

South Dakota Drought Update

28 April 2013

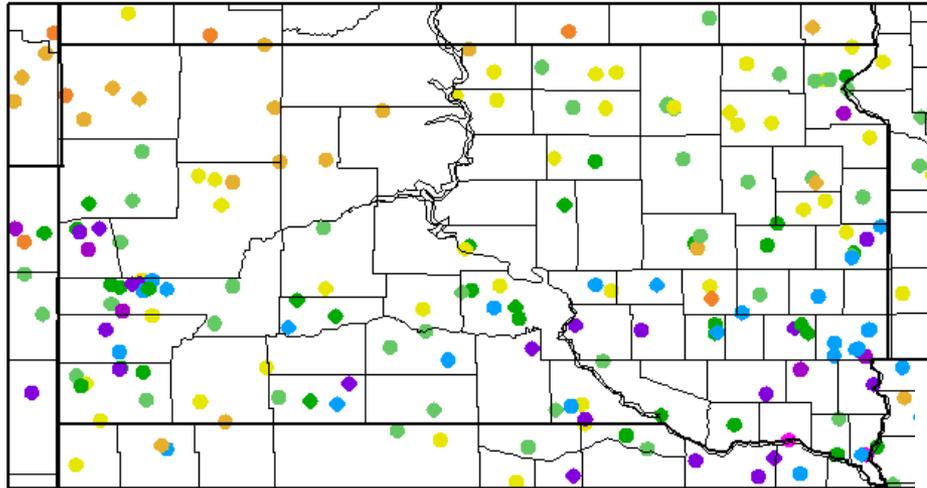
Dr. Dennis Todey

South Dakota State Climatologist

SDSU Extension/AES/ABE



Precipitation (in)
3/30/2013 - 4/28/2013



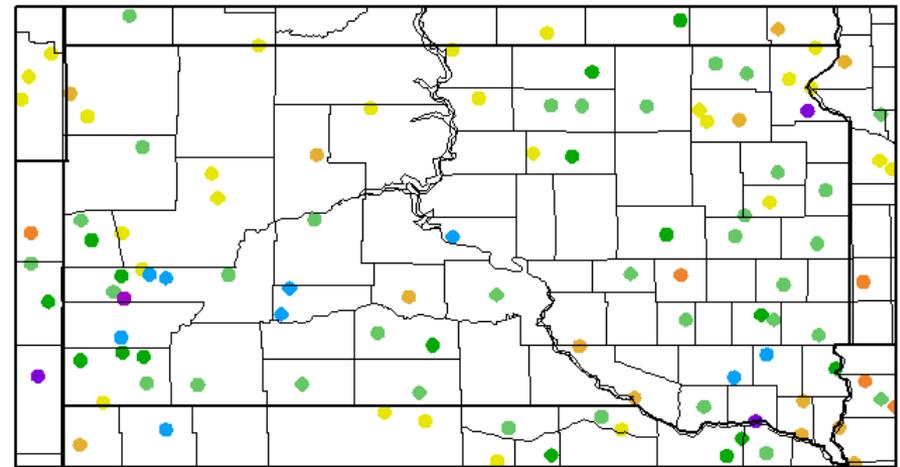
Generated 4/29/2013 at HPRCC using provisional data.

Regional Climate Centers

Good precipitation last 30 days –
some areas still below average



Departure from Normal Precipitation (in)
3/30/2013 - 4/28/2013

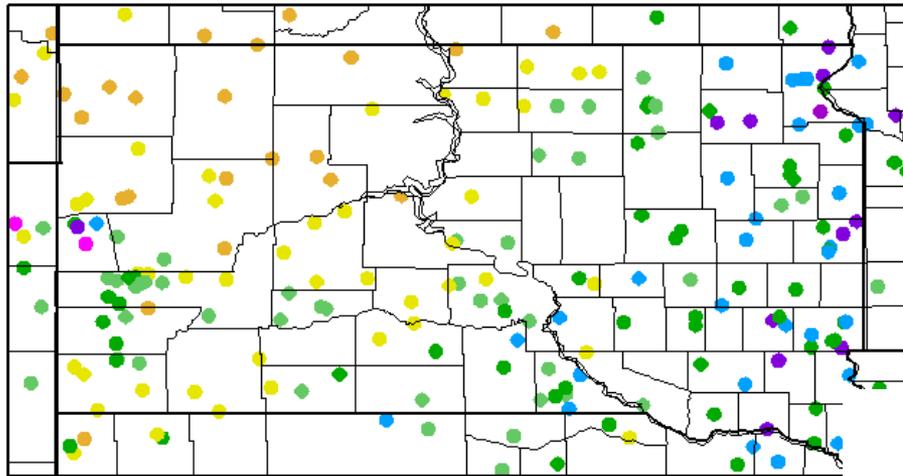


Generated 4/29/2013 at HPRCC using provisional data.

Regional Climate Centers

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

Precipitation (in)
10/1/2012 - 4/28/2013

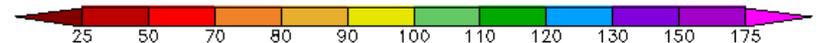
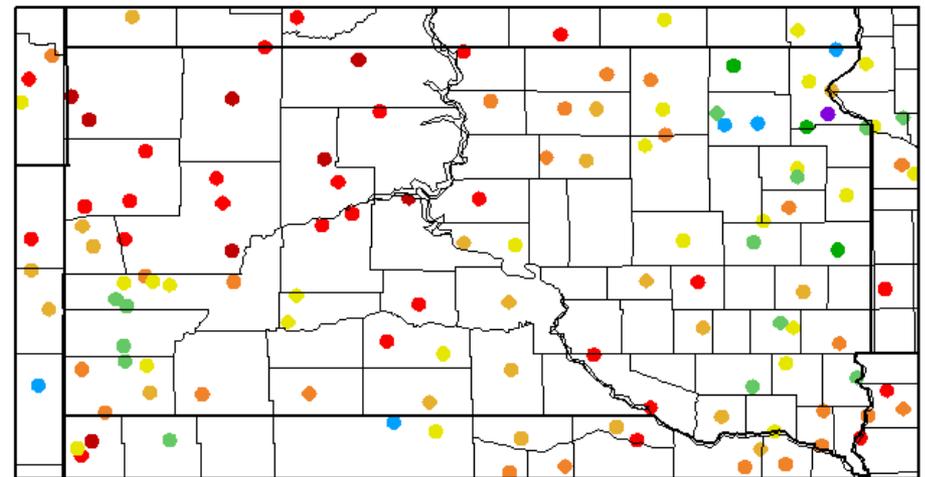


Generated 4/29/2013 at HPRCC using provisional data.

Regional Clir

Large deficits since last fall

Percent of Normal Precipitation (%)
10/1/2012 - 4/28/2013



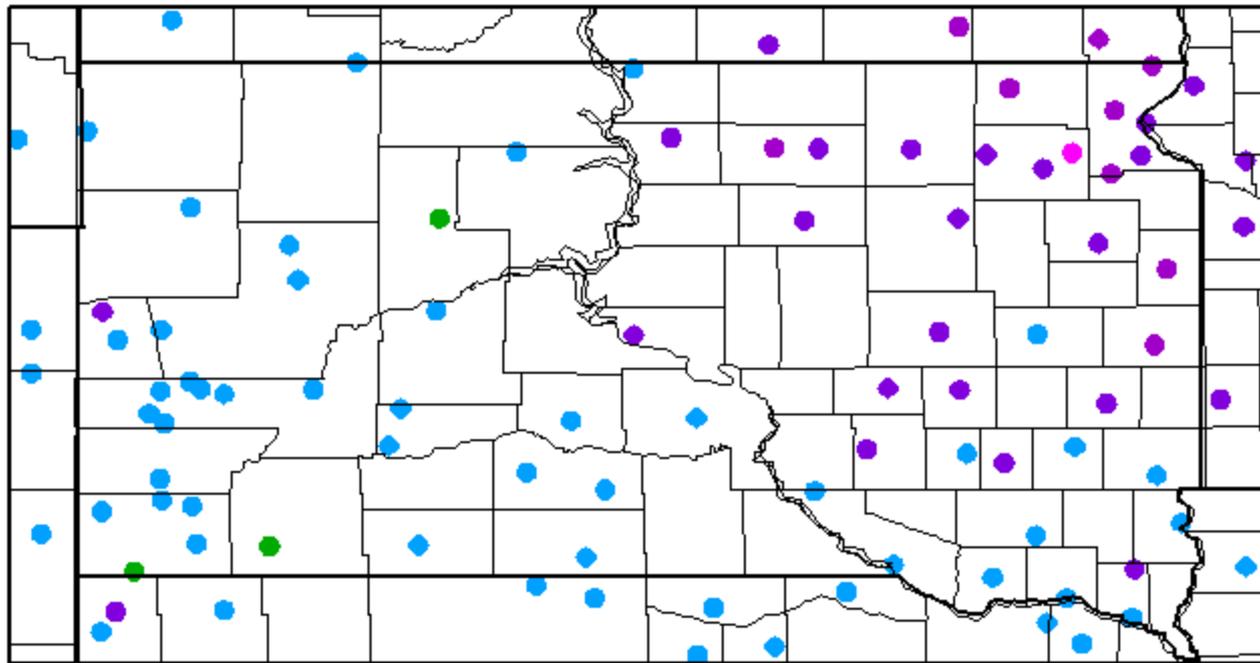
Generated 4/29/2013 at HPRCC using provisional data.

Regional Climate Centers



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

Departure from Normal Temperature (F) 3/30/2013 - 4/28/2013



Generated 4/29/2013 at HPRCC using provisional data.

Regional Climate Centers



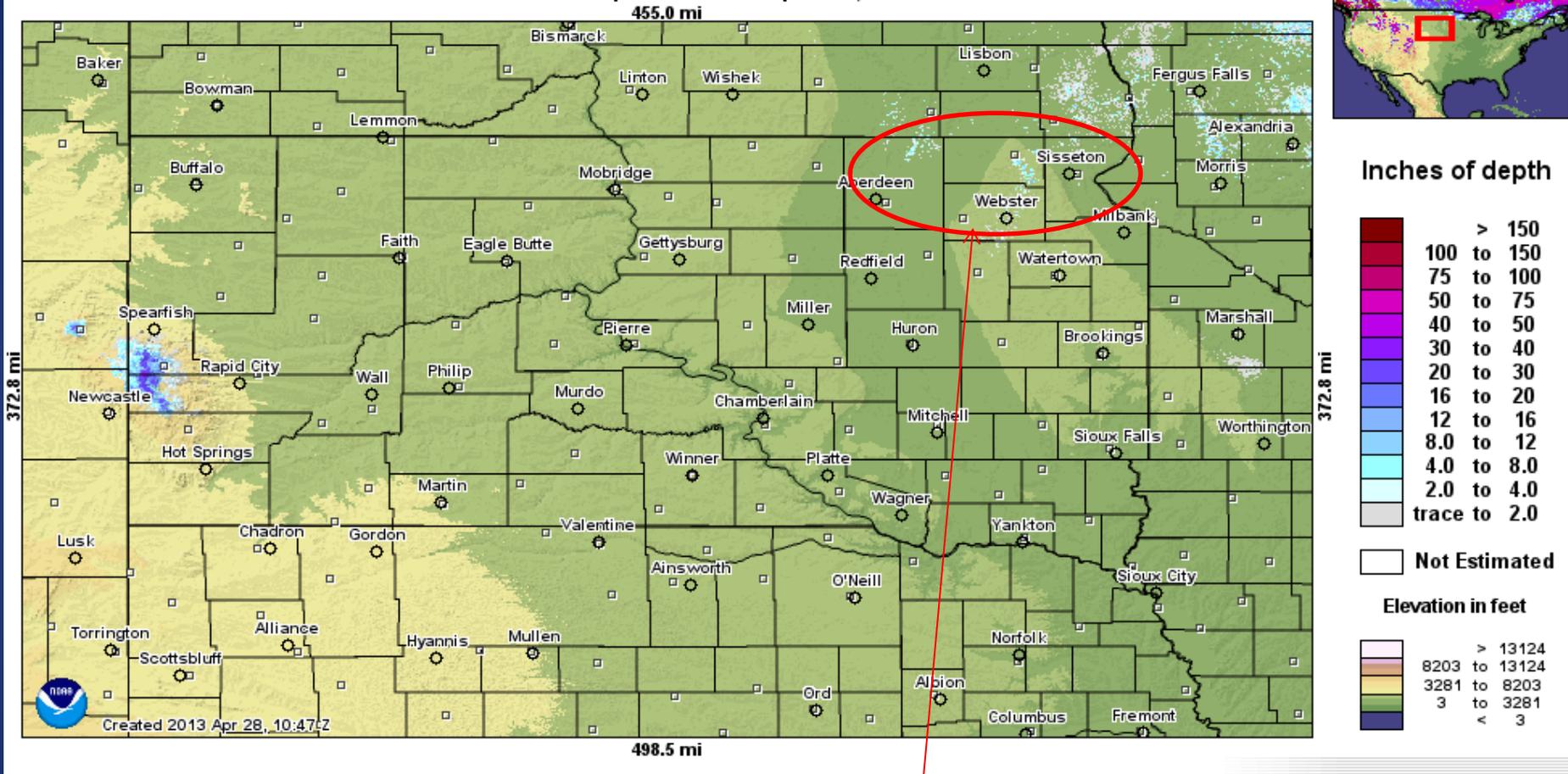
Overall very cold

Temperature Records since 1 Mar.

- Aberdeen 26.4 coldest
- Watertown 26.0 coldest
- Brookings 25.4 coldest
- Sioux Falls 31.8 5th
- Vermillion 36.2 5th
- Huron 29.8 4th
- Pierre 32.7 5th
- Kennebec 34.3 8th
- Timber Lake 32.0 9th
- Winner 34.3 3rd
- Cottonwood 34.8 10th
- Sturgis 35.8 12th
- Oelrichs 36.1 14th
- Bison 32.5 11th

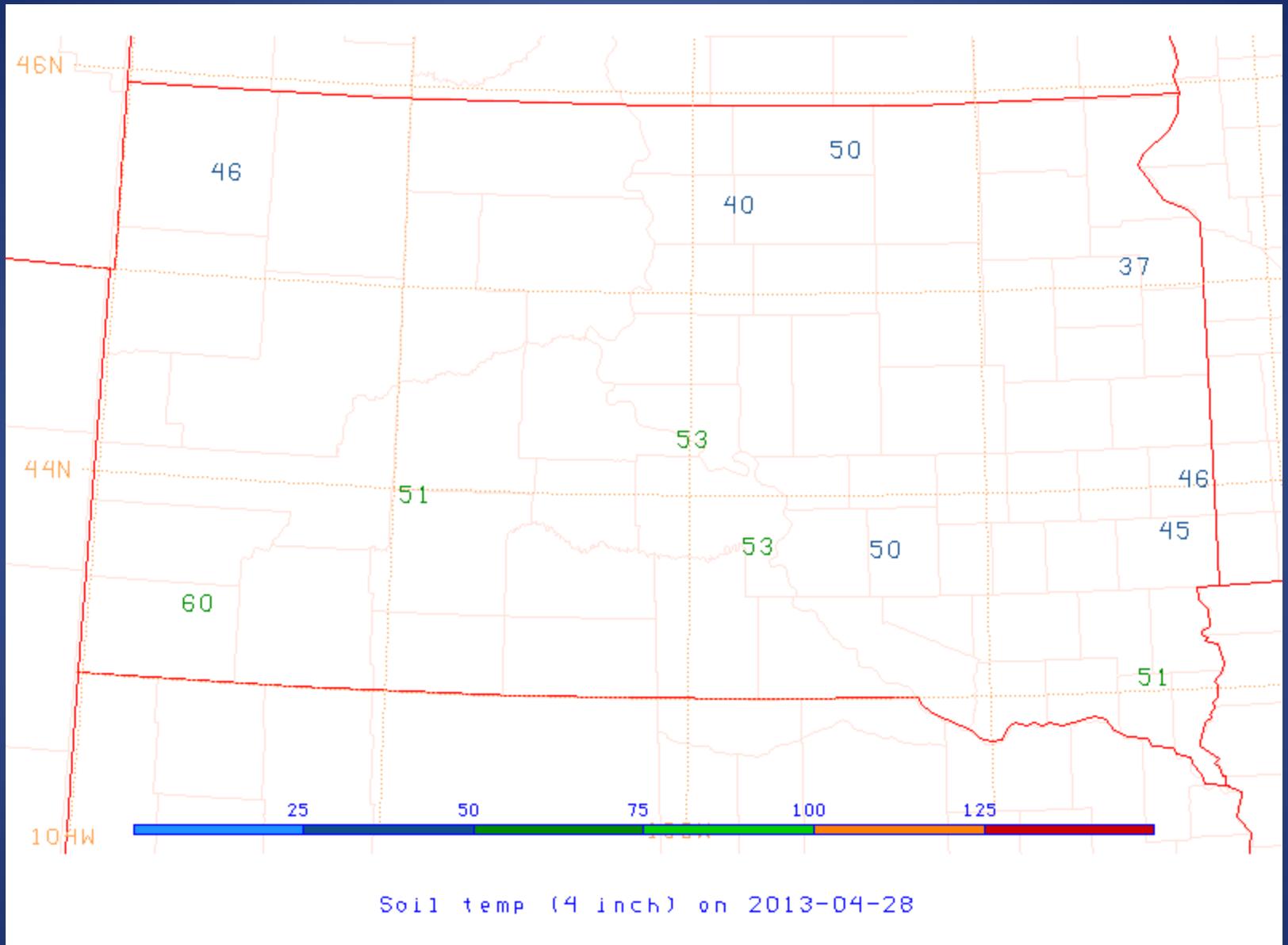


Modeled Snow Depth for 2013 April 28, 6:00 Z



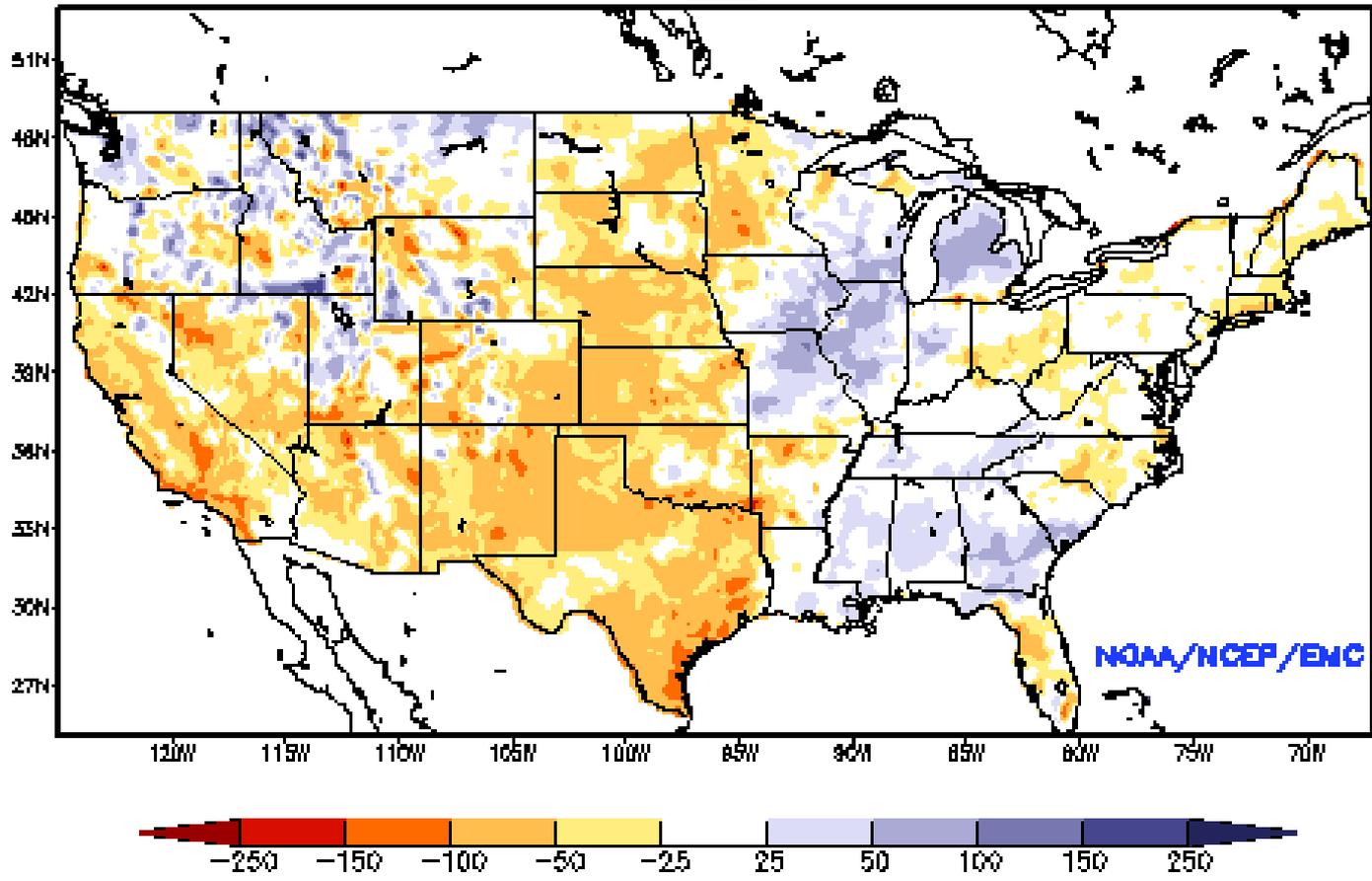
Pockets of snow left





Some frost at depth in northeast

Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products ___ Valid: APR 24, 2013

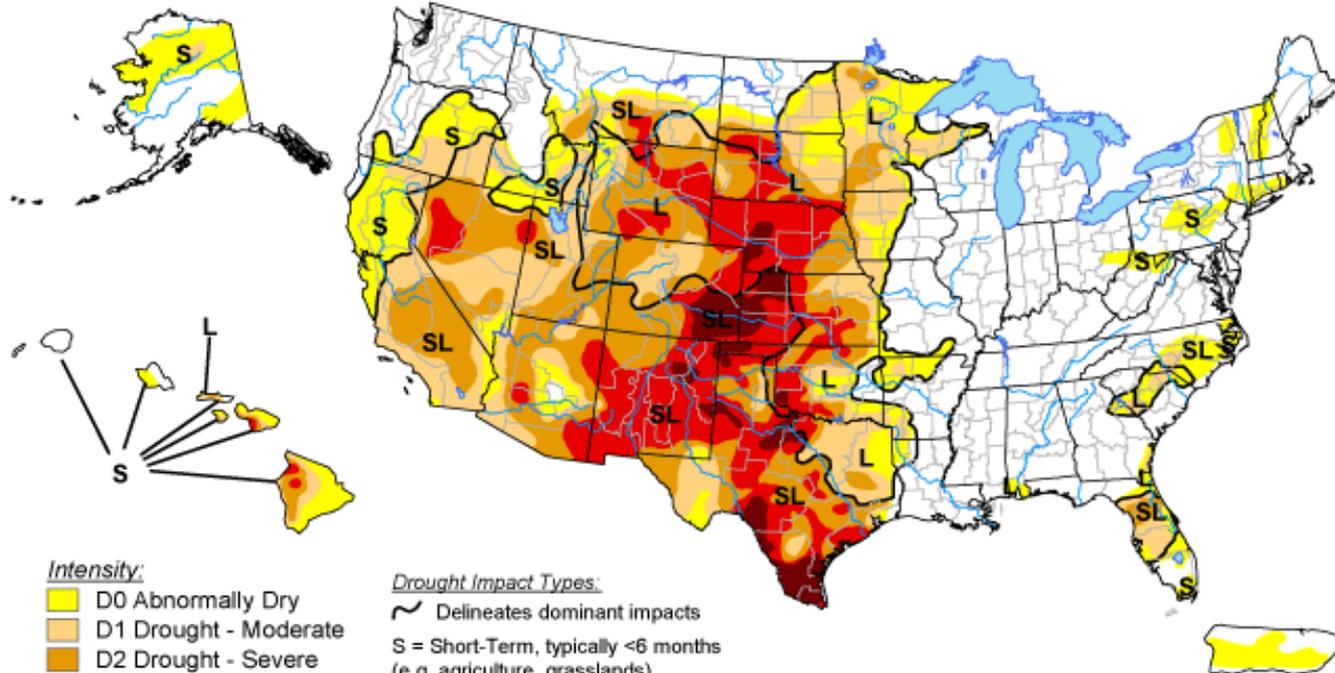


Comments from extension people saying near-surface is pretty good. Deeper profile moisture largely lacking.

U.S. Drought Monitor

April 23, 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, April 25, 2013

Author: Eric Luebehusen, U.S. Department of Agriculture



U.S. Drought Monitor

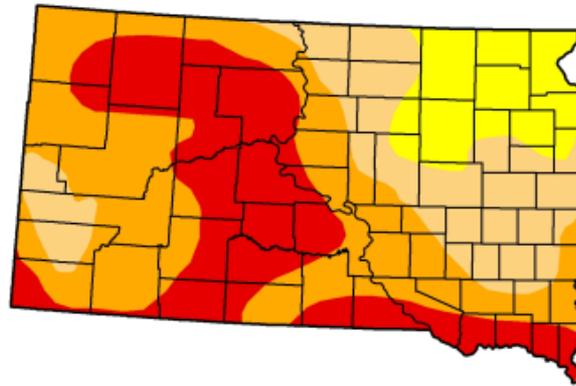
South Dakota

April 23, 2013

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	87.74	66.01	29.03	0.00
Last Week (04/16/2013 map)	0.00	100.00	87.71	69.08	32.92	0.00
3 Months Ago (01/22/2013 map)	0.00	100.00	100.00	96.93	62.99	30.68
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 (04/17/2012 map)	32.56	67.44	27.22	0.00	0.00	0.00



Intensity:

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

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, April 25, 2013
Eric Luebbehusen, U.S. Department of Agriculture

Drought Monitor

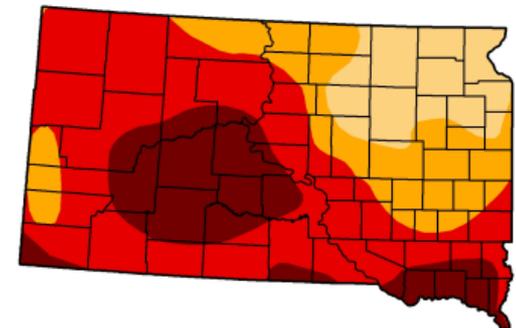
April 2, 2013

Valid 7 a.m. EST

South Dakota

Drought Conditions (Percent Area)

	D3-D4	D4
Current	66.49	20.86
Last Week (04/02/2013 map)	65.78	20.86
3 Months Ago (01/01/2013 map)	0.00	100.00
Start of Calendar Year (01/01/2013 map)	0.00	100.00
Start of Water Year (09/25/2012 map)	0.00	100.00
One Year Ago (03/27/2012 map)	23.87	76.13



Intensity:

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

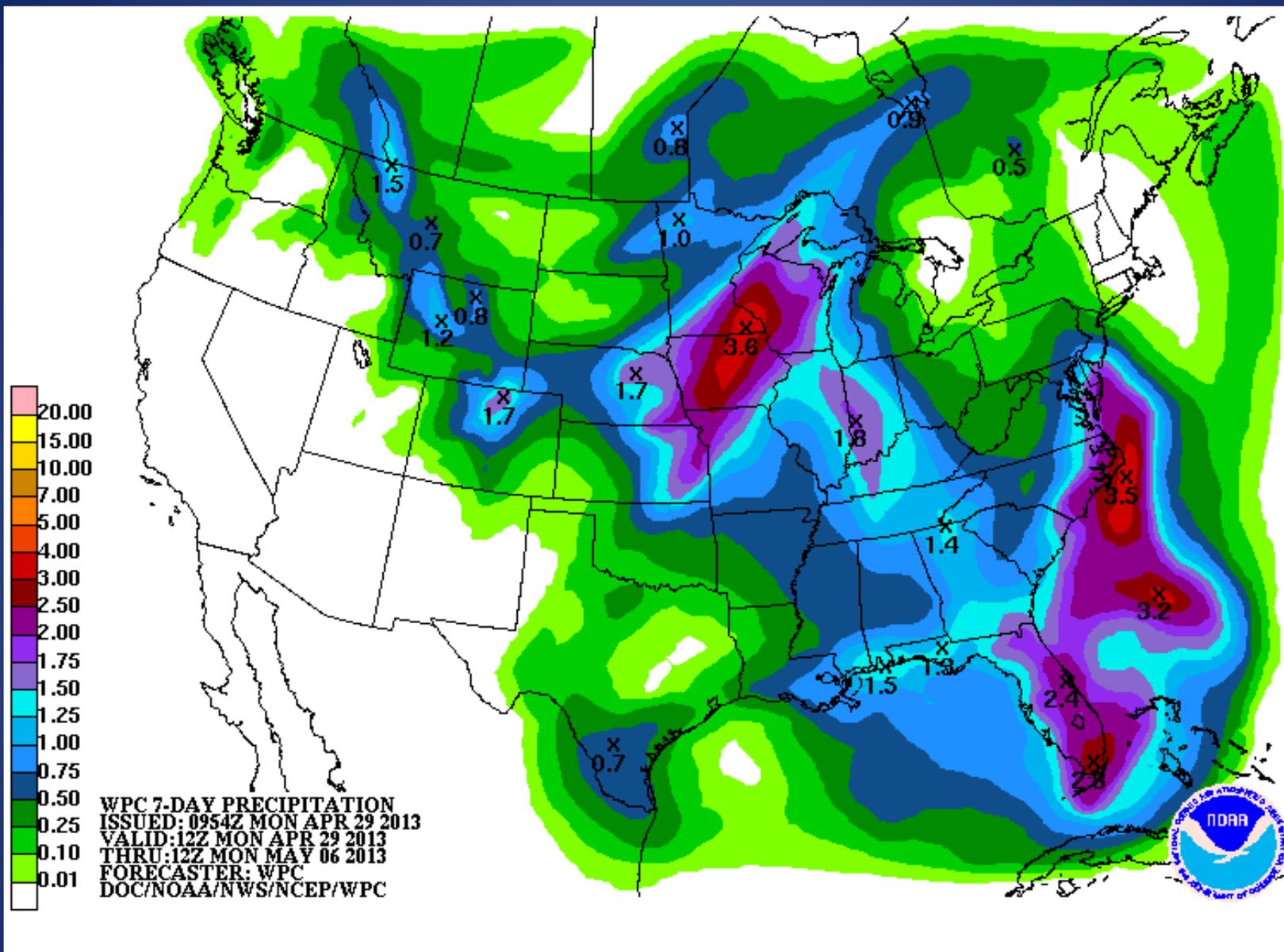
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>

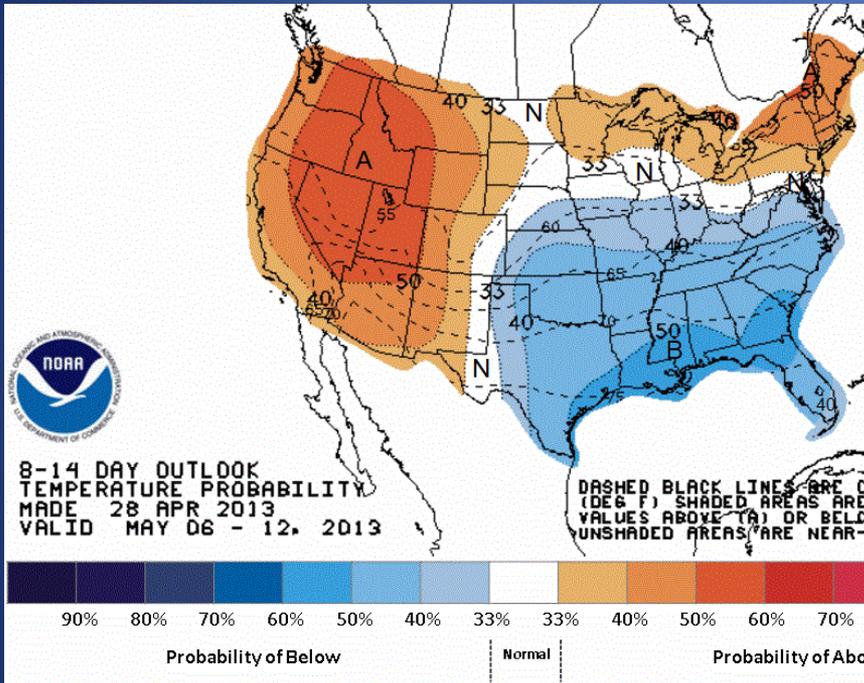


Released Thursday, April 4, 2013
National Drought Mitigation Center,

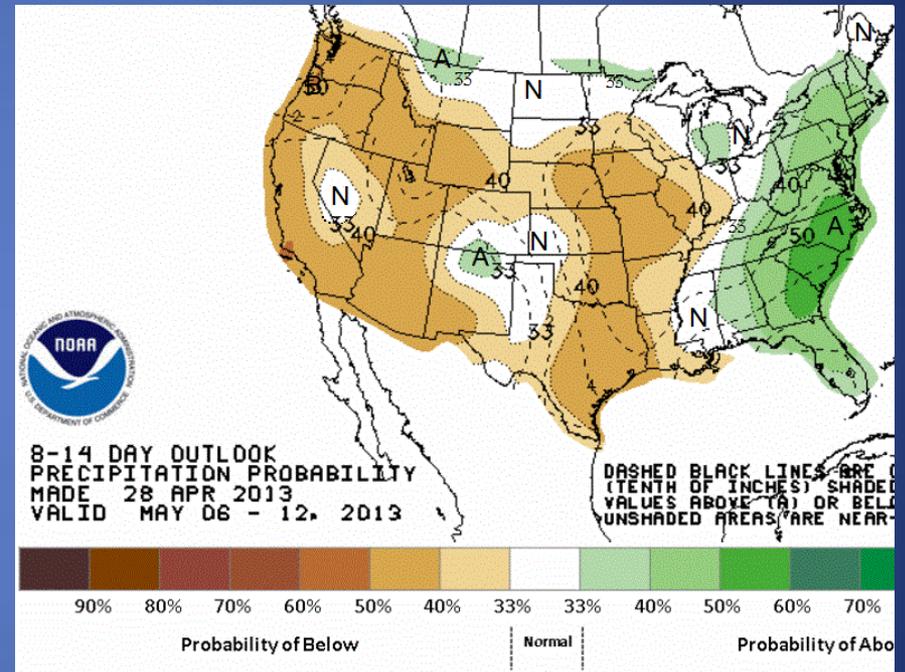




8-14 Day Outlook

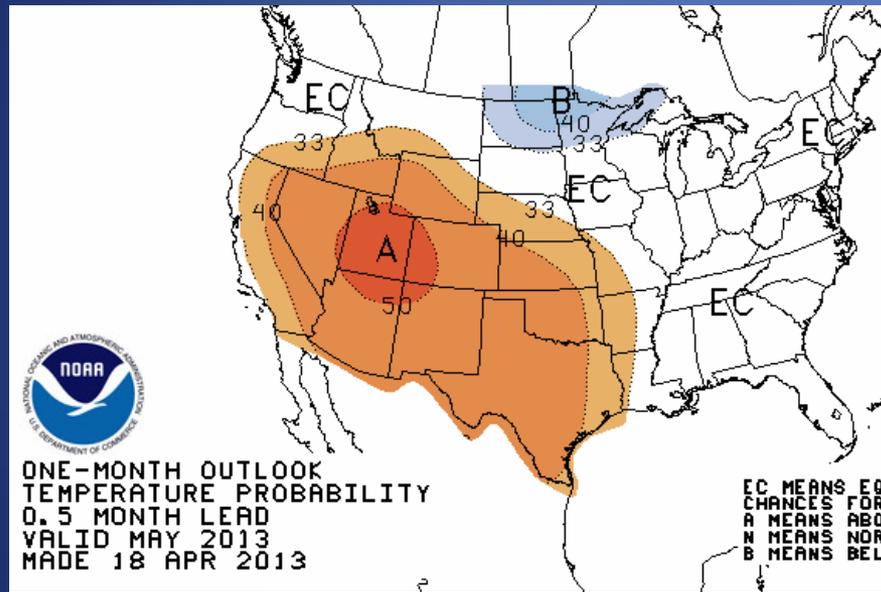


Temperature

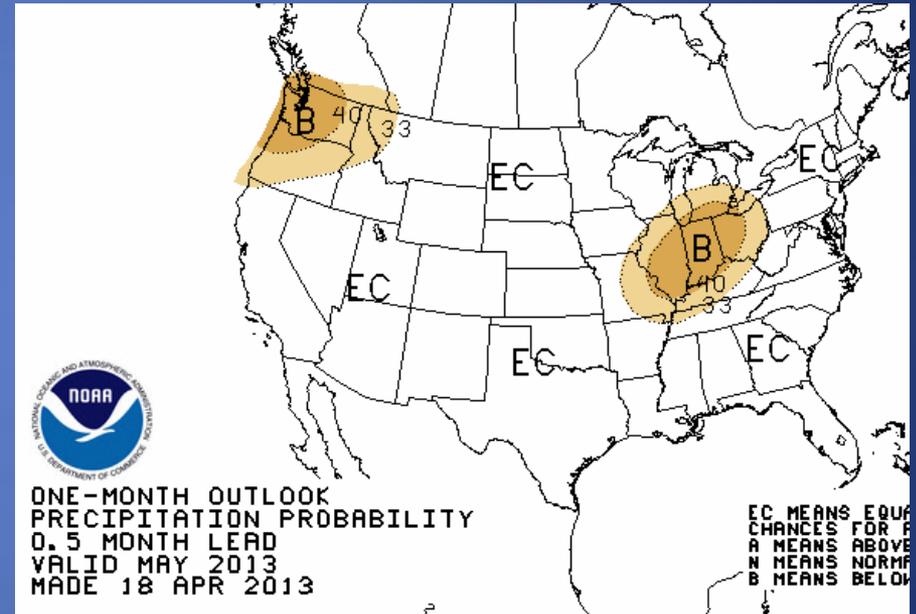


Precipitation

May Temperature and Precipitation Probabilities

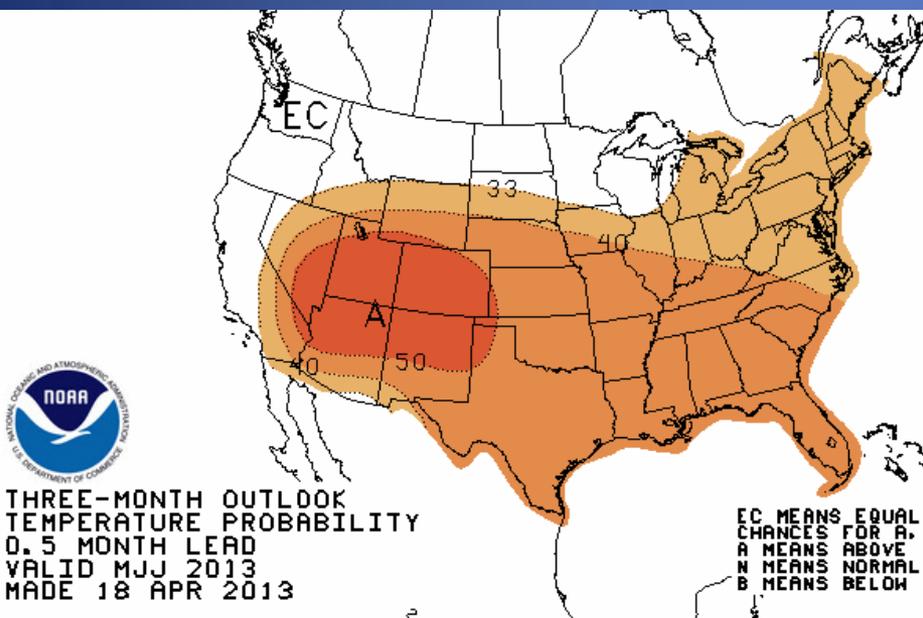


Temperature

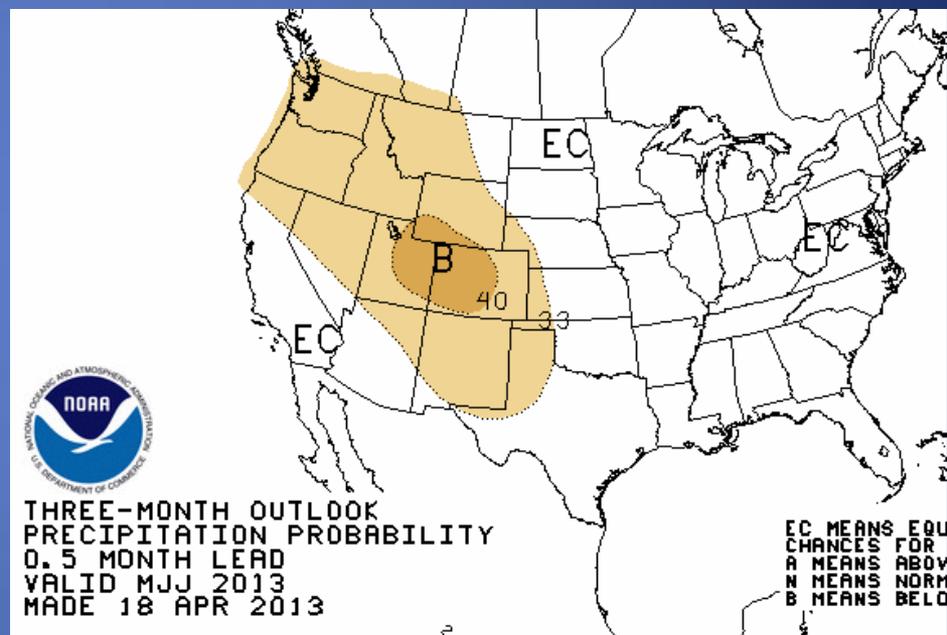


Precipitation

3 Month Temperature and Precipitation Probabilities (April - June)



Temperature



Precipitation

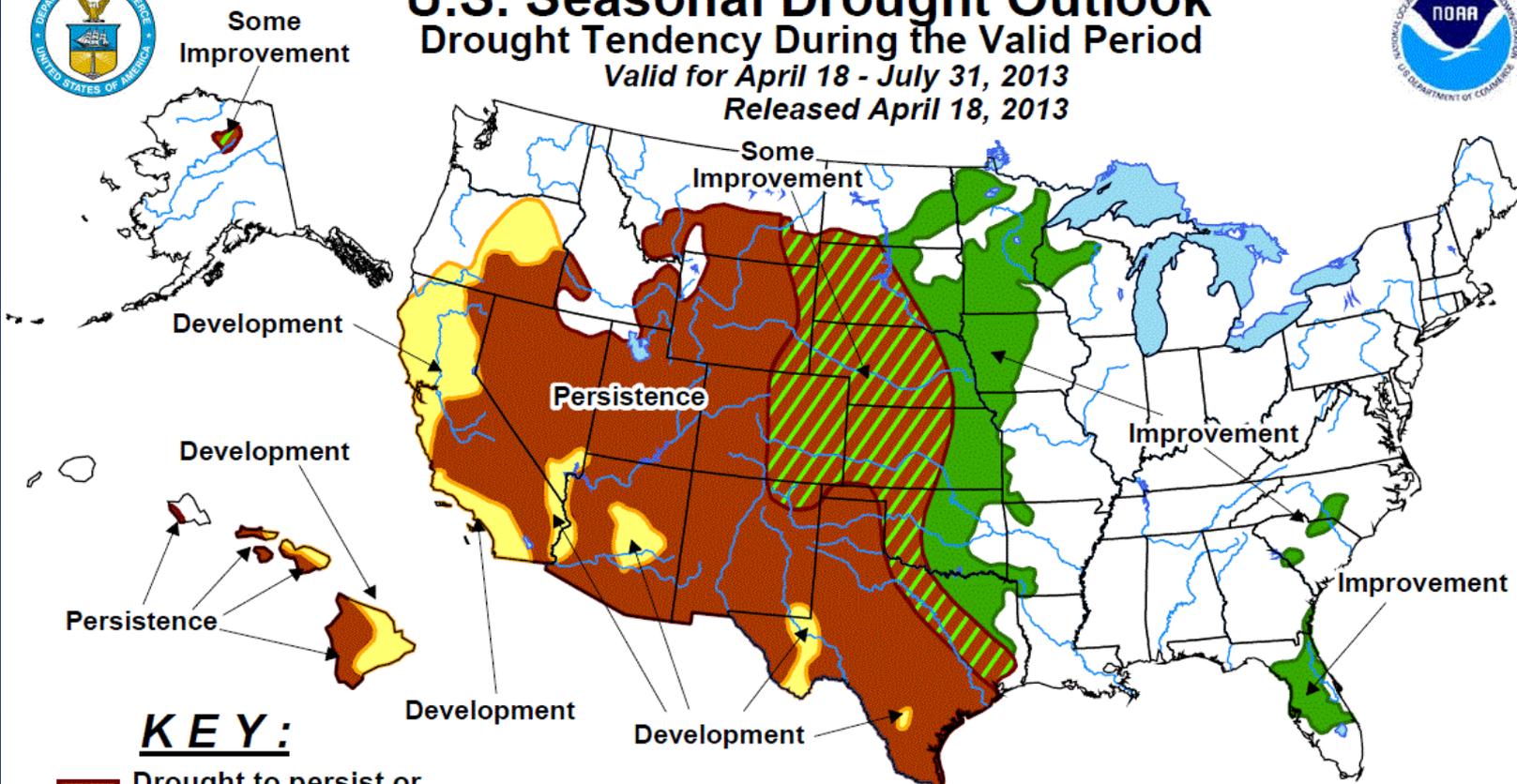


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for April 18 - July 31, 2013

Released April 18, 2013



KEY:

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

No Drought Posted/Predicted 

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.



Issues

- Fire – continuing until green-up
- Flood – far northeast – a few issues
- Precipitation – drier for the next week
- Temperature – warmer now
- Outlook – not bad, but enough ongoing?
 - Some improvement will continue