

Rhode Island Drought Steering Committee Meeting NWS Update

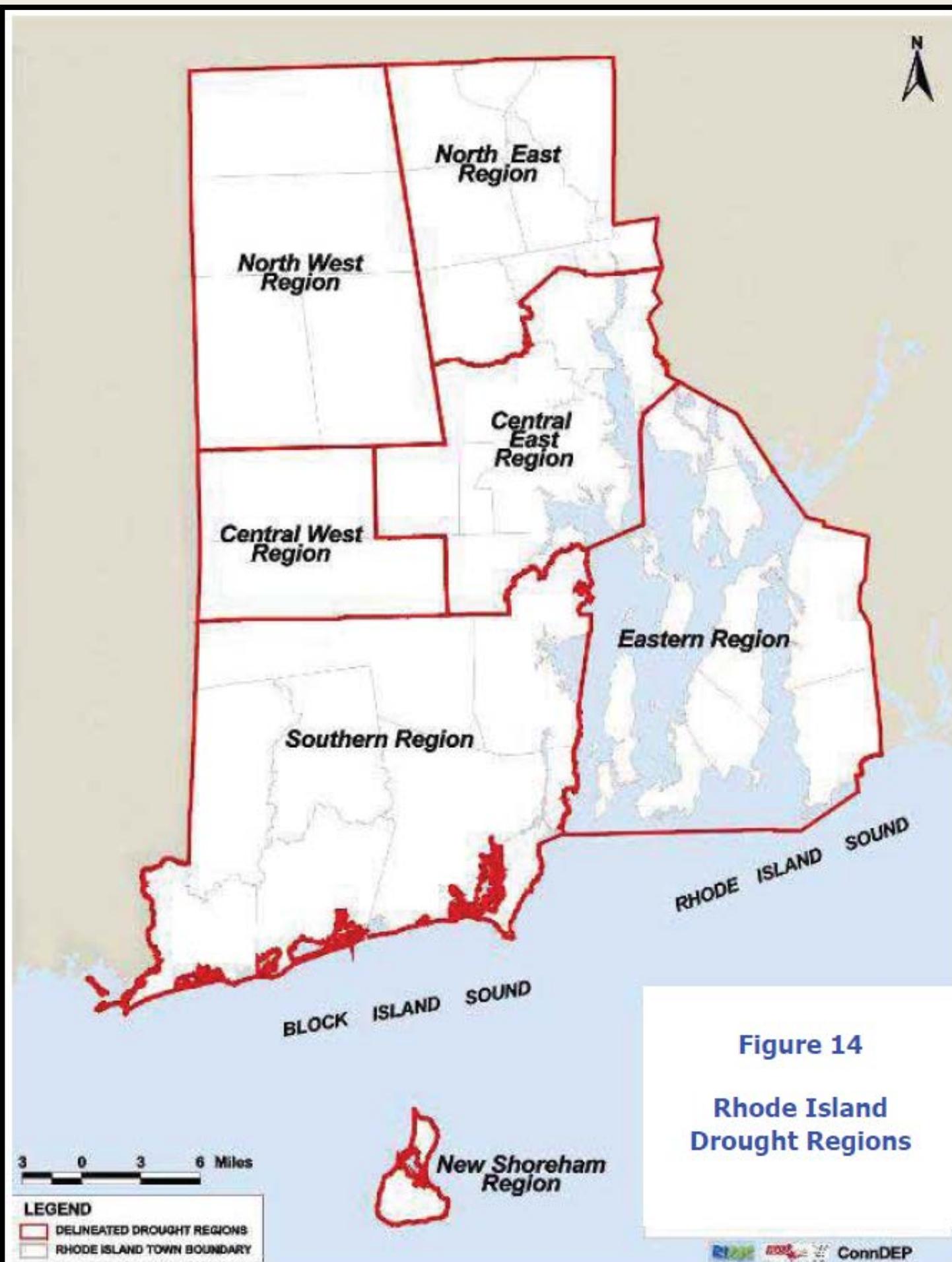
National Weather Service

Thursday August 4th, 2016



**National Weather Service
Boston, MA**

Rhode Island Drought Regions



Month of July, Two and Three Month Precipitation Data

RI 1 month July 2016	Rainfall	Departure	Percent	Normal
Northwest	2.49	-1.33	65	3.82
Northeast	2.08	-1.73	55	3.81
Central West	3.09	-0.55	85	3.64
Central East	2.87	-0.42	87	3.29
Eastern	2.11	-0.68	76	2.79
Southern	2.20	-1.46	60	3.66
New Shoreham	2.96	-0.70	81	3.66

RI 2 month Jun-July 16	Rainfall	Departure	Percent	Normal
Northwest	4.28	-4.12	51	8.40
Northeast	4.15	-3.87	52	8.02
Central West	5.15	-2.63	66	7.78
Central East	5.02	-1.91	72	6.93
Eastern	3.36	-3.31	50	6.67
Southern	3.72	-4.22	47	7.94
New Shoreham	3.73	-4.21	47	7.94

RI 3 month May-July 16	Rainfall	Departure	Percent	Normal
Northwest	8.17	-4.15	66	12.32
Northeast	7.55	-4.25	64	11.80
Central West	8.85	-2.68	77	11.53
Central East	8.62	-1.86	82	10.48
Eastern	7.14	-3.17	69	10.31
Southern	6.90	-4.99	58	11.89
New Shoreham	7.80	-4.09	66	11.89

Two Month Rainfall

RI Drought Index: Precipitation
Drought Advisory Criteria
2 Month <65% of normal

Three Month Rainfall

RI Drought Index: Precipitation
Drought Watch Criteria
3 Month <65% of normal



Six/Twelve Month Precipitation Data

RI 6 month Feb-July 16	Rainfall	Departure	Percent	Normal
Northwest	21.57	-4.86	82	26.43
Northeast	19.93	-5.17	79	25.10
Central West	21.33	-3.56	86	24.89
Central East	20.98	-2.16	91	23.14
Eastern	18.90	-5.68	77	24.58
Southern	20.33	-5.83	78	26.16
New Shoreham	20.29	-5.87	78	26.16

RI Drought Index: Precipitation

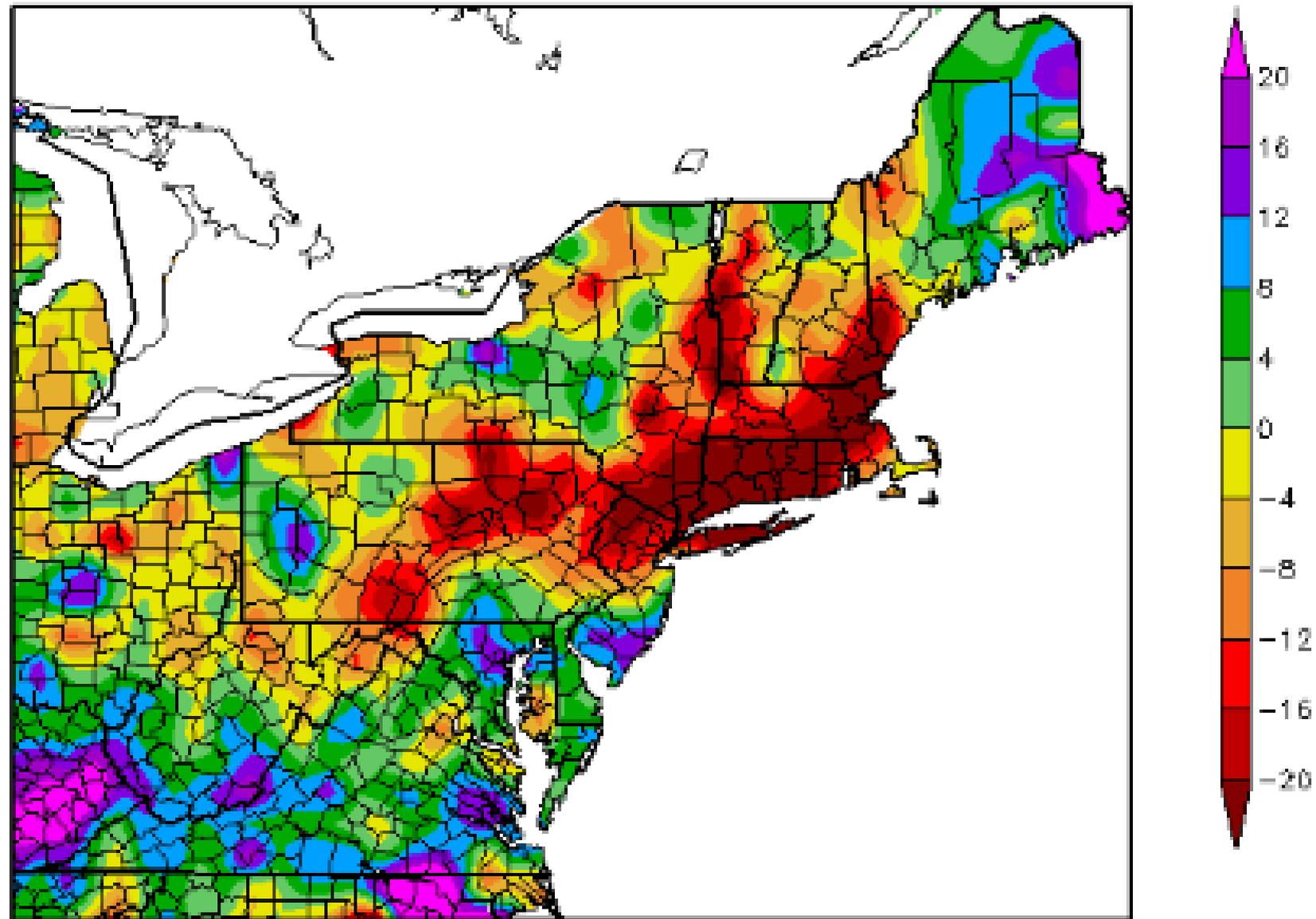
During these timeframes,
Precipitation was within Normal
Conditions (>70% Normal)

RI 12 month Aug 15-July 16	Rainfall	Departure	Percent	Normal
Northwest	41.69	-12.01	78	53.70
Northeast	39.46	-11.96	77	51.42
Central West	43.38	-7.39	85	50.77
Central East	40.40	-6.78	86	47.18
Eastern	43.84	-4.70	90	48.54
Southern	43.36	-9.51	82	52.87
New Shoreham	43.32	-9.55	82	52.87



Longer Term Deficits

Departure from Normal Precipitation (in)
7/27/2013 – 7/26/2016

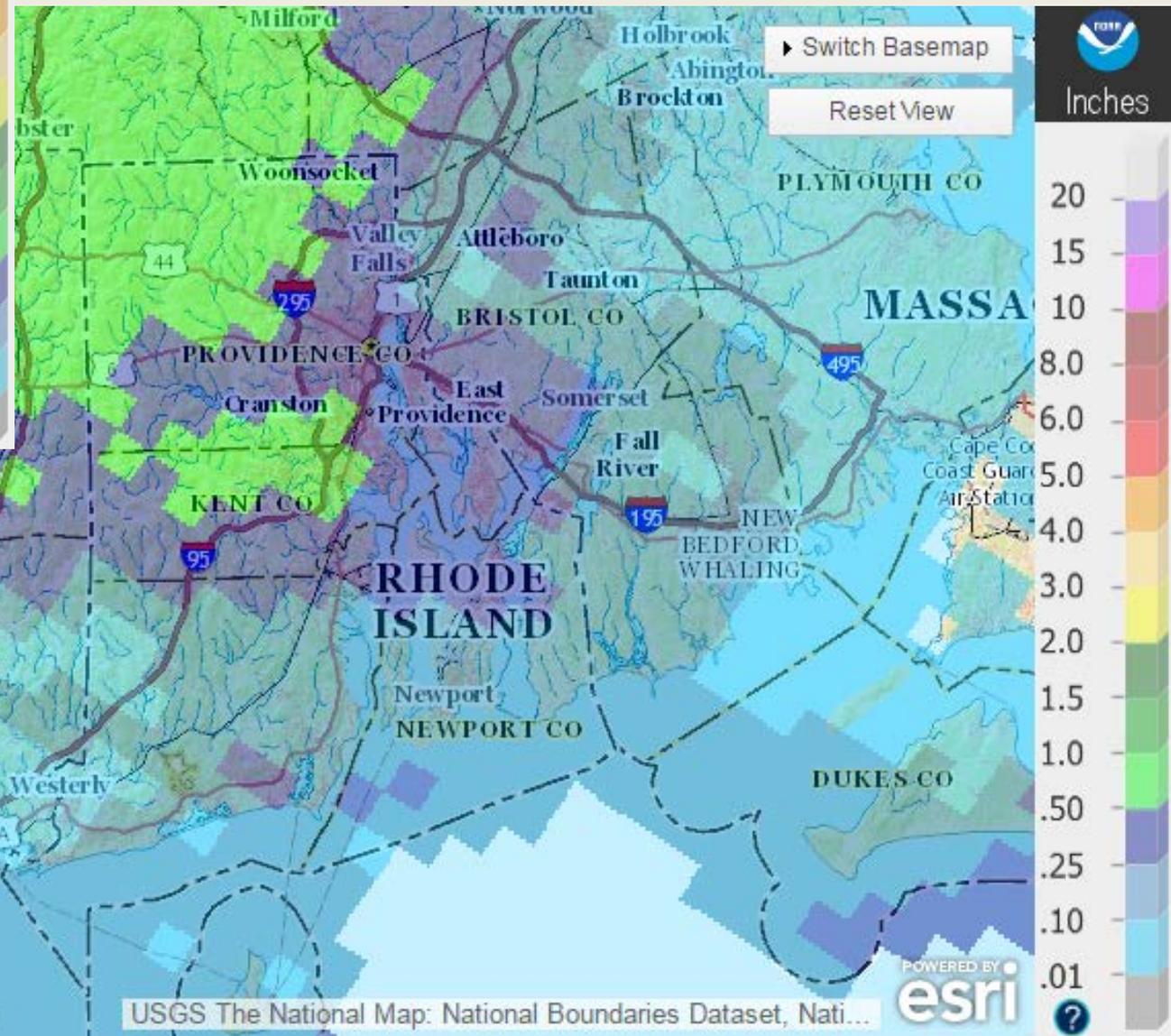
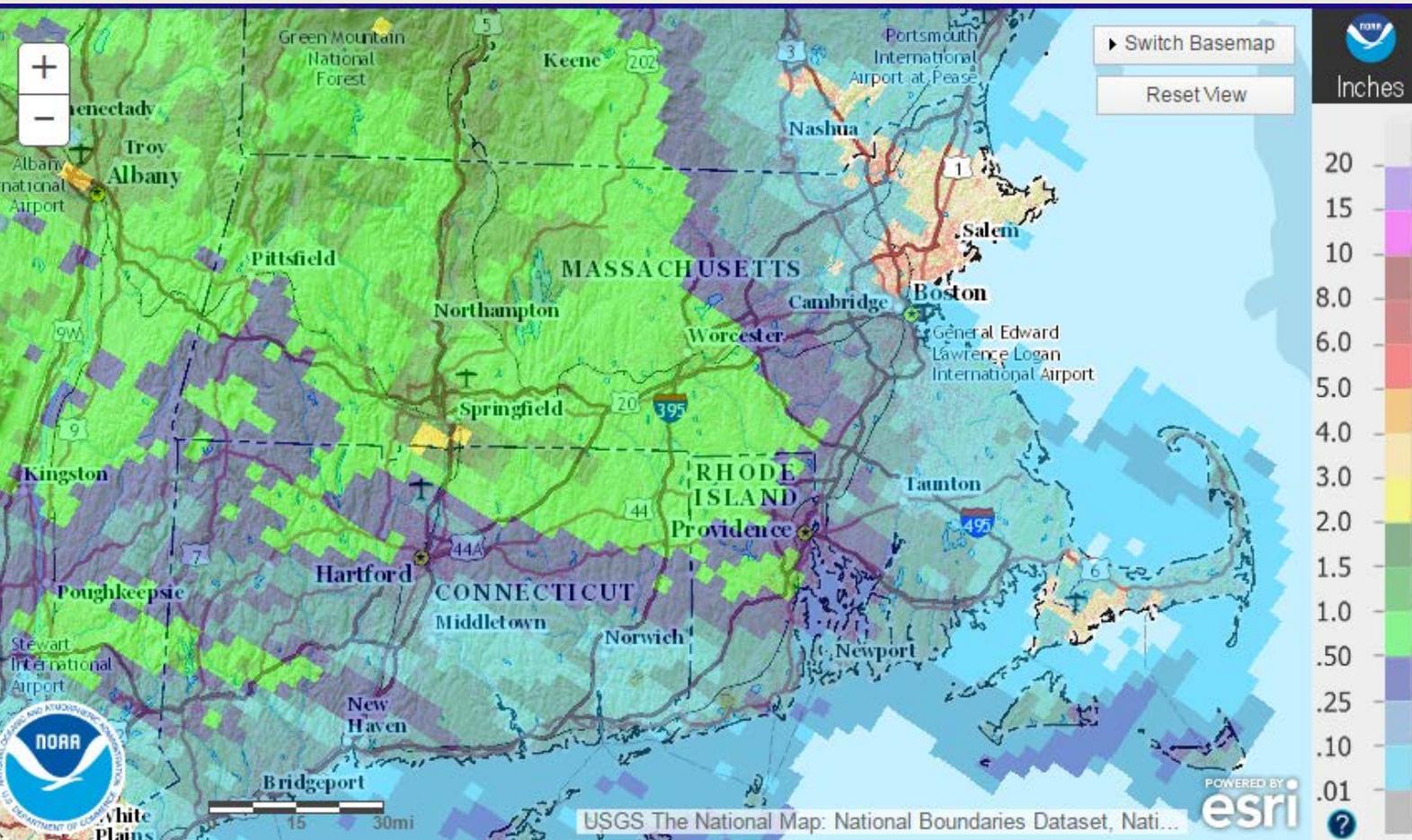


led 7/27/2016 at HPRCC using provisional data.

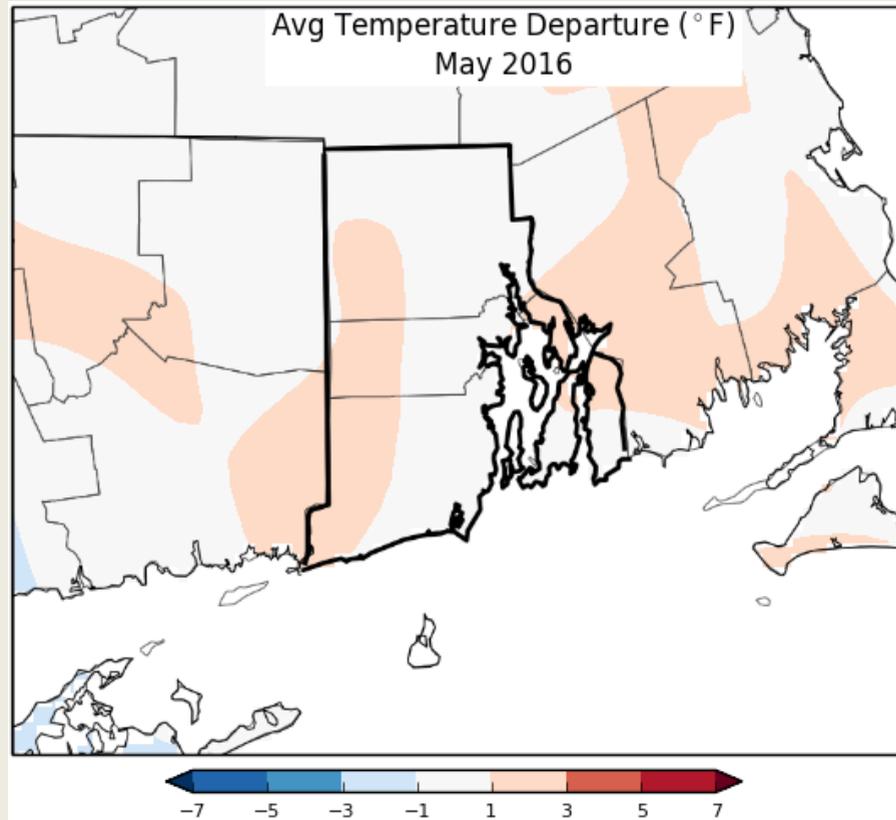
Regional Climate Centers



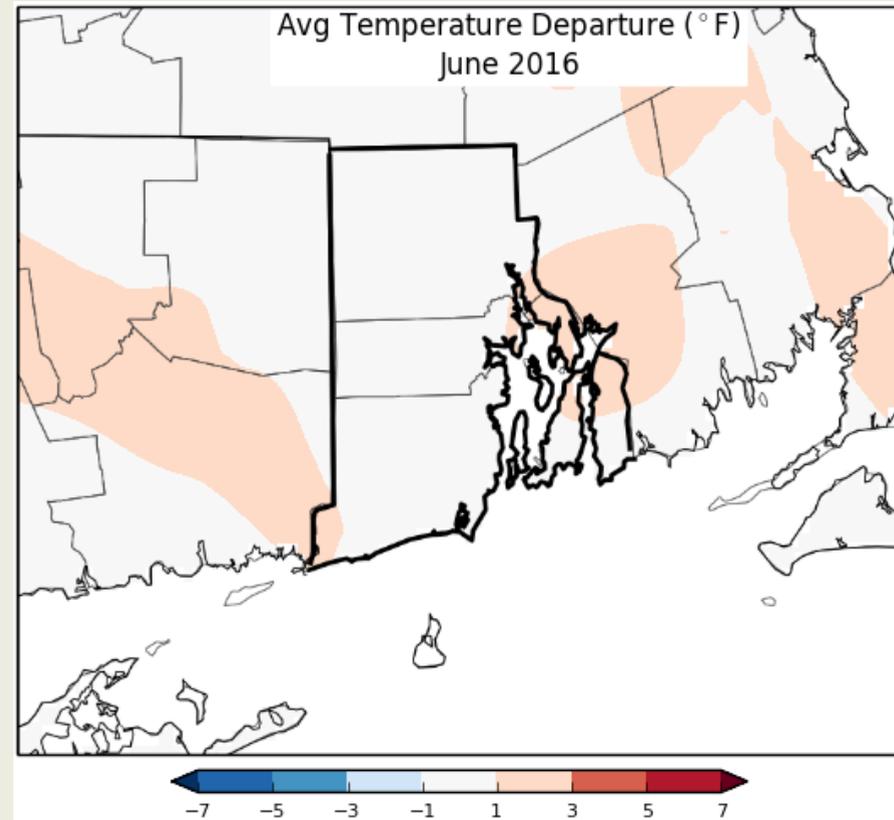
August Month-to-Date Rainfall



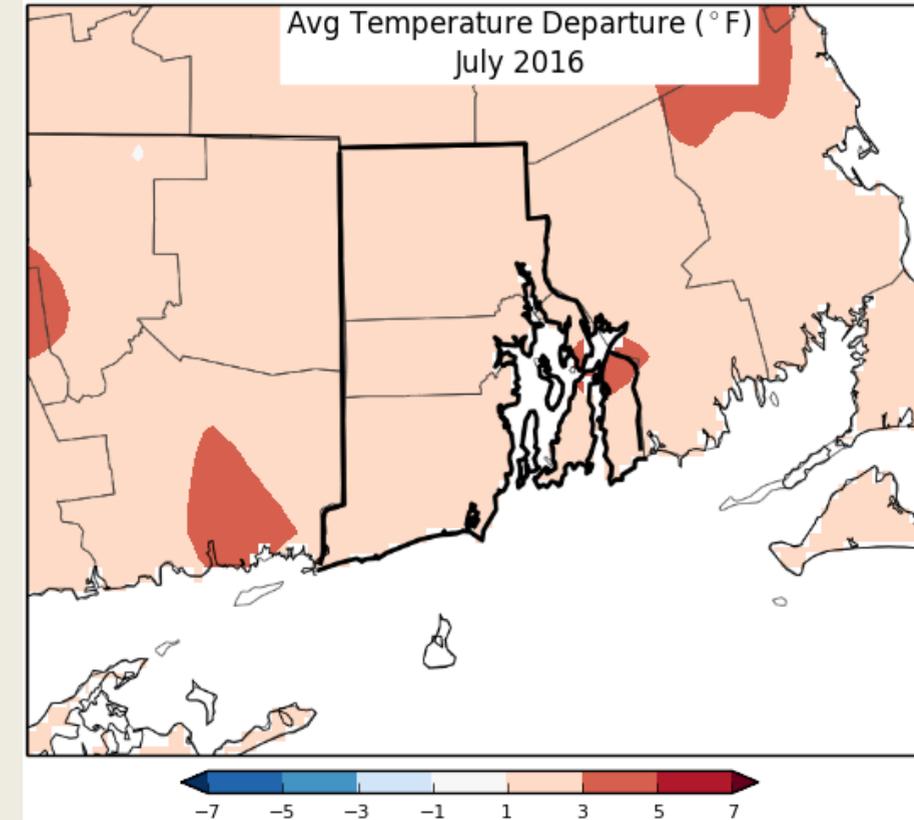
Monthly Temperature Departure from Normal



May- Near Normal
PVD/TF Green +0.9



June- Near Normal
PVD/TF Green +0.8

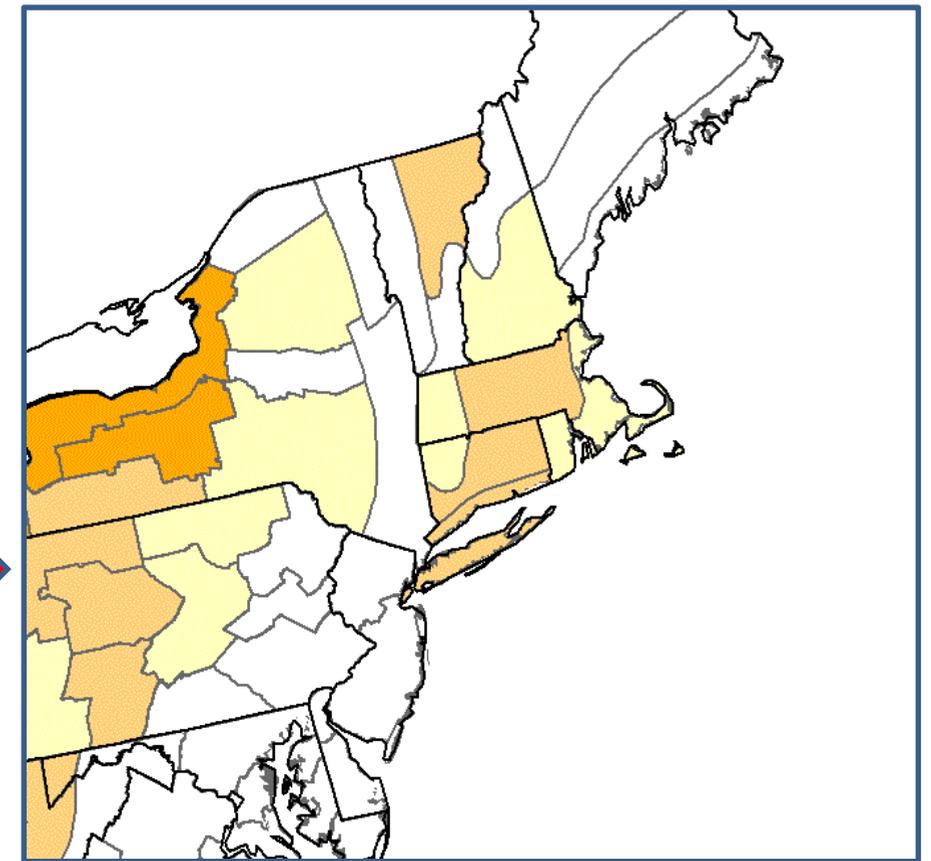
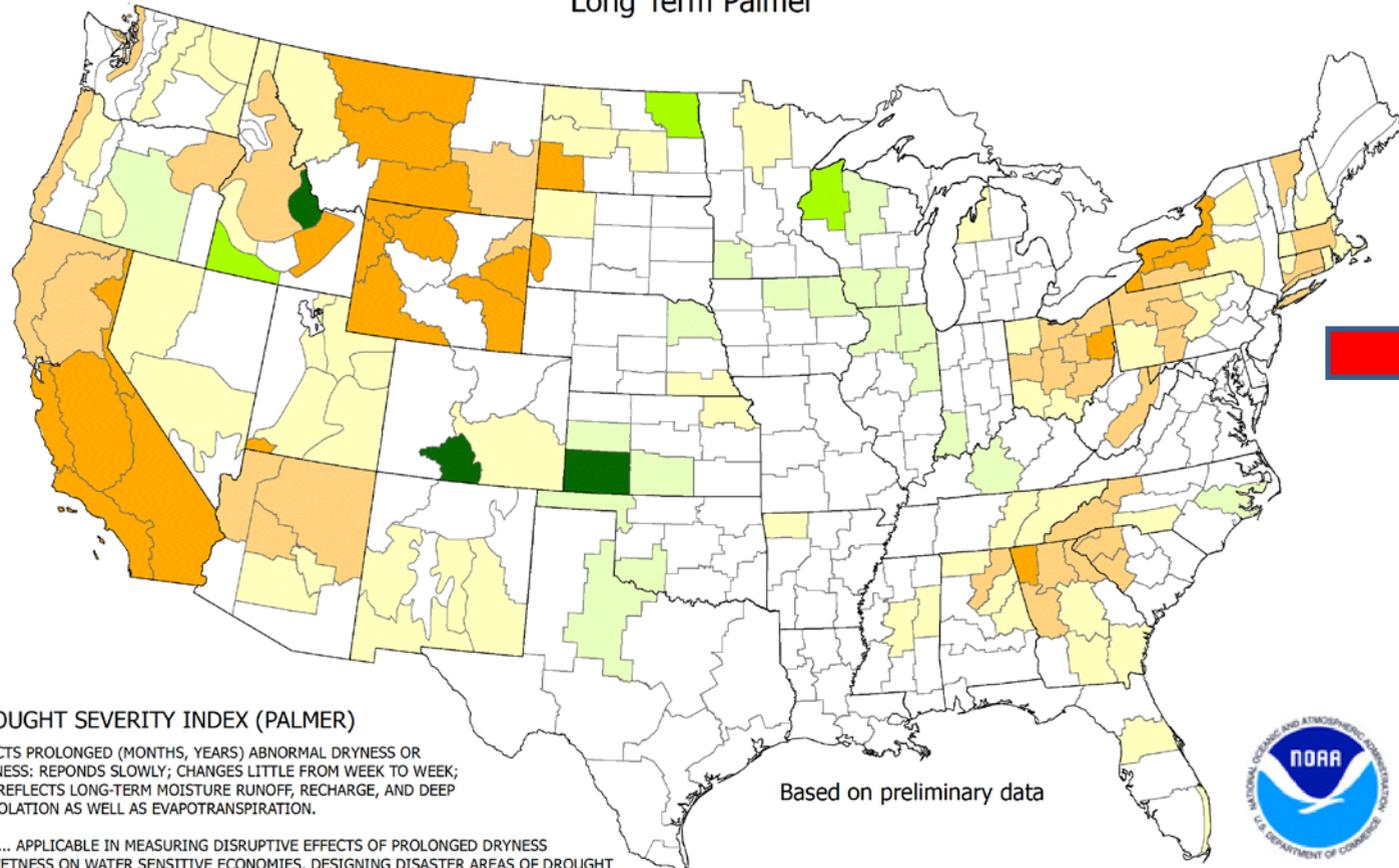


July- Above Normal
PVD/TF Green +2.5



Palmer Drought Severity Index (PDSI)- Updated 7/30/16

Drought Severity Index by Division
Weekly Value for Period Ending Jul 30, 2016
Long Term Palmer

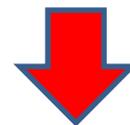


RI Drought Index: PDSI
RI Value -2.43, 'Moderate Drought'
Drought Advisory Criteria
PDSI -2 to -2.99

Based on preliminary data



- 4.0 or less (Extreme Drought)
- 3.0 to -3.9 (Severe Drought)
- 2.0 to -2.9 (Moderate Drought)
- 1.9 to +1.9 (Near Normal)
- +2.0 to +2.9 (Unusual Moist Spell)
- +3.0 to +3.9 (Very Moist Spell)
- +4.0 and above (Extremely Moist)



- 4.0 or less (Extreme Drought)
- 3.0 to -3.9 (Severe Drought)
- 2.0 to -2.9 (Moderate Drought)
- 1.9 to +1.9 (Near Normal)
- +2.0 to +2.9 (Unusual Moist Spell)
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DROUGHT SEVERITY INDEX (PALMER)

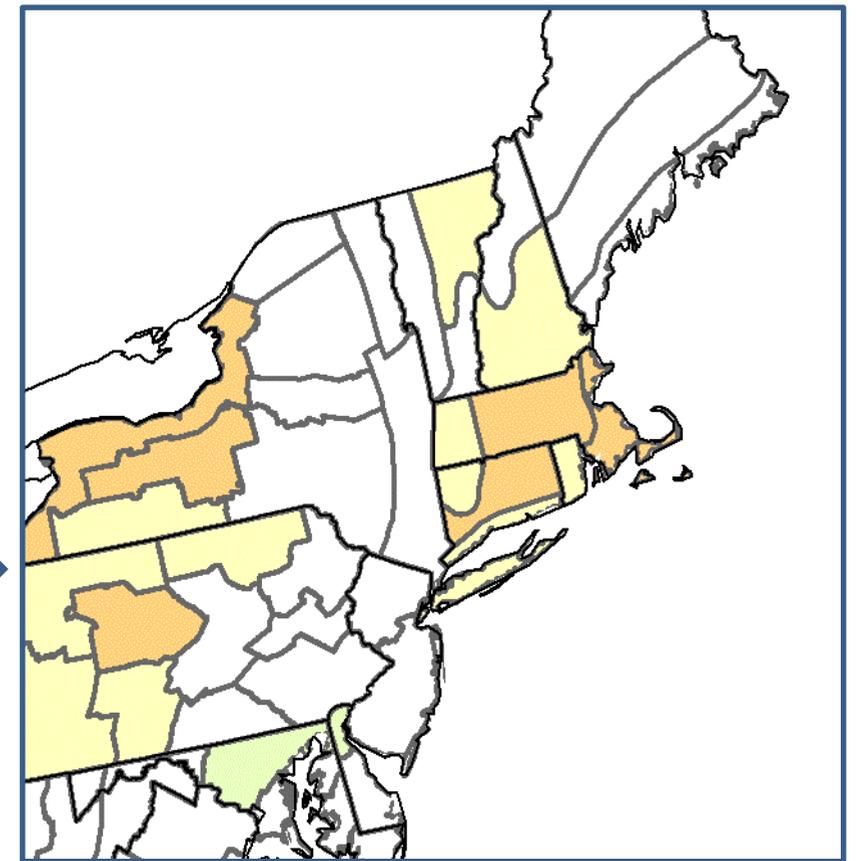
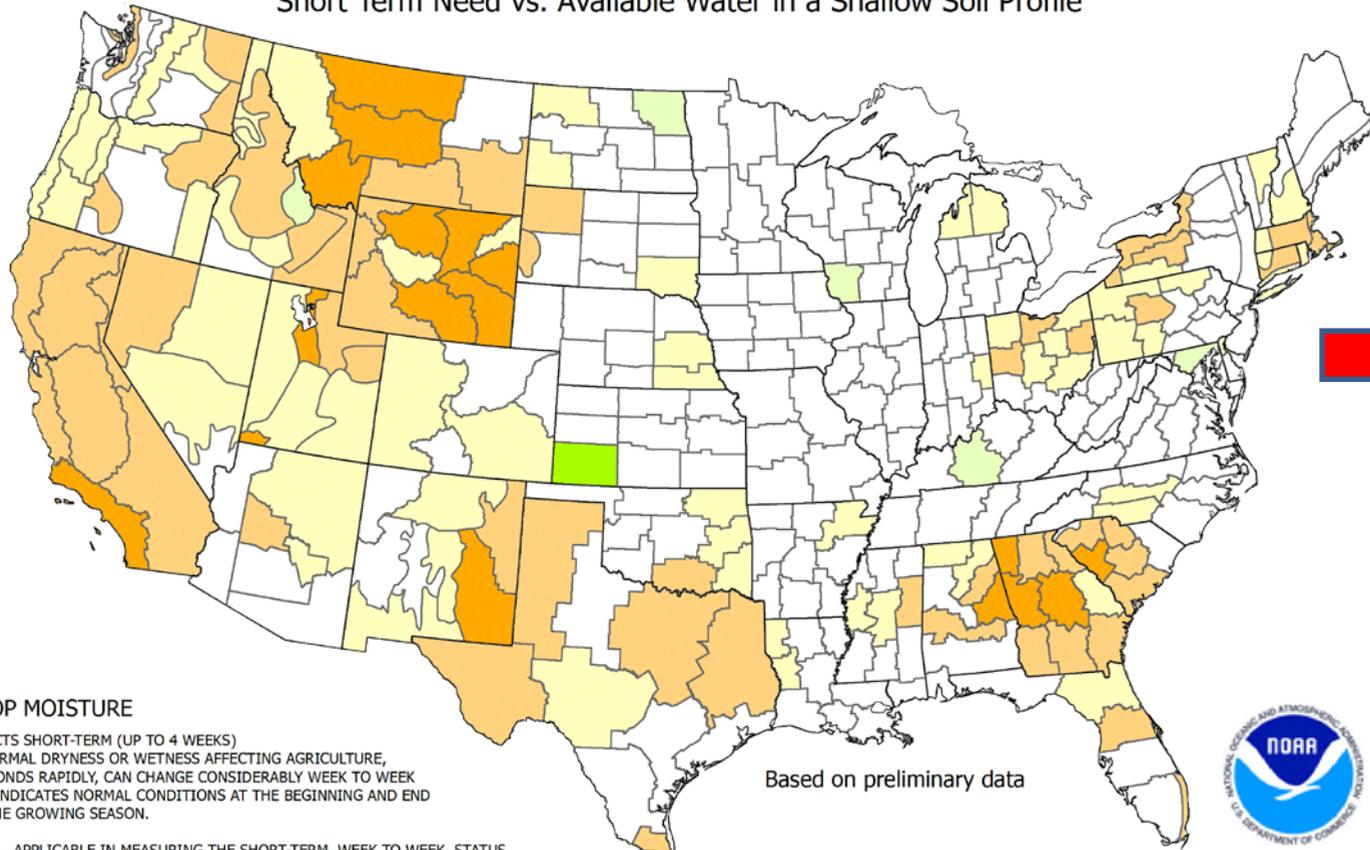
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Crop Moisture Index (CMI)- Updated 7/30/16

Crop Moisture Index by Division
Weekly Value for Period Ending Jul 30, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile



RI Secondary Drought Index: CMI
RI Value -1.65, 'Excessively Dry'
Drought Advisory Criteria
CMI -1.0 to -1.9

Based on preliminary data



- 3.0 or less (Severely Dry)
- 2.0 to -2.9 (Excessively Dry)
- 1.0 to -1.9 (Abnormally Dry)
- 0.9 to +0.9 (Slightly Dry/Favorably Moist)
- +1.0 to +1.9 (Abnormally Moist)
- +2.0 to +3.0 (Wet)
- 3.0 and above (Excessively Wet)



- 3.0 or less (Severely Dry)
- 2.0 to -2.9 (Excessively Dry)
- +1.0 to +1.9 (Abnormally Moist)
- +2.0 to +3.0 (Wet)
- 1.0 to -1.9 (Abnormally Dry)
- 3.0 and above (Excessively Wet)
- 0.9 to +0.9 (Slightly Dry/Favorably Moist)

CROP MOISTURE

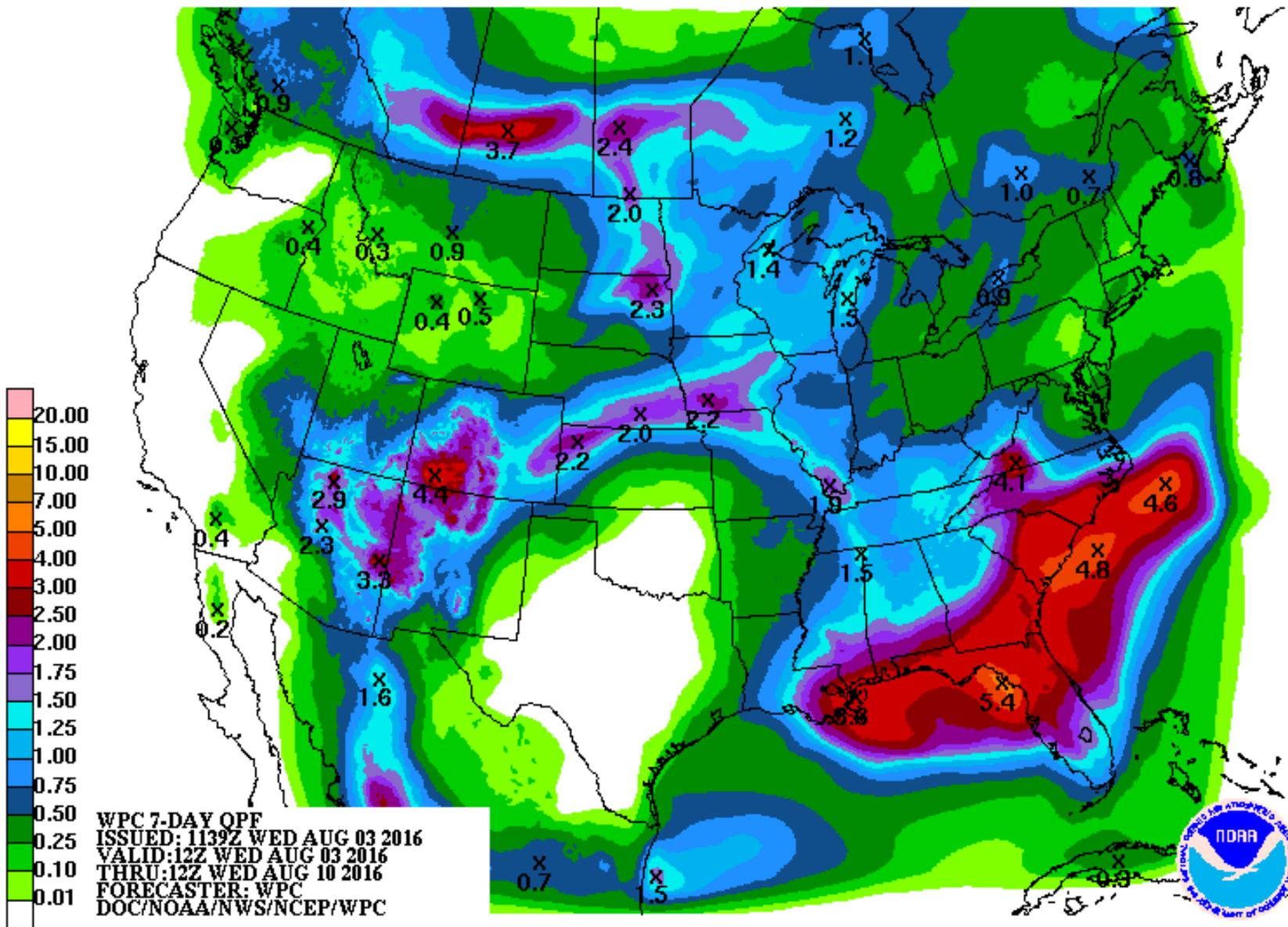
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

Forecast for the Next 7 Days

Rainfall Forecast thru 8 AM Aug 10th

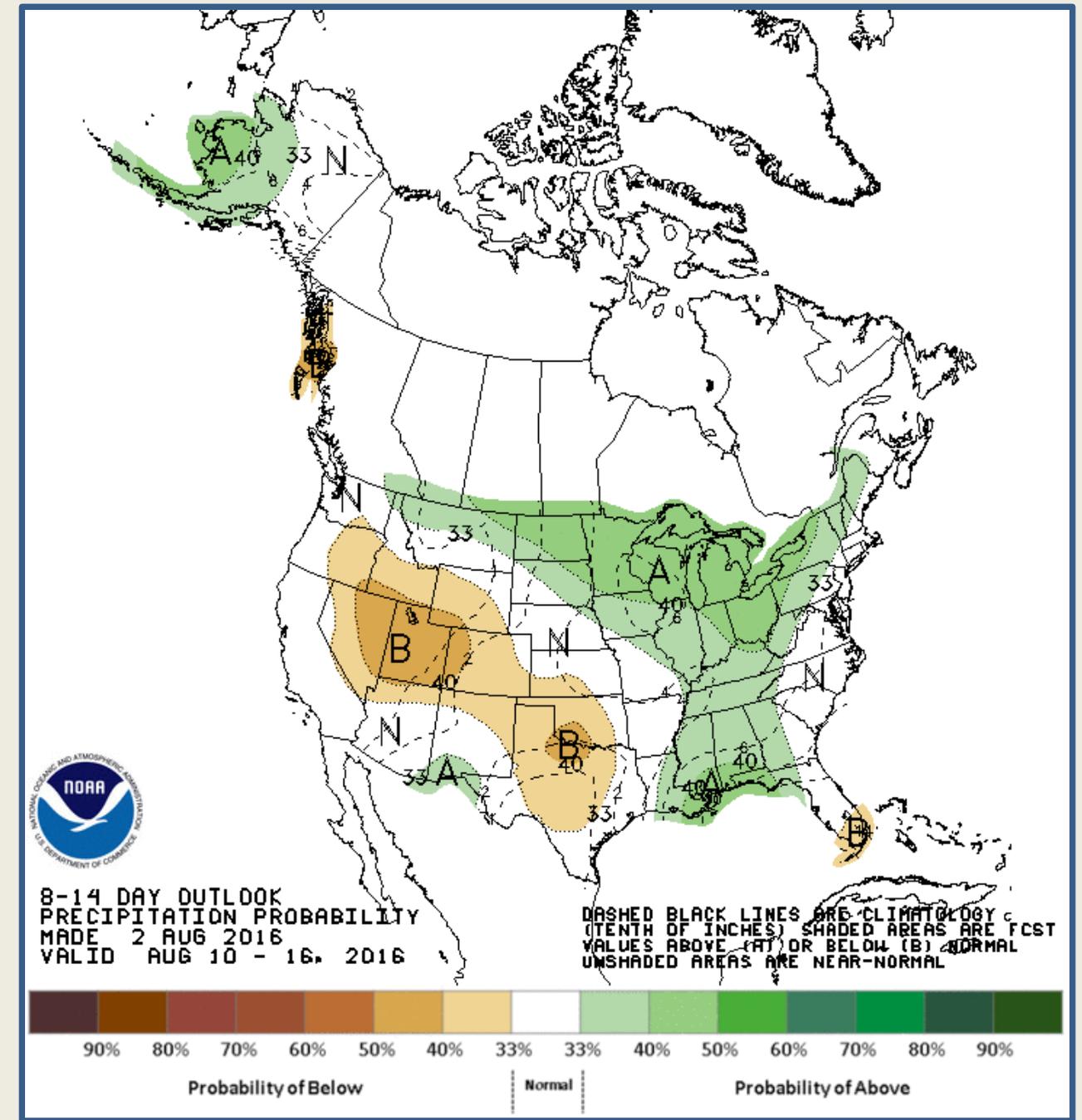
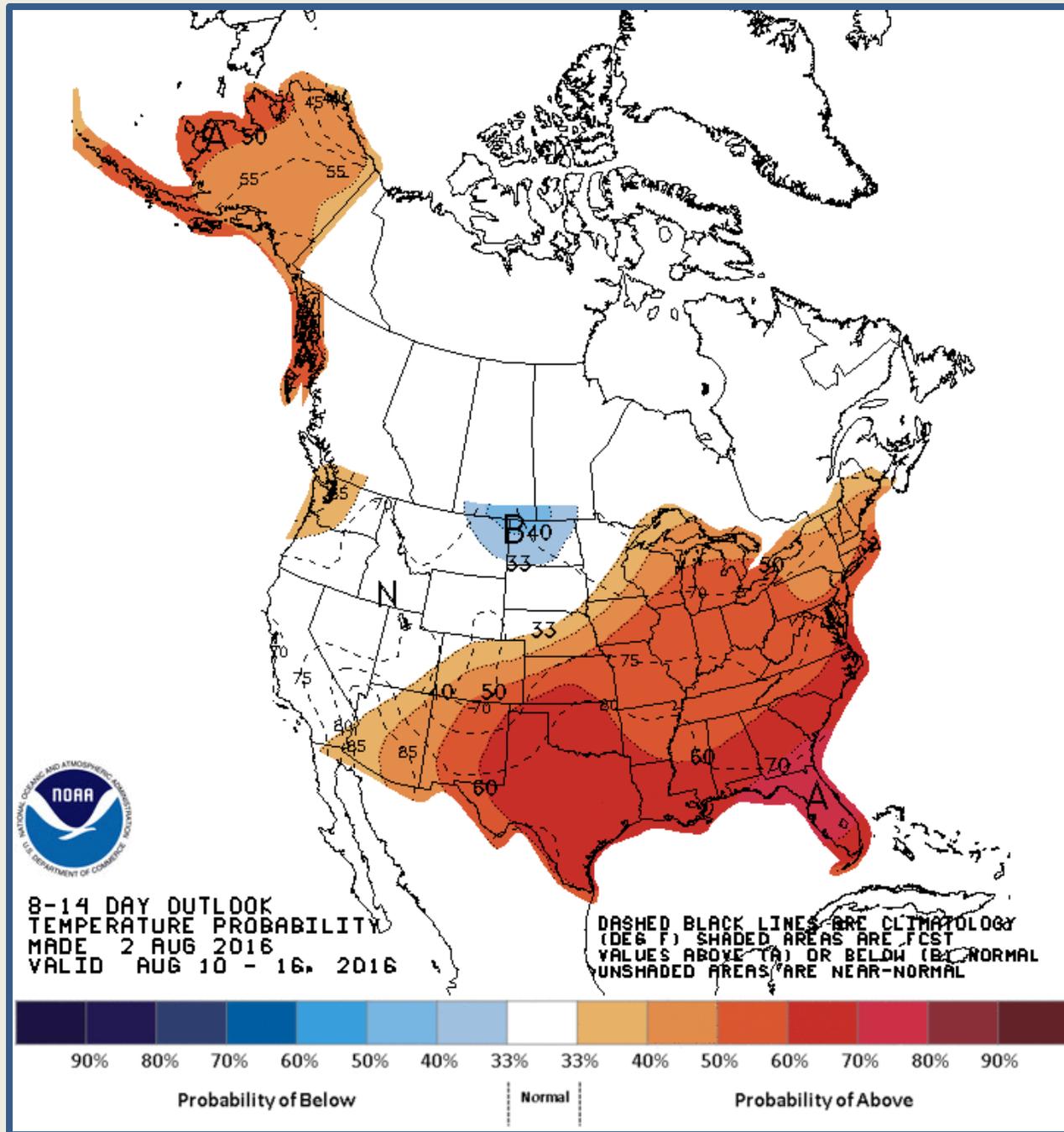


Predominant Pattern:

- High Pressure stays over New England
- Cold Front on Saturday brings scattered showers/t-storms
- *Rainfall below normal*
 - *Could be 0.25" or less*
- *Temps near/slightly above normal*
 - Lows in the 60s
 - Highs in the 80s



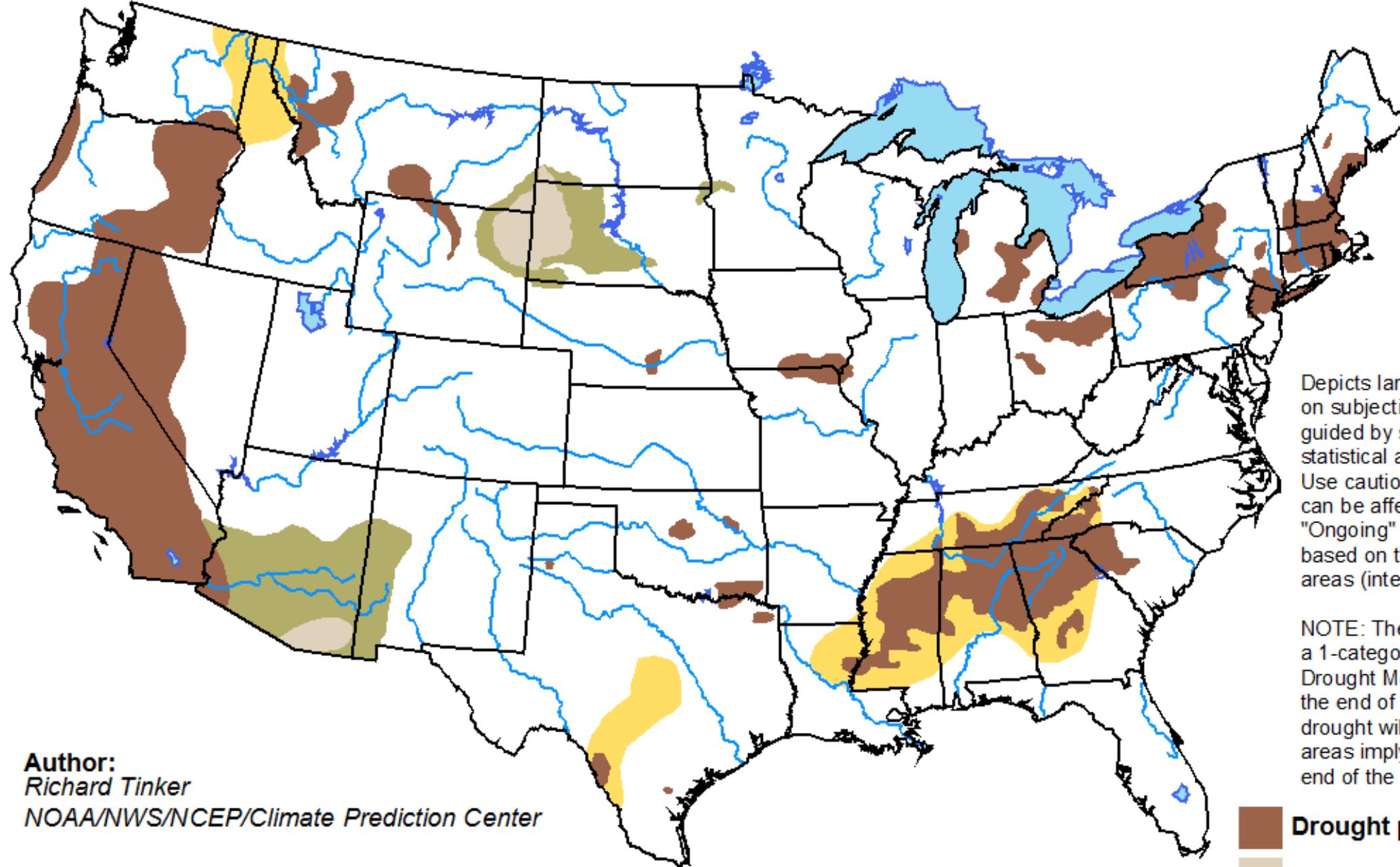
Outlook: August 10th-16th



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for July 21 - October 31, 2016
Released July 21, 2016

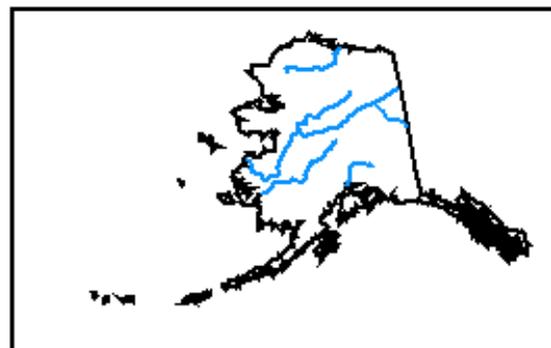


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

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

Author:
Richard Tinker
NOAA/NWS/NCEP/Climate Prediction Center



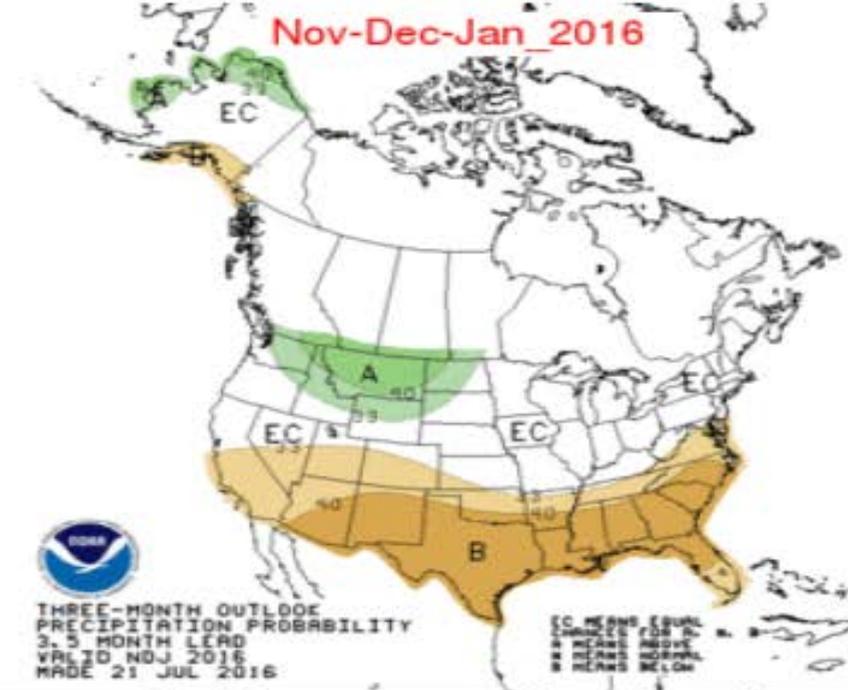
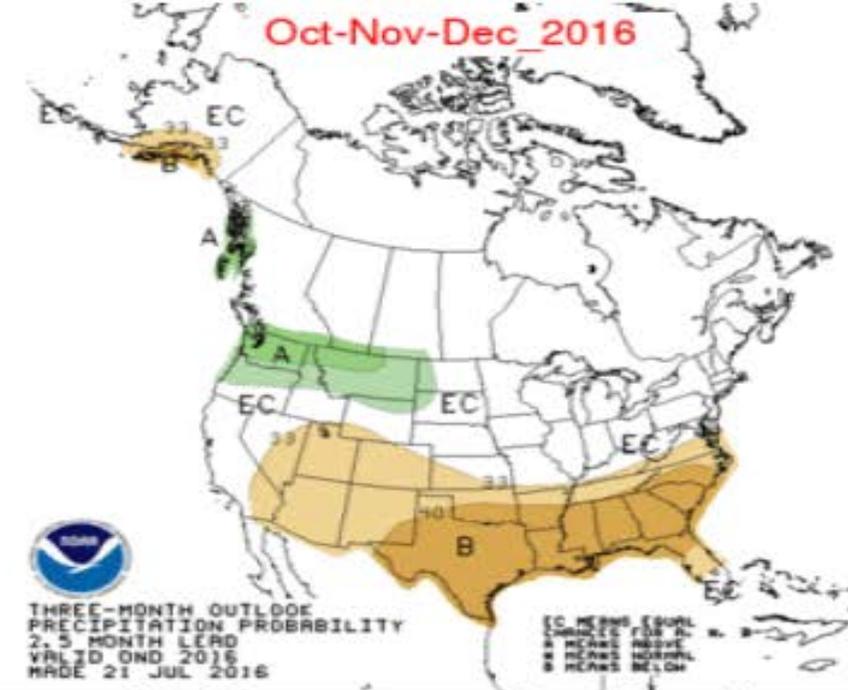
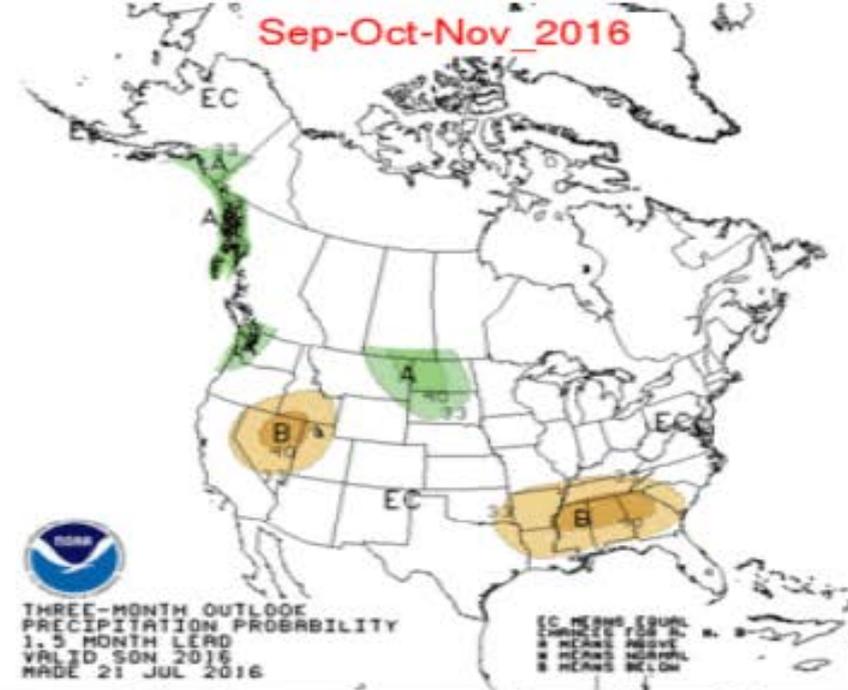
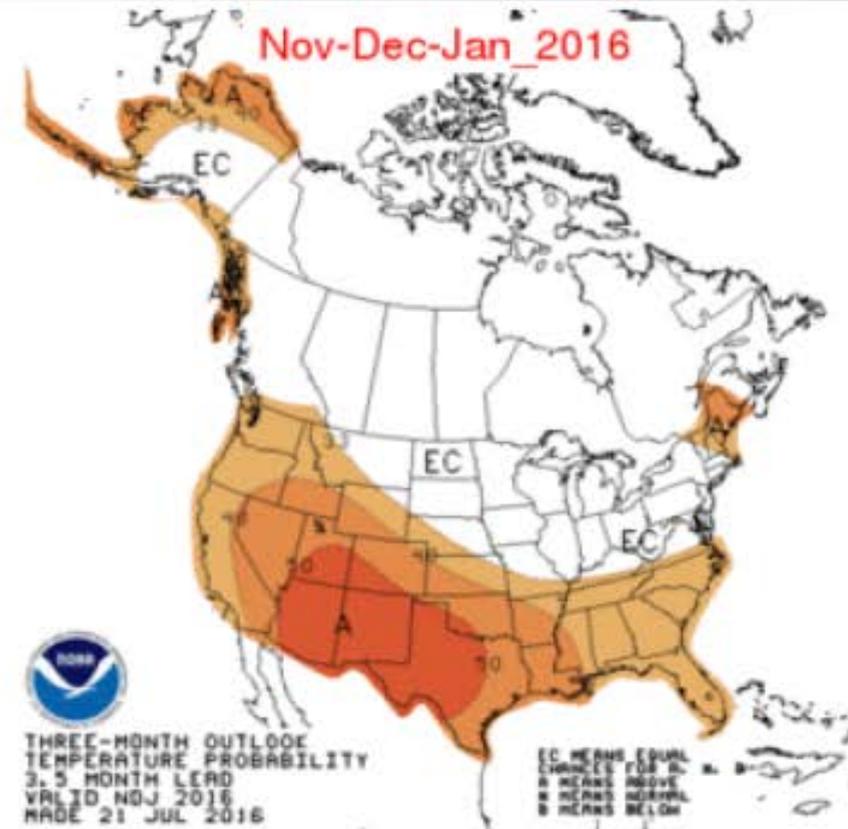
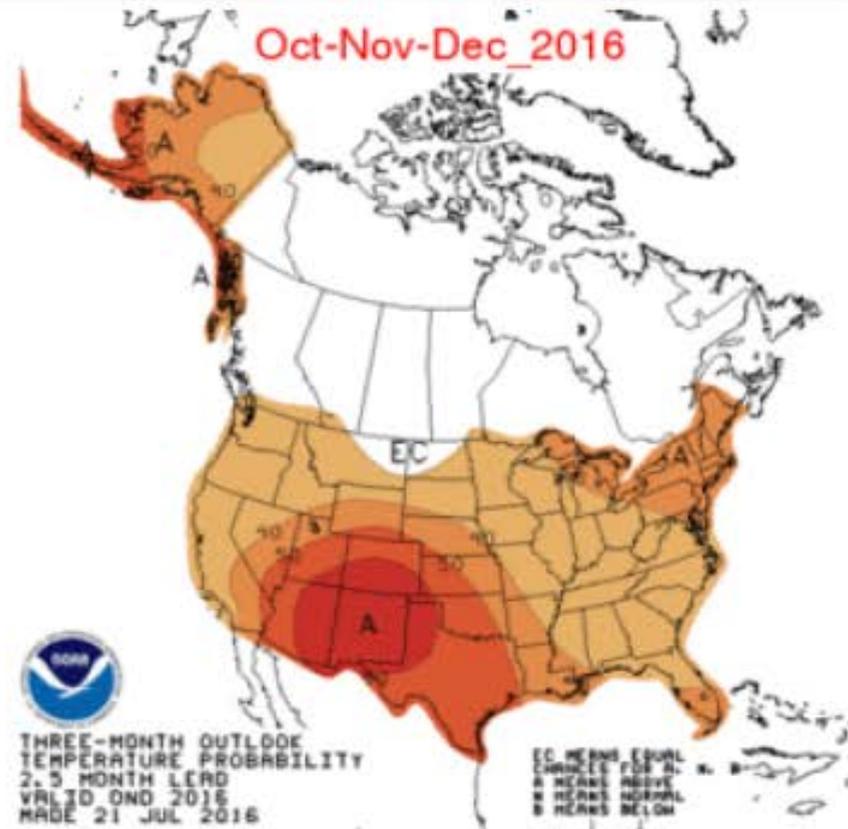
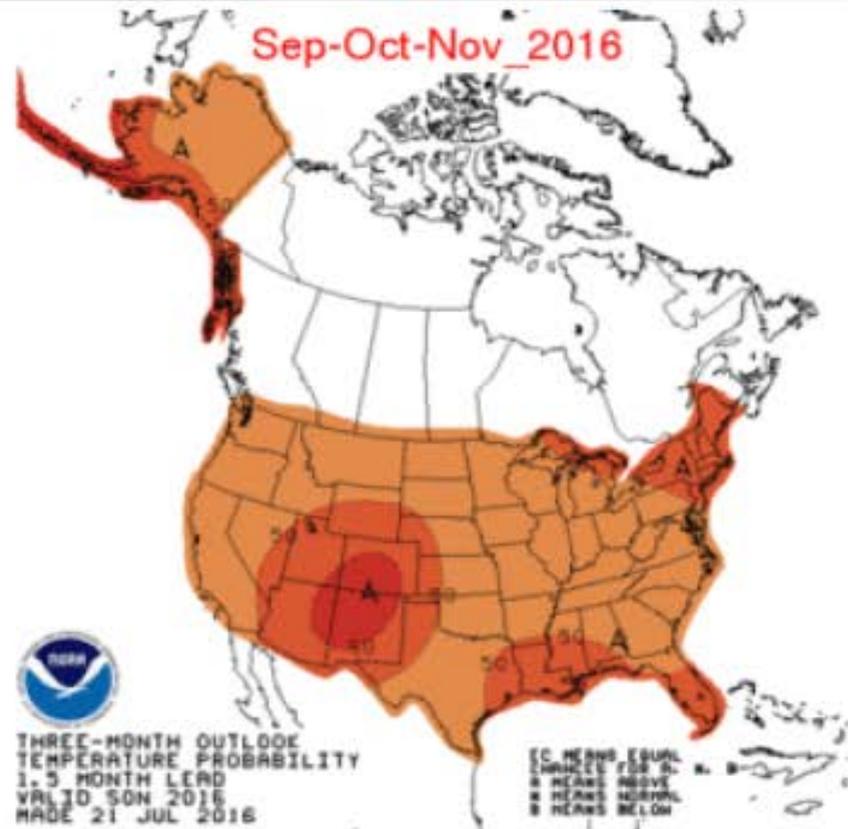
<http://go.usa.gov/3eZ73>



CPC -- 3-monthly Outlooks



Warm with Normal Precipitation

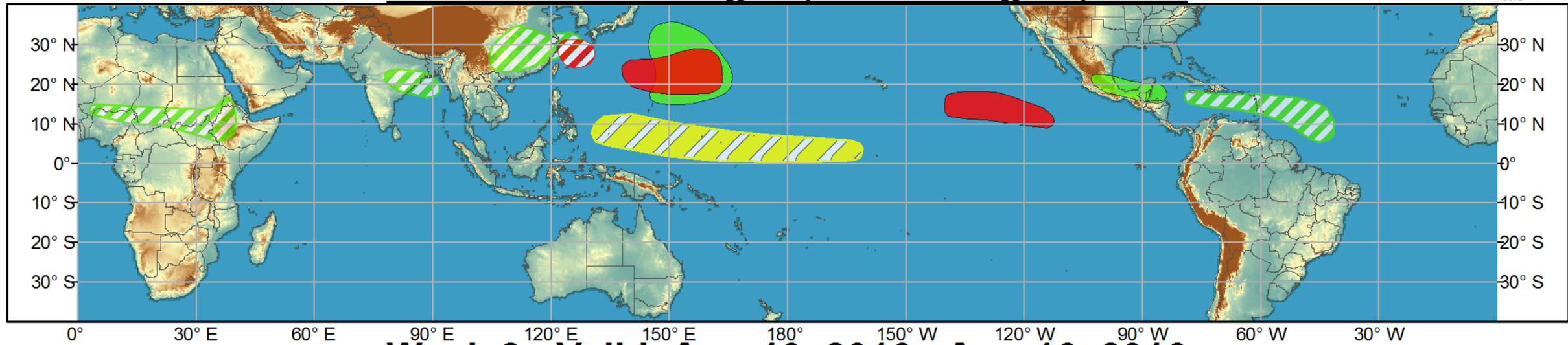




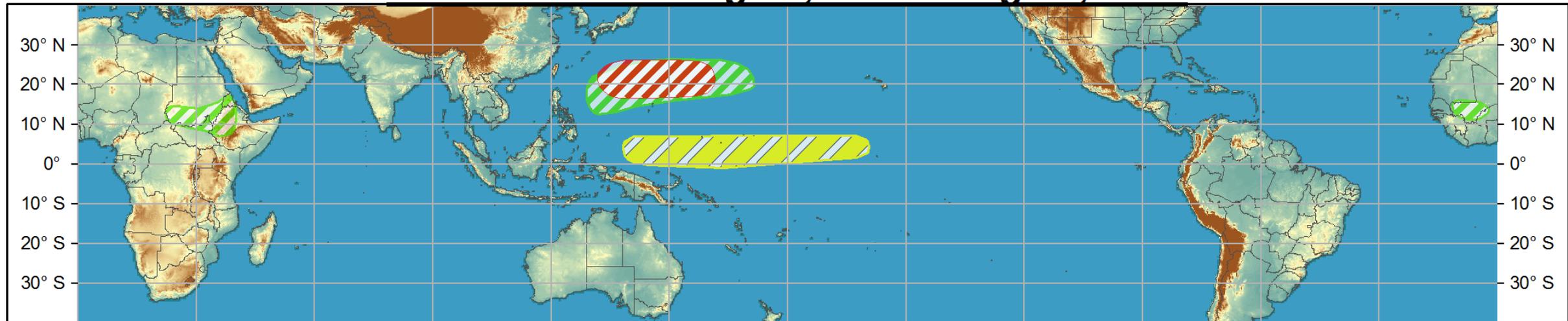
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 03, 2016 - Aug 09, 2016



Week 2 - Valid: Aug 10, 2016 - Aug 16, 2016



Produced: 08/02/2016

Forecaster: Pugh

Confidence
High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
- Below-normal temperatures** 7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.





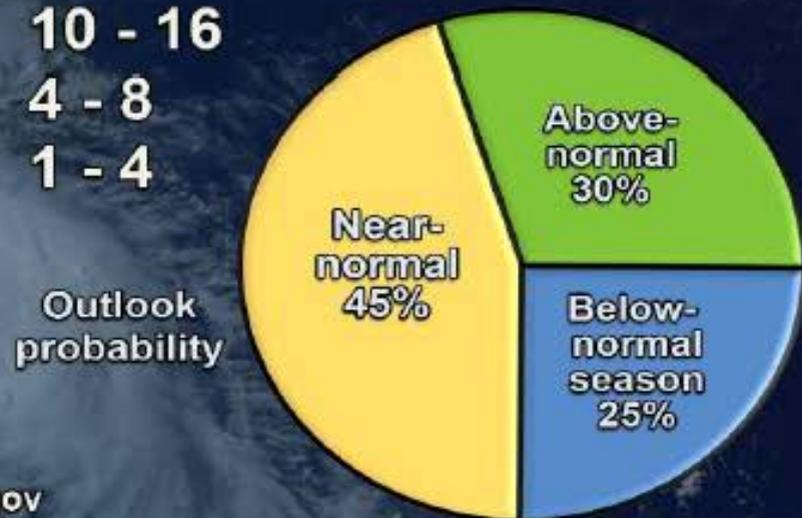
2016 Hurricane Season



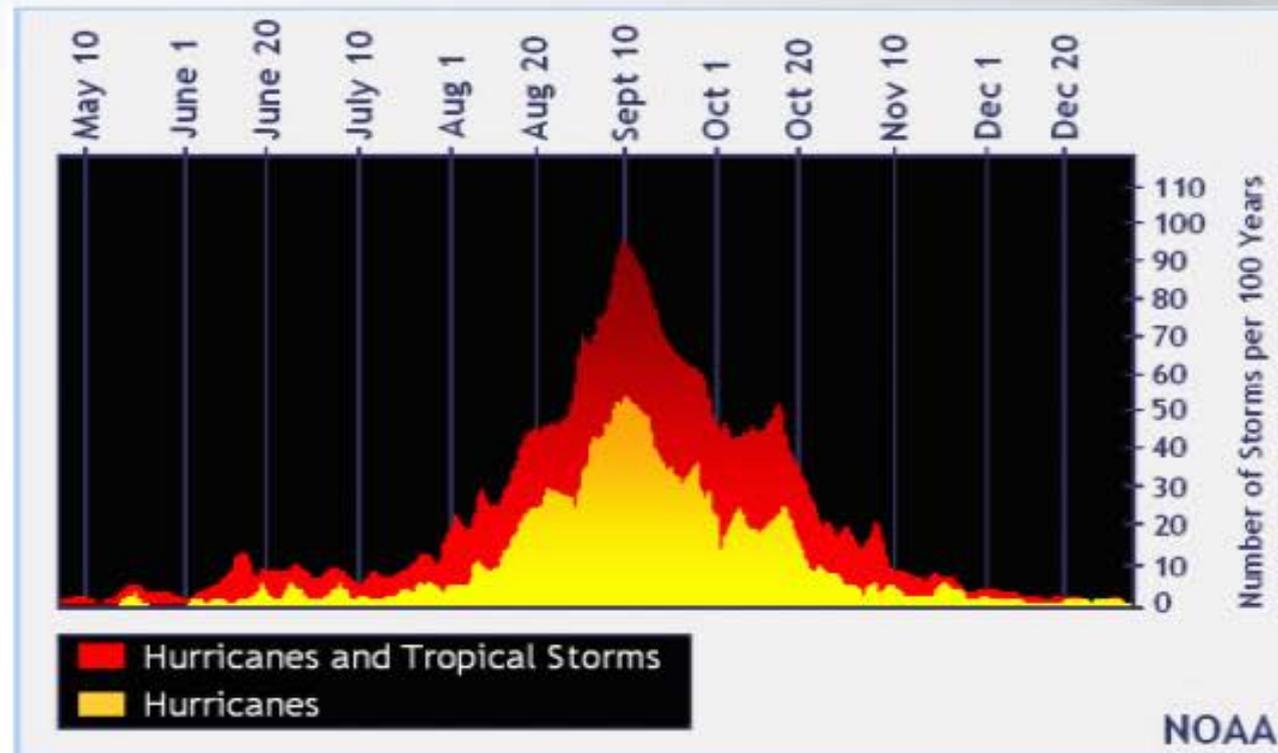
Climatologic Height of Season...Late Aug-Late Sept

2016 Atlantic Hurricane Season Outlook

Named storms: 10 - 16
 Hurricanes: 4 - 8
 Major hurricanes: 1 - 4



Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on Twitter



2016 Atlantic Tropical Cyclone Names

- | | | |
|---------------------|---------|----------|
| Alex | Hermine | Otto |
| Bonnie | Ian | Paula |
| Colin | Julia | Richard |
| Danielle | Karl | Shary |
| Earl | Lisa | Tobias |
| Fiona | Matthew | Virginie |
| Gaston | Nicole | Walter |

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