

# South Dakota Drought Update

## 13 June 2013

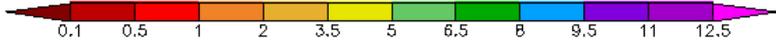
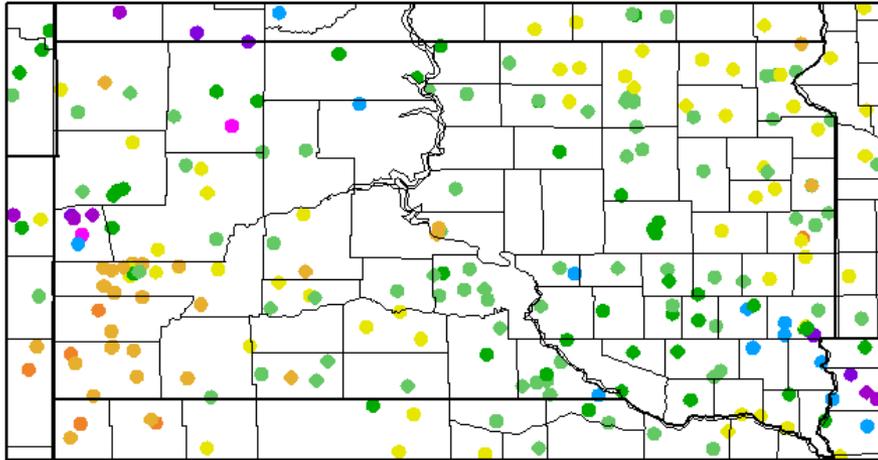
Dr. Dennis Todey

South Dakota State Climatologist

SDSU Extension/AES/ABE



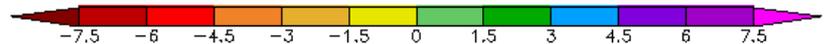
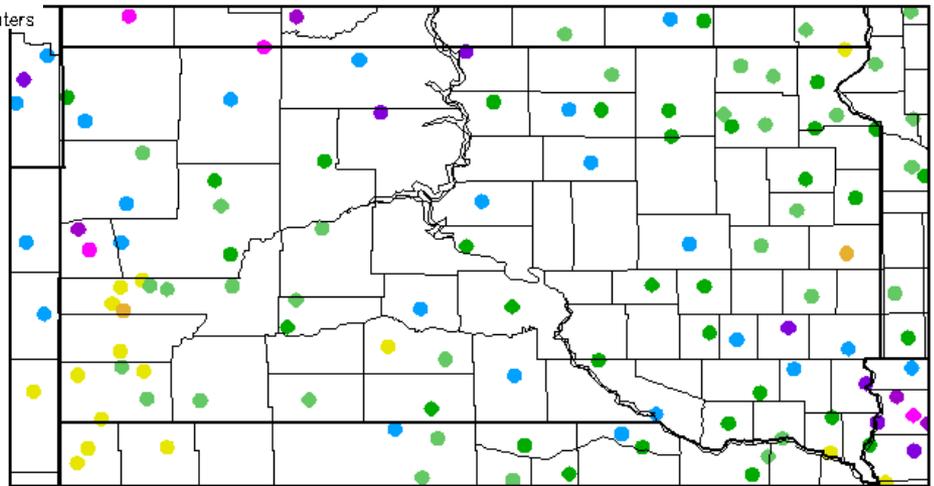
Precipitation (in)  
5/14/2013 - 6/12/2013



Generated 6/13/2013 at HPRCC using provisional data.

Regional Climate Centers

Departure from Normal Precipitation (in)  
5/14/2013 - 6/12/2013



Generated 6/13/2013 at HPRCC using provisional data.

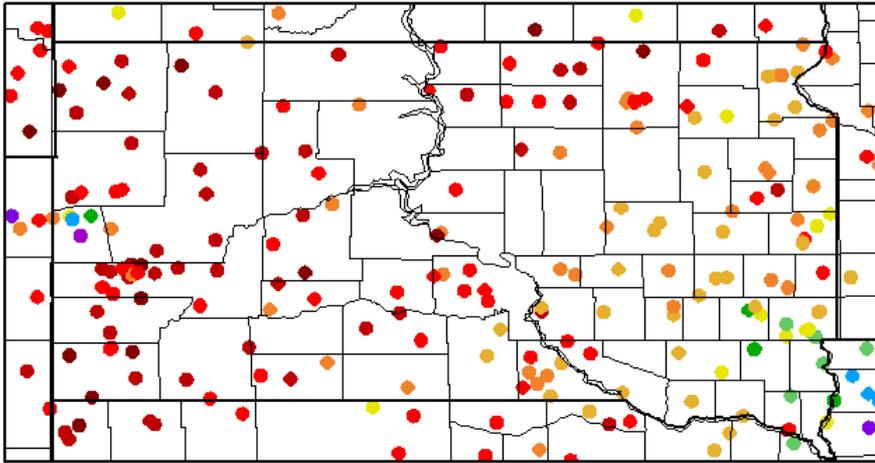
Regional Climate Centers

Above average precipitation over nearly the whole state the last 30 days.



<http://www.hprcc.unl.edu/maps/current/>

Precipitation (in)  
10/1/2012 - 6/12/2013



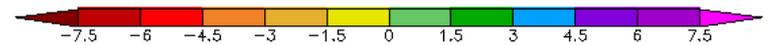
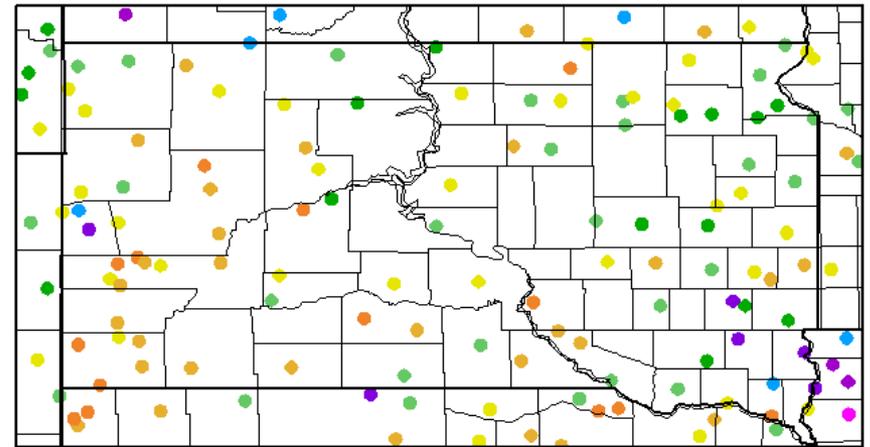
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Regional Climate Cent

The spring precipitation has helped shorter term deficits. But we are still working on longer term deficits since last fall.



Departure from Normal Precipitation (in)  
10/1/2012 - 6/12/2013

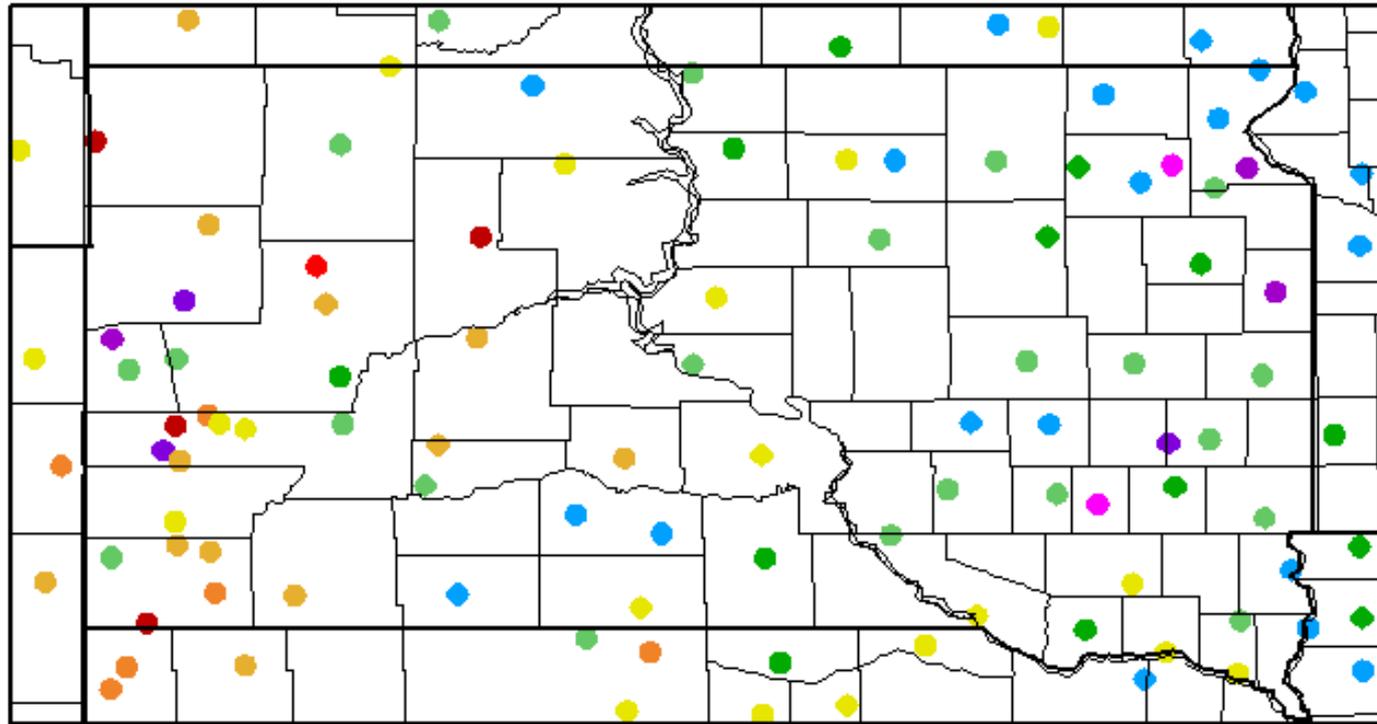


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Regional Climate Centers

<http://www.hprcc.unl.edu/maps/current/>

# Departure from Normal Temperature (F) 5/14/2013 - 6/12/2013



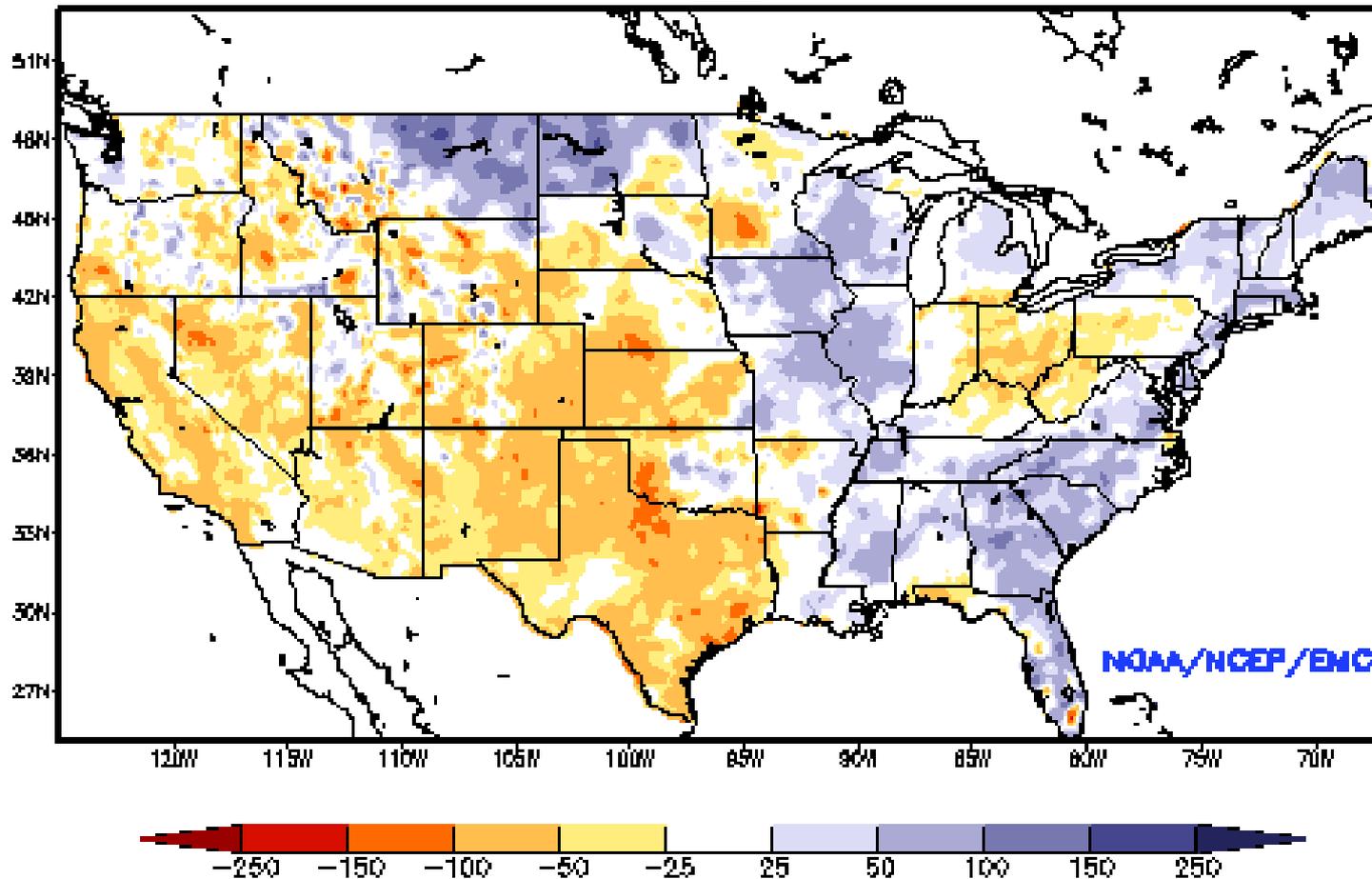
Generated 6/13/2013 at HPRCC using provisional data.

Regional Climate Centers



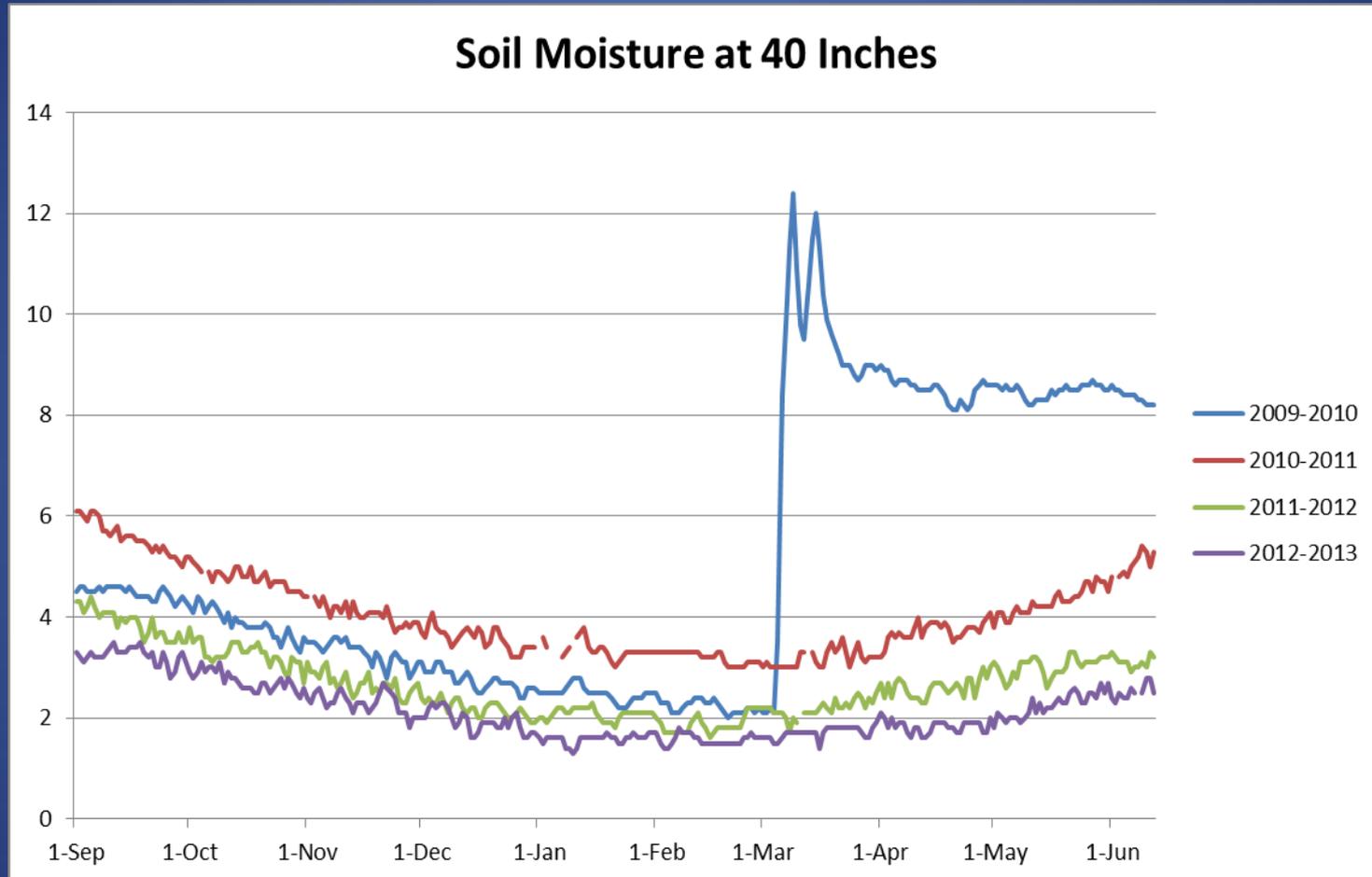
Still running cooler than average.

Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)  
NCEP NLDAS Products Valid: JUN 09, 2013



Modeled soil moisture over the state is closer to average with some higher than average in the east and still deficits in the southwest. Reports from SDSU extension still indicate a little dryness very deep in the soil moisture profile in the east. Likely still dry in the southwest.

# Cottonwood 40" Soil Moisture

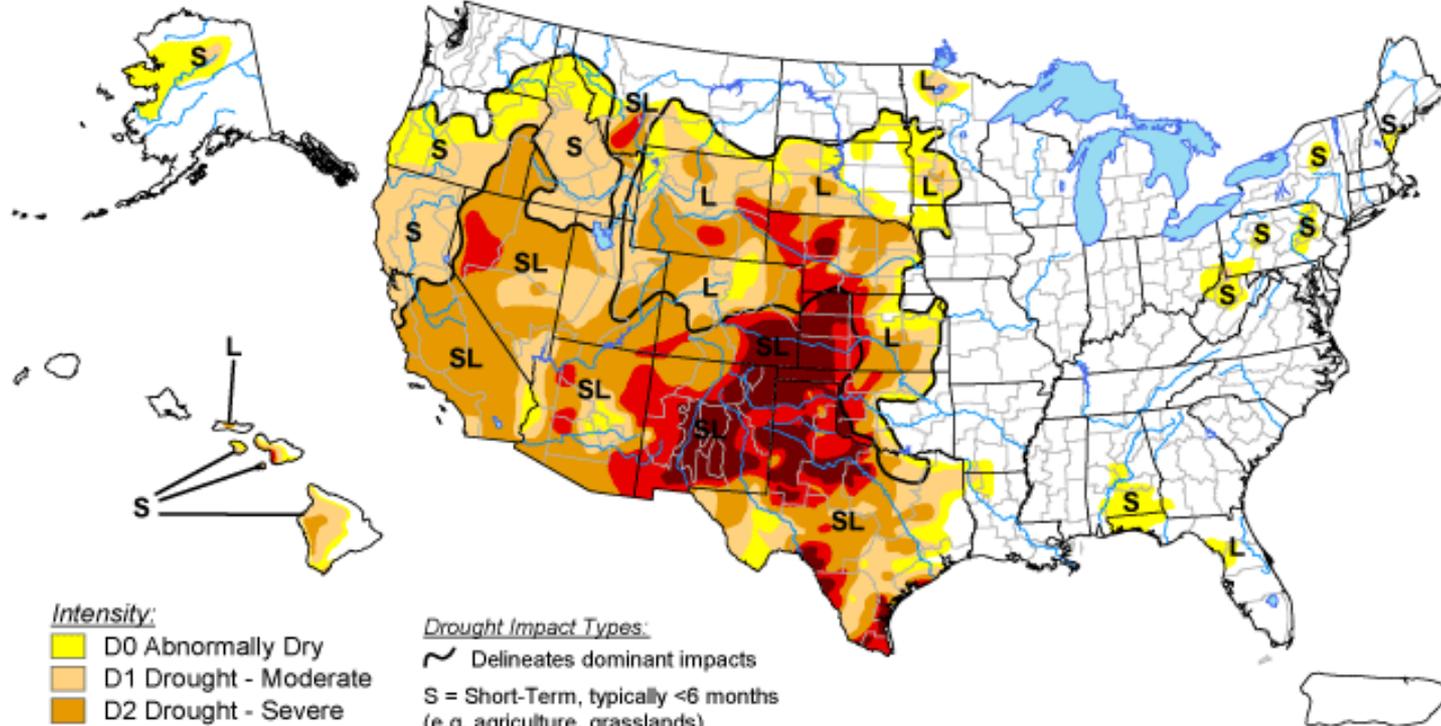


Cottonwood soil moisture at 40" depth is still running drier of any of the last four years at this time.

# U.S. Drought Monitor

June 11, 2013

Valid 7 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, June 13, 2013

Author: David Simeral, Western Regional Climate Center



# U.S. Drought Monitor

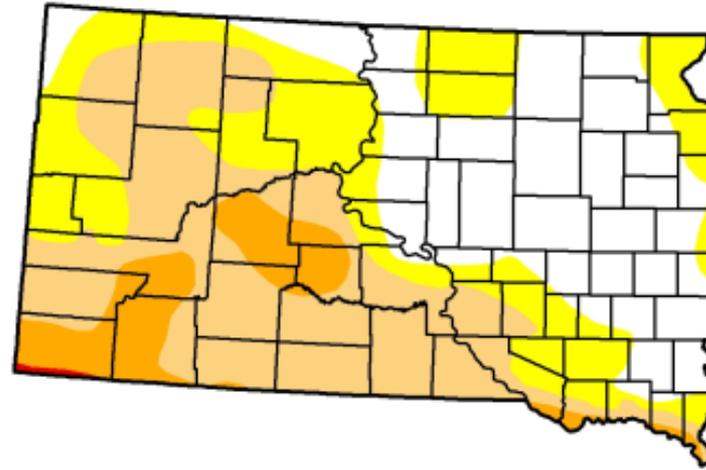
## South Dakota

June 11, 2013

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	32.28	67.72	41.39	9.10	0.22	0.00
Last Week (06/04/2013 map)	24.44	75.56	44.13	10.27	0.22	0.00
3 Months Ago (03/12/2013 map)	0.00	100.00	100.00	86.29	67.48	20.09
Start of Calendar Year (01/01/2013 map)	0.00	100.00	100.00	96.95	63.17	30.68
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	74.69	50.53	6.72
One Year Ago (06/05/2012 map)	63.13	36.87	0.41	0.00	0.00	0.00

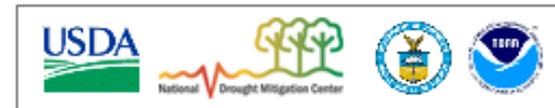


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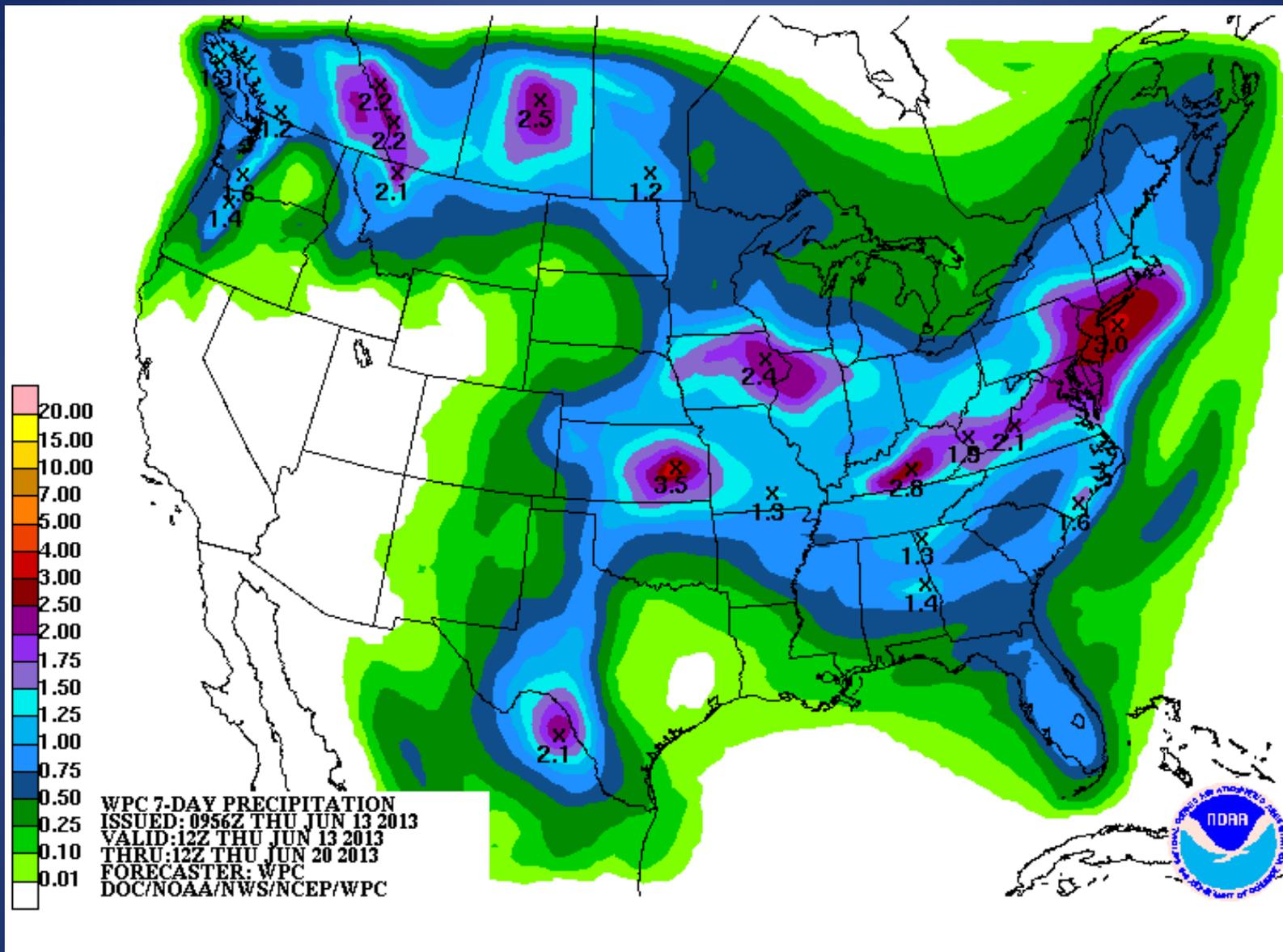
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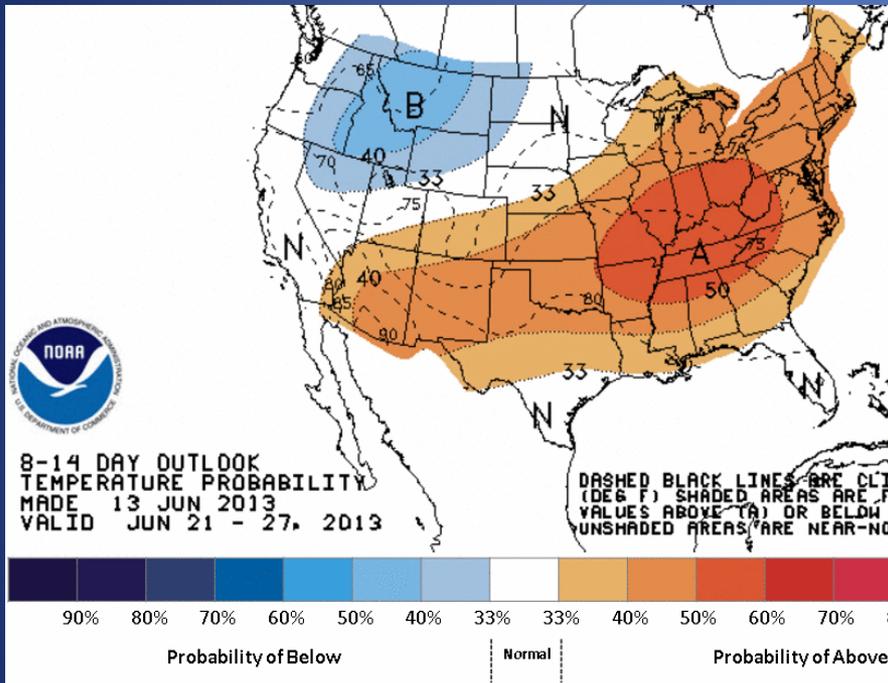
Largely removed drought status in the east. Impacts continue in the west with rangeland and lacking surface water, though improved.



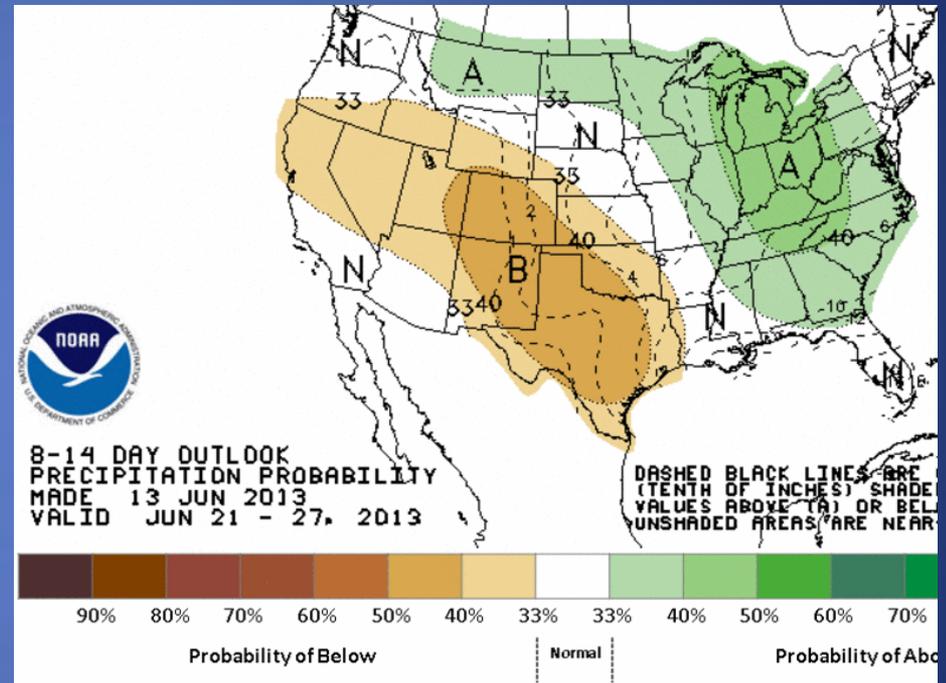
<http://www.hpc.ncep.noaa.gov/qpf/day1-7.shtml>

Forecast precipitation totals over the next seven days.

# 8-14 Day Outlook



Temperature



Precipitation

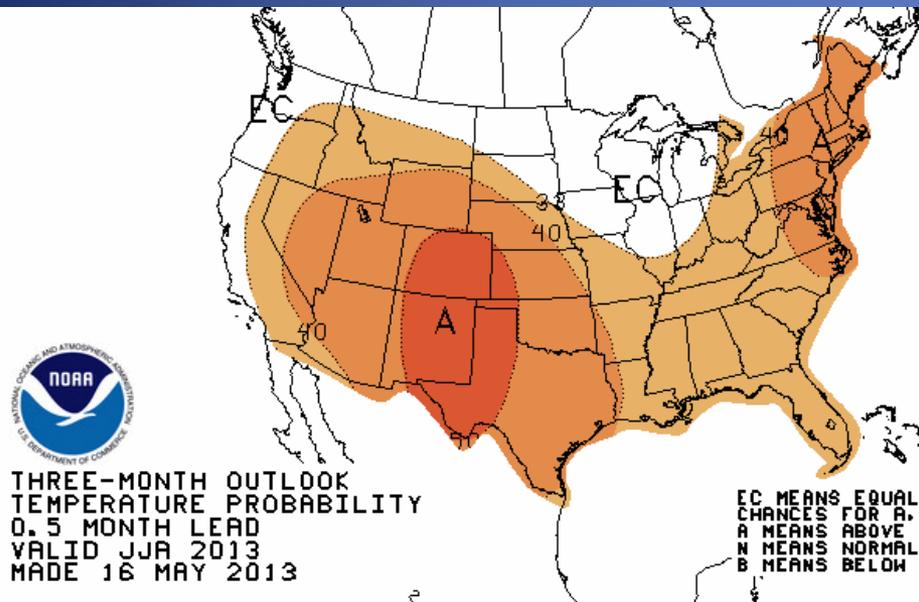
Fairly moderate conditions continuing over the next 8-14 days.

<http://www.cpc.ncep.noaa.gov/>

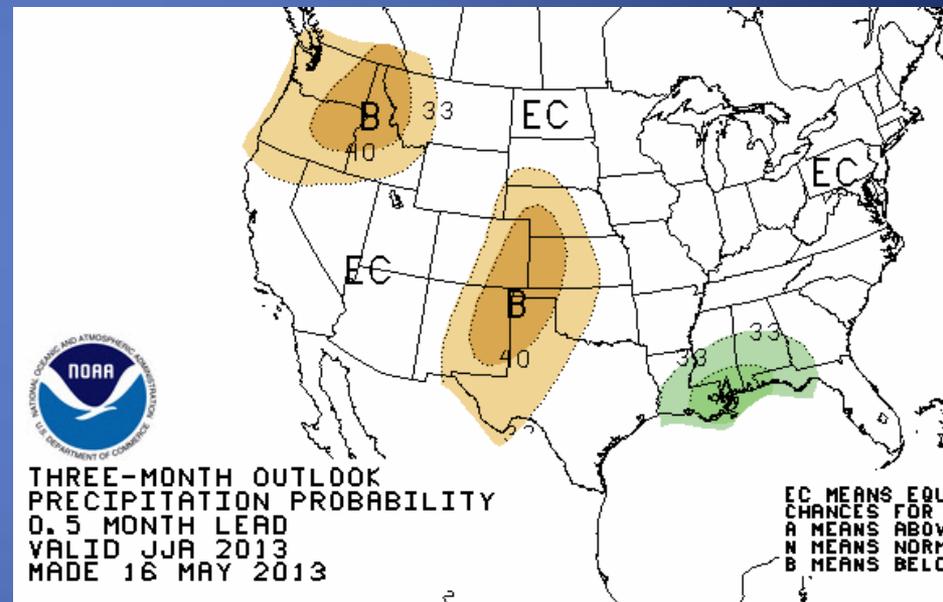
# 3 Month Temperature and Precipitation Probabilities

(June - August)

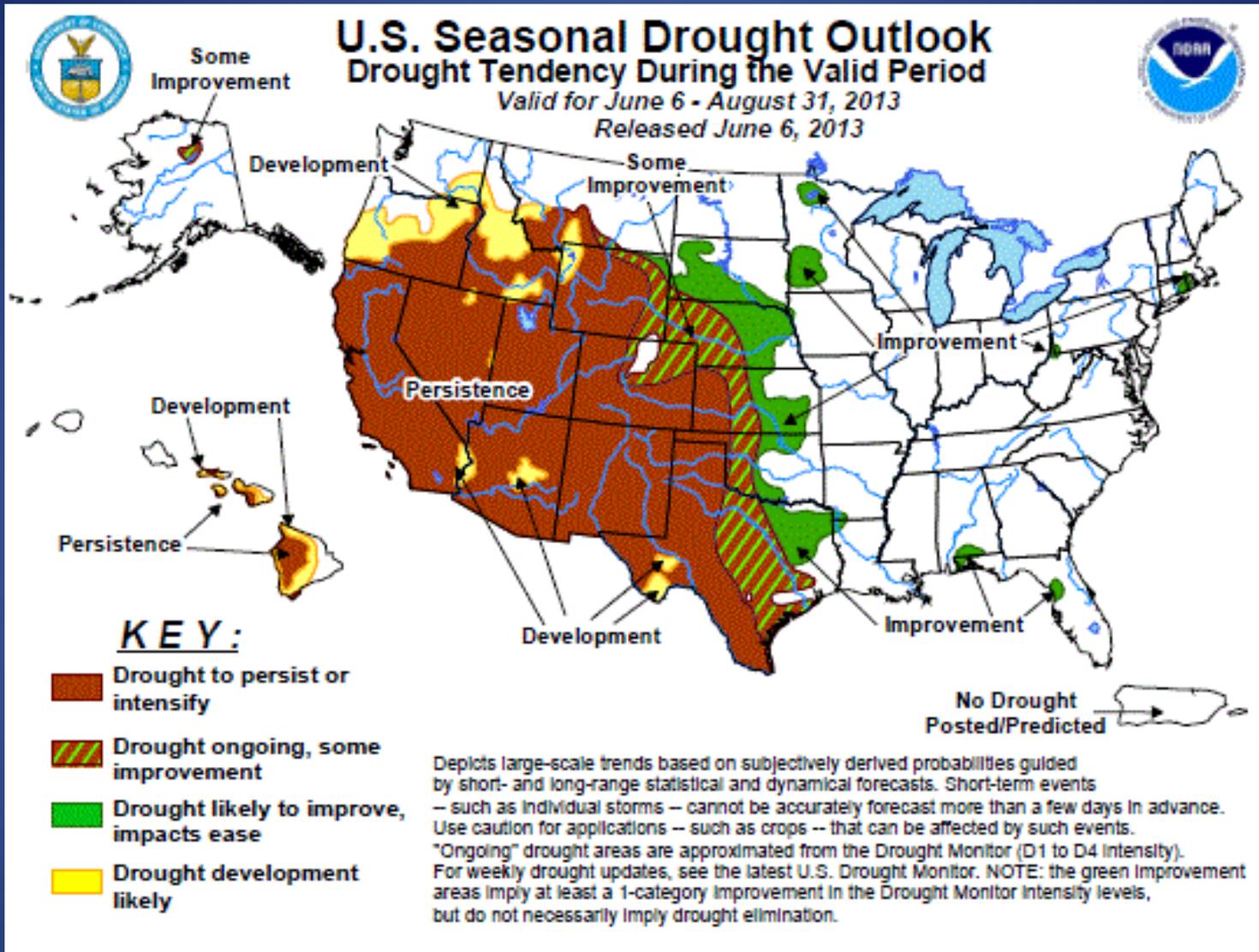
*Updates to be released next week*



Temperature



Precipitation



Drought conditions are expected to continue to improve somewhat. Some issues exist in the southwest. That area has best chance of continuing in drought conditions through the summer.



# Issues

- Outlook – continued steady conditions or some additional drought improvement.
- Ag –
  - planting being wrapped up – needing more warmth and sunlight for row crop areas.
  - Winter wheat still quite poor.
  - Rangeland some recovery.
- Fire – green-up has slowed initial fire concerns. Still have dry heavy fuels. Thus, large fire concerns still exist.