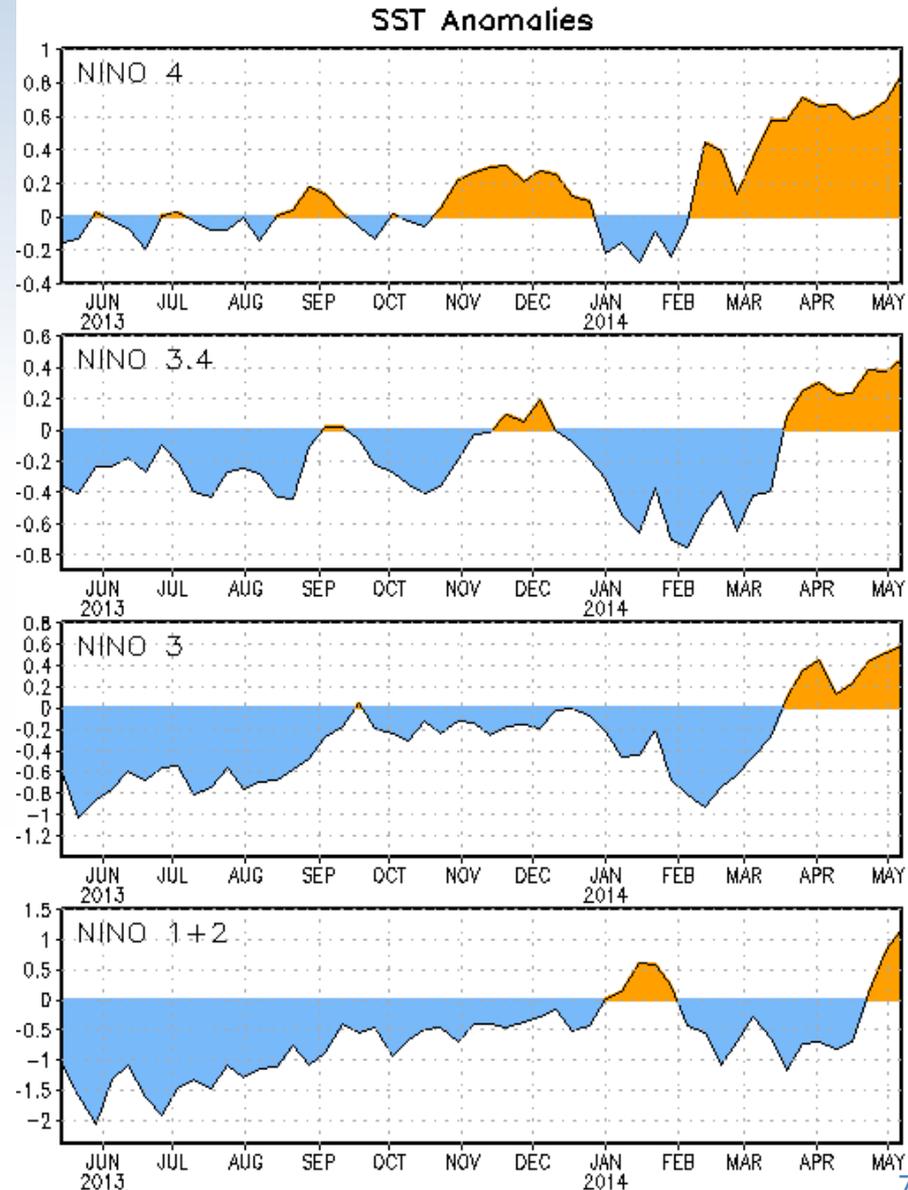
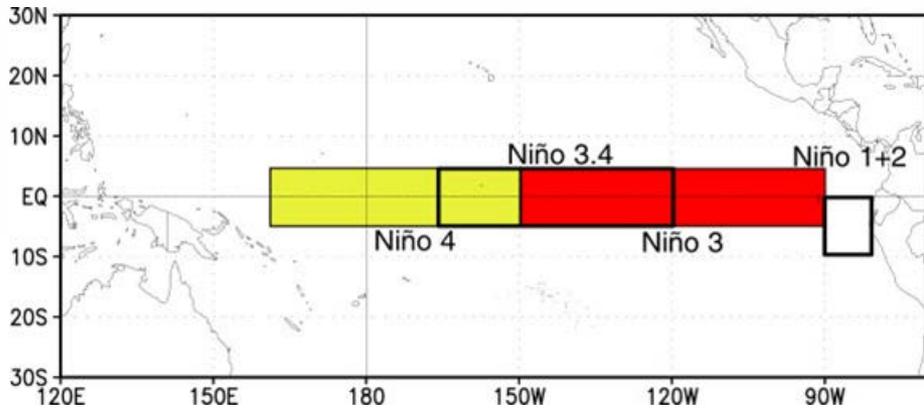


Niño Region SST Departures (°C)

Recent Evolution

The latest weekly SST departures are:

Niño 4	0.8°C
Niño 3.4	0.5°C
Niño 3	0.6°C
Niño 1+2	1.2°C

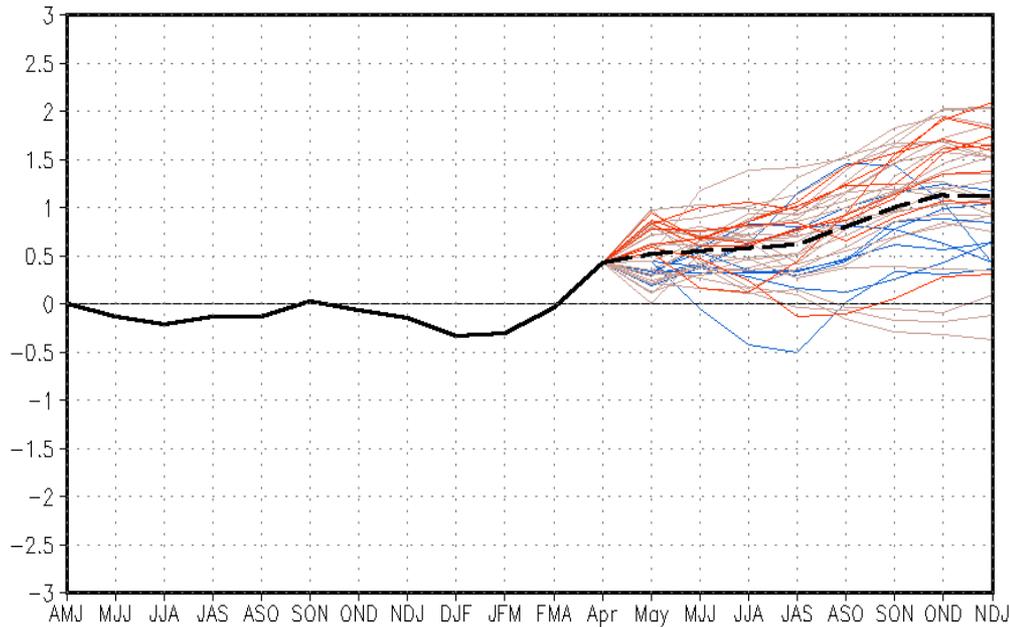


SST Outlook: NCEP CFS.v2 Forecast (PDF corrected)

Issued: 12 May 2014

The CFS.v2 ensemble mean (black dashed line) predicts El Niño starting within the next 1-3 months.

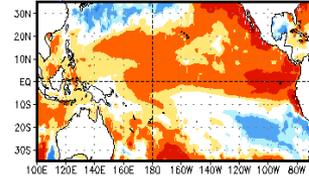
CFSv2 Forecast Nino3.4 SST anomalies (K) (PDF corrected)



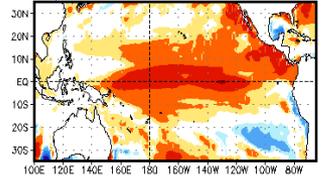
— Latest 8 forecast members
— Earliest 8 forecast members
— Other forecast members
- - - Forecast ensemble mean
— NCDC daily analysis

(Model bias correct base period: 1999–2010; Climatology base period: 1982–2010)

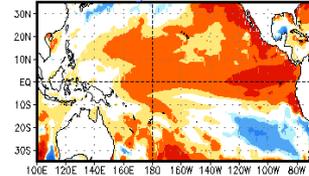
May–Jun–Jul 2014



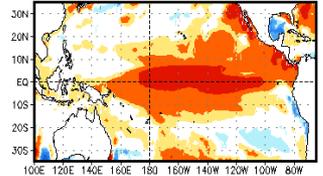
Sep–Oct–Nov 2014



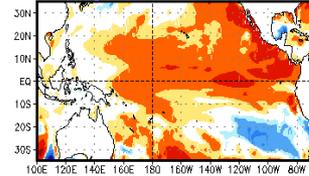
Jun–Jul–Aug 2014



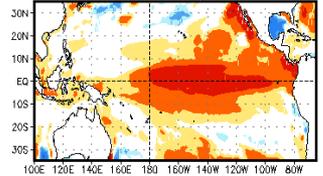
Oct–Nov–Dec 2014



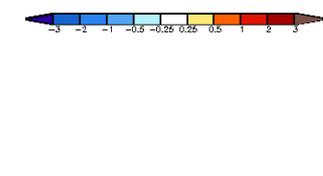
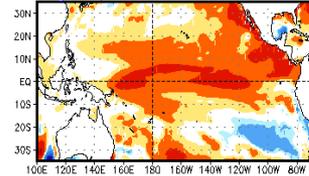
Jul–Aug–Sep 2014



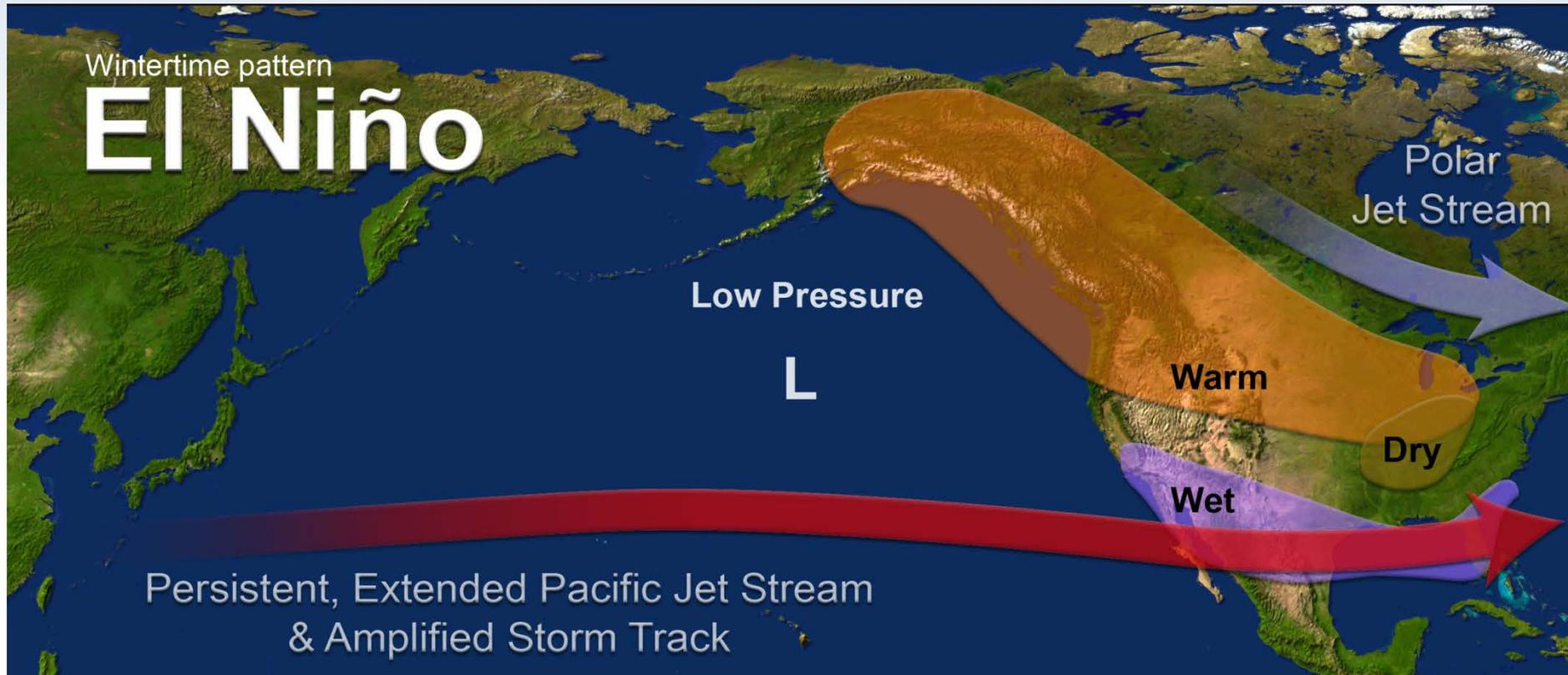
Nov–Dec–Jan 2014/2015



Aug–Sep–Oct 2014

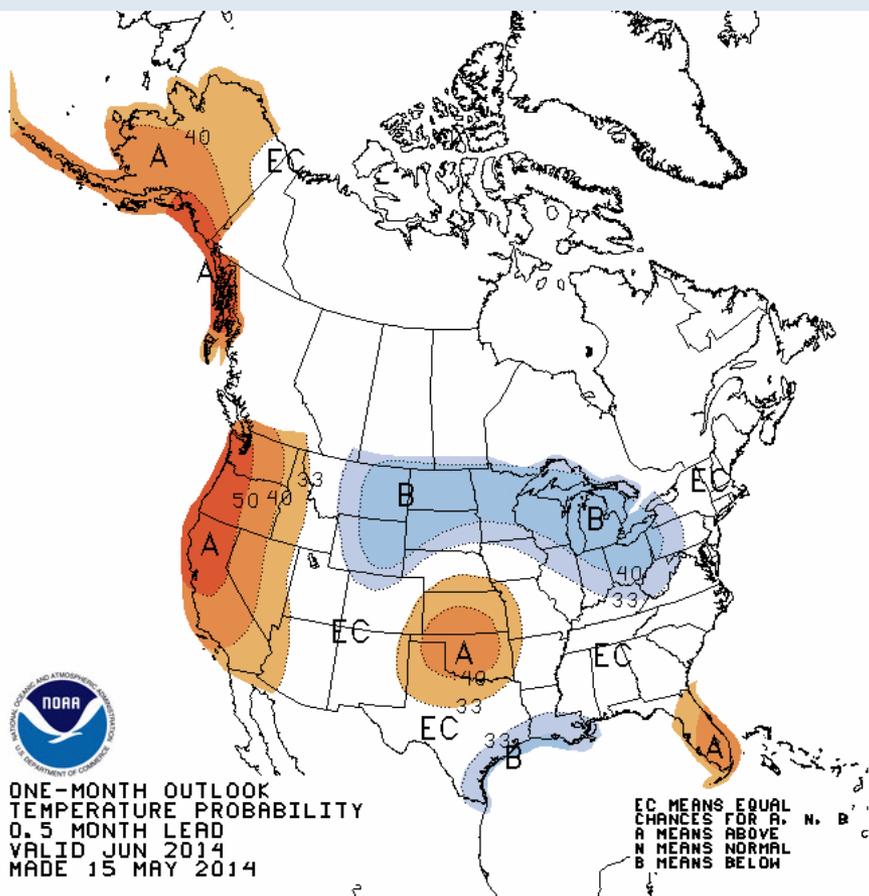


Typical Wintertime El Niño Pattern

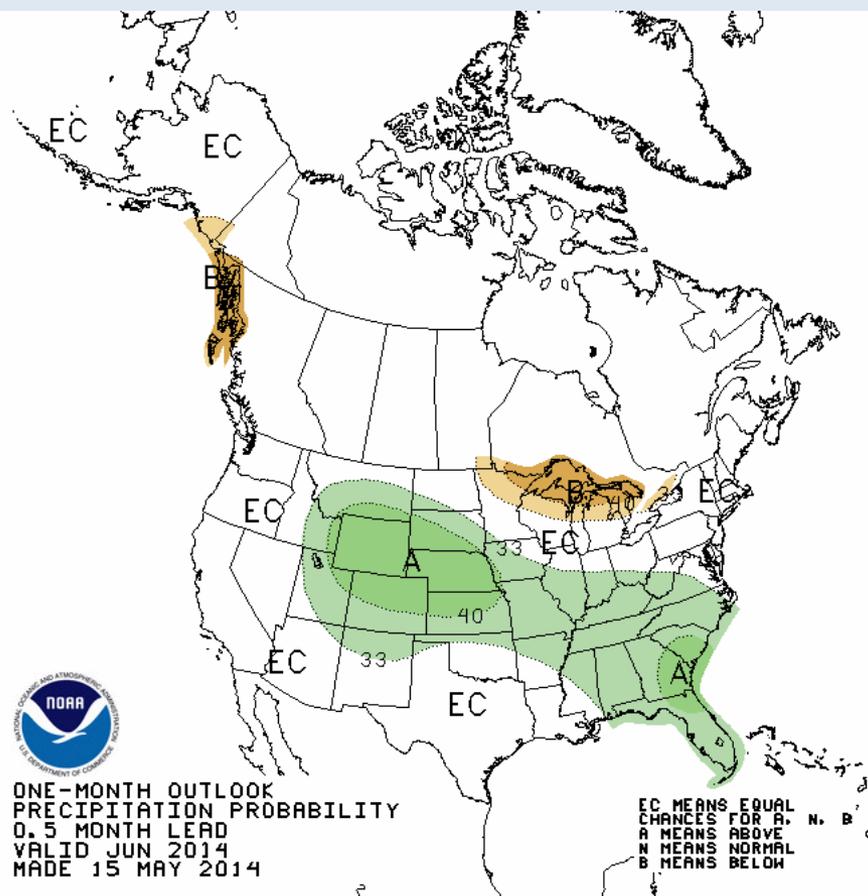


Monthly Forecast (June)

June Average Temperature Probability

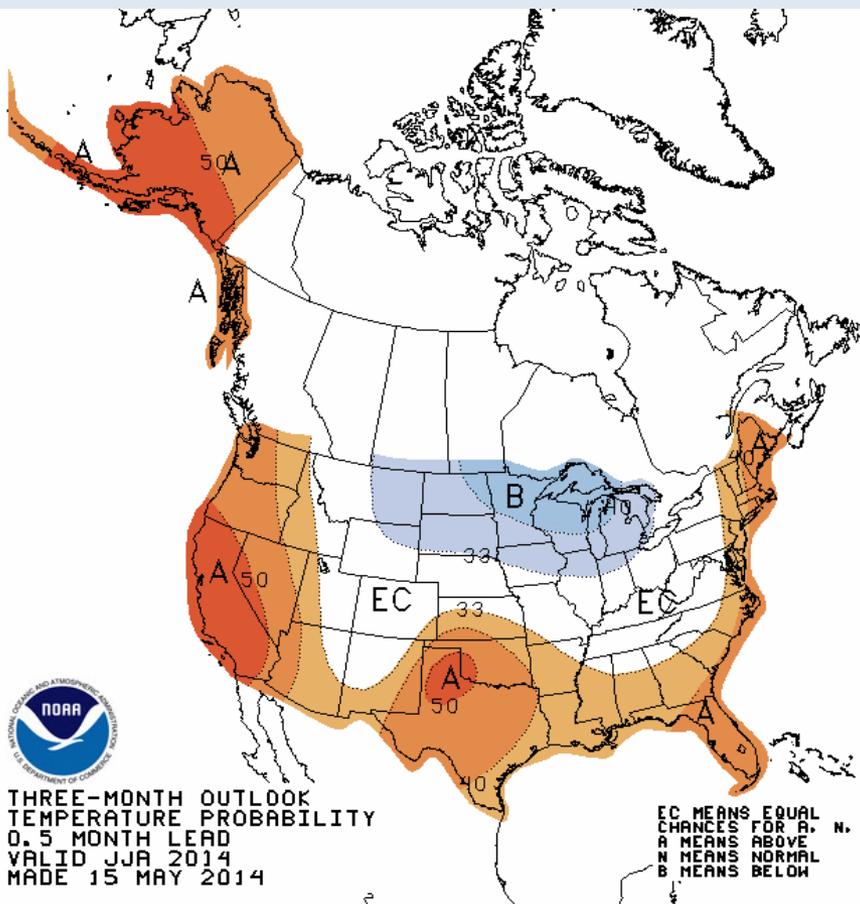


June Total Precipitation Probability



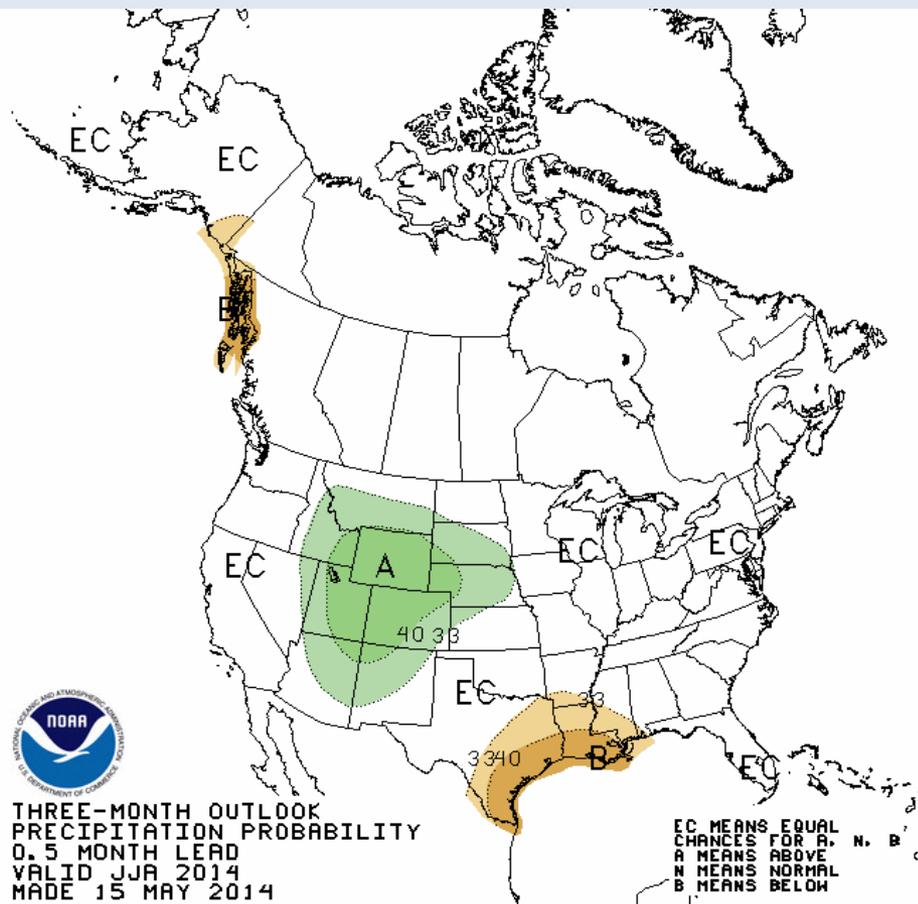
Seasonal Forecast (June-July-August)

June-July-August Average Temperature Probability



THREE-MONTH OUTLOOK
 TEMPERATURE PROBABILITY
 0.5 MONTH LEAD
 VALID JJA 2014
 MADE 15 MAY 2014

June-July-August Total Precipitation Probability

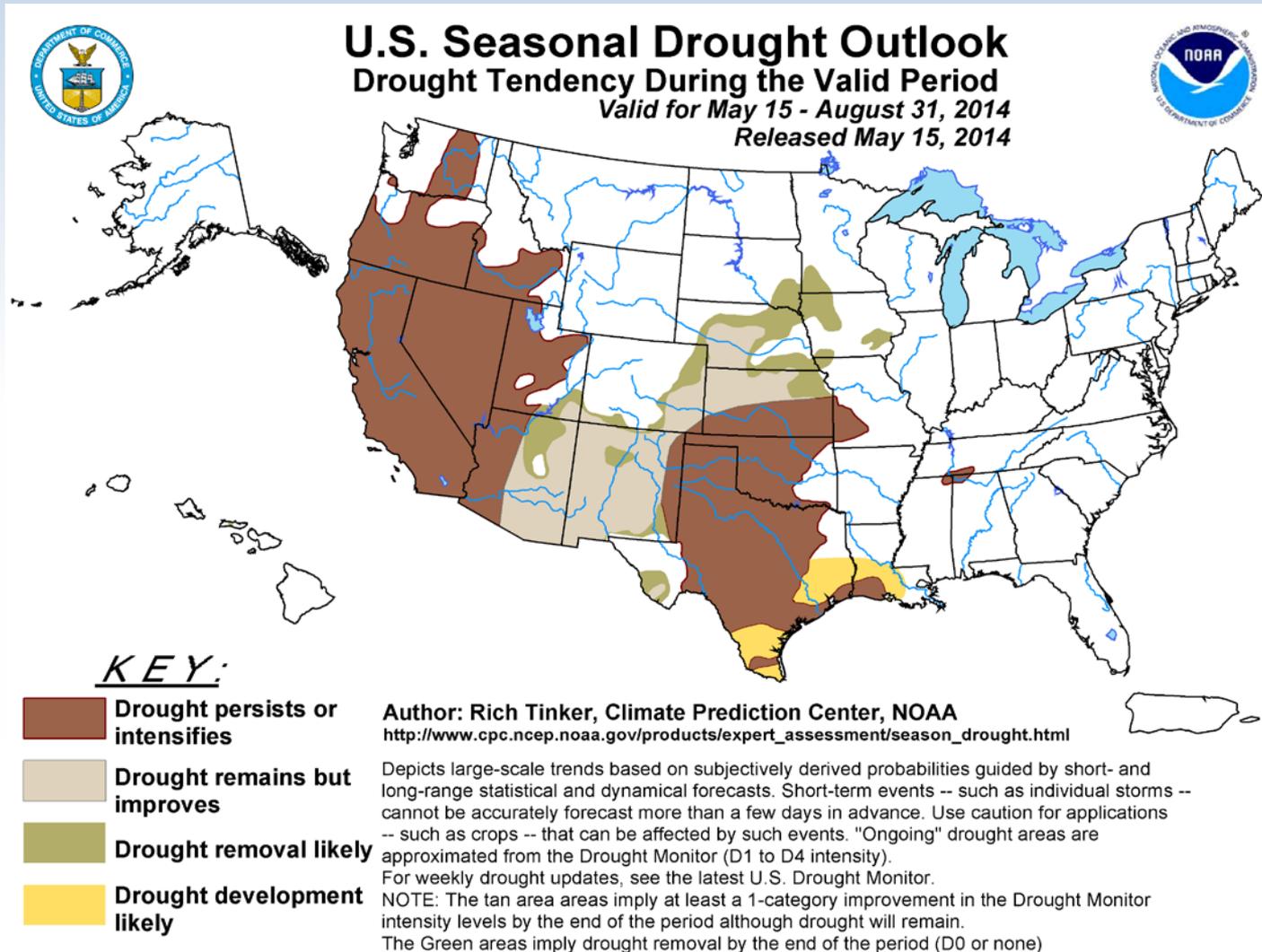


THREE-MONTH OUTLOOK
 PRECIPITATION PROBABILITY
 0.5 MONTH LEAD
 VALID JJA 2014
 MADE 15 MAY 2014

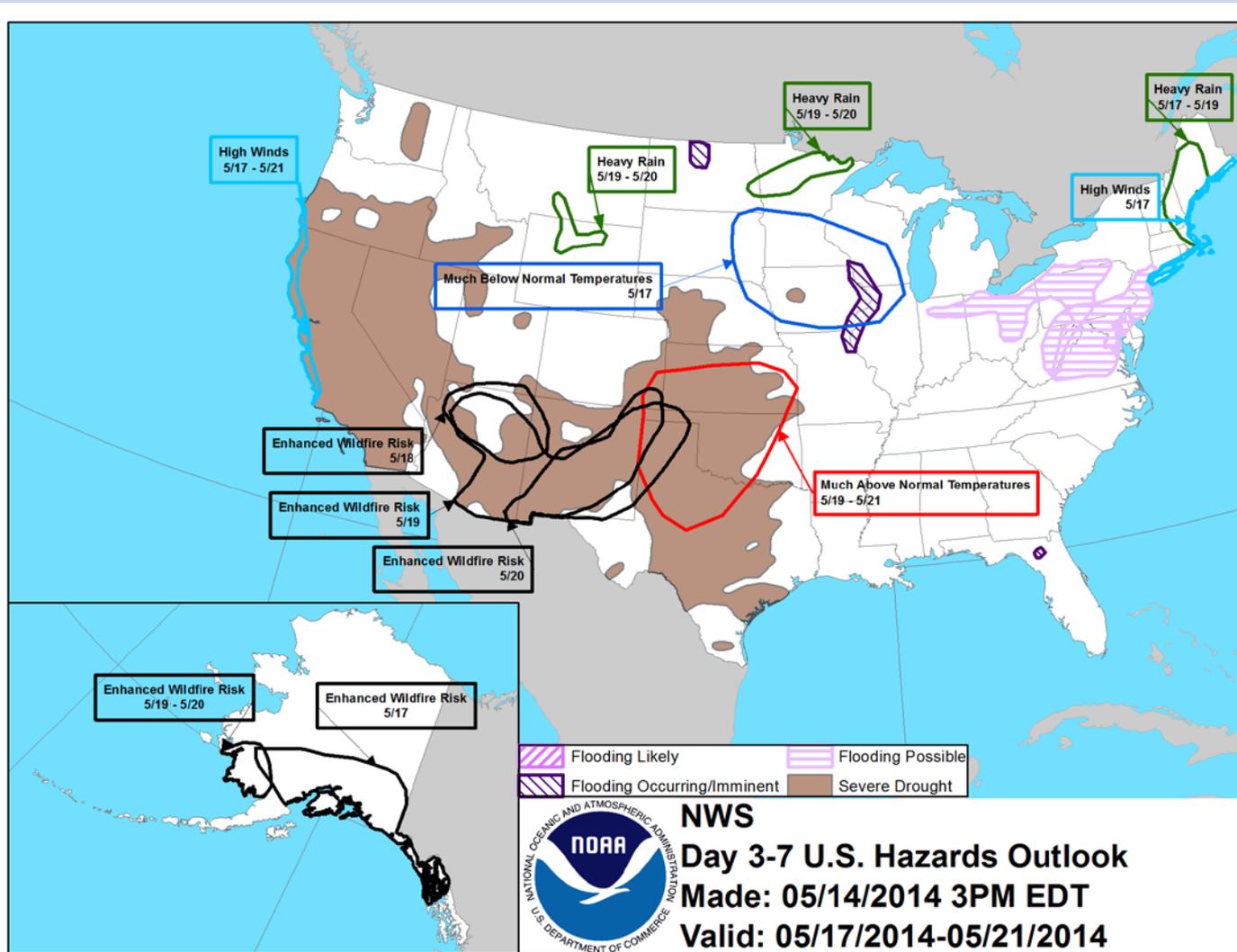


U.S. Drought Outlook

3-month forecast



U.S. Hazards Outlook (3-7 Days)



For More Information



Today's Presentation:

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

NOAA's National Climatic Data Center: 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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