

Nebraska Climate Update WAOC Report

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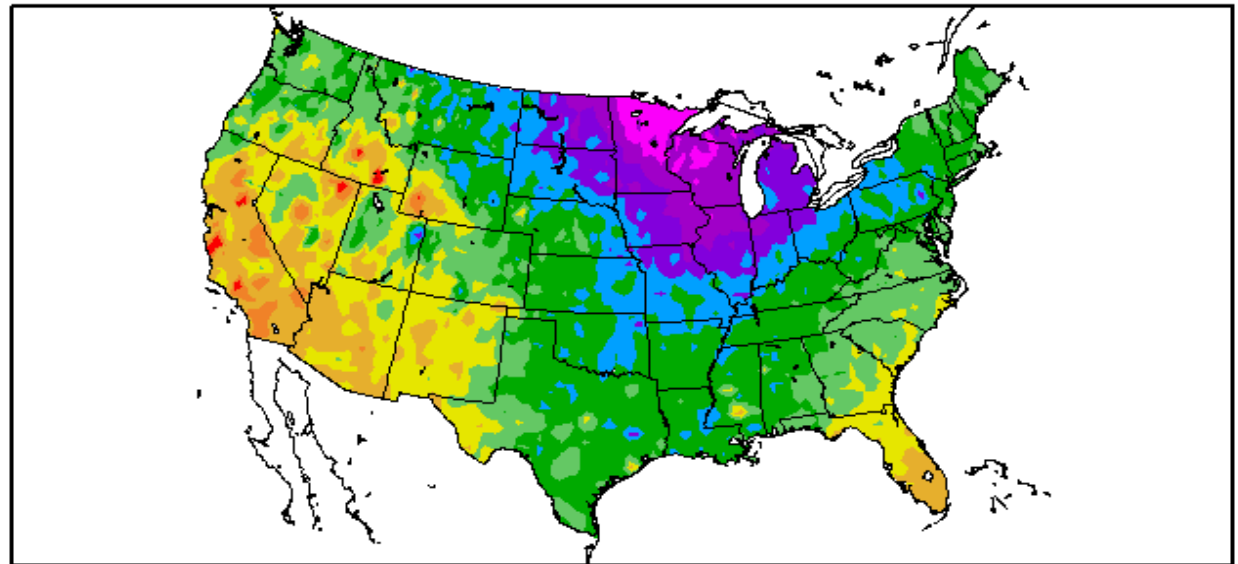
402-472-5206

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Winter Temperature Trend

Departure from Normal Temperature (F)
12/1/2013 – 2/28/2014



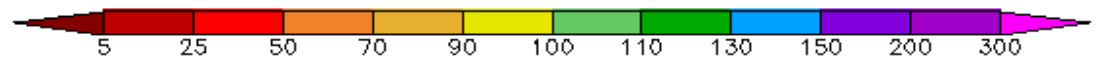
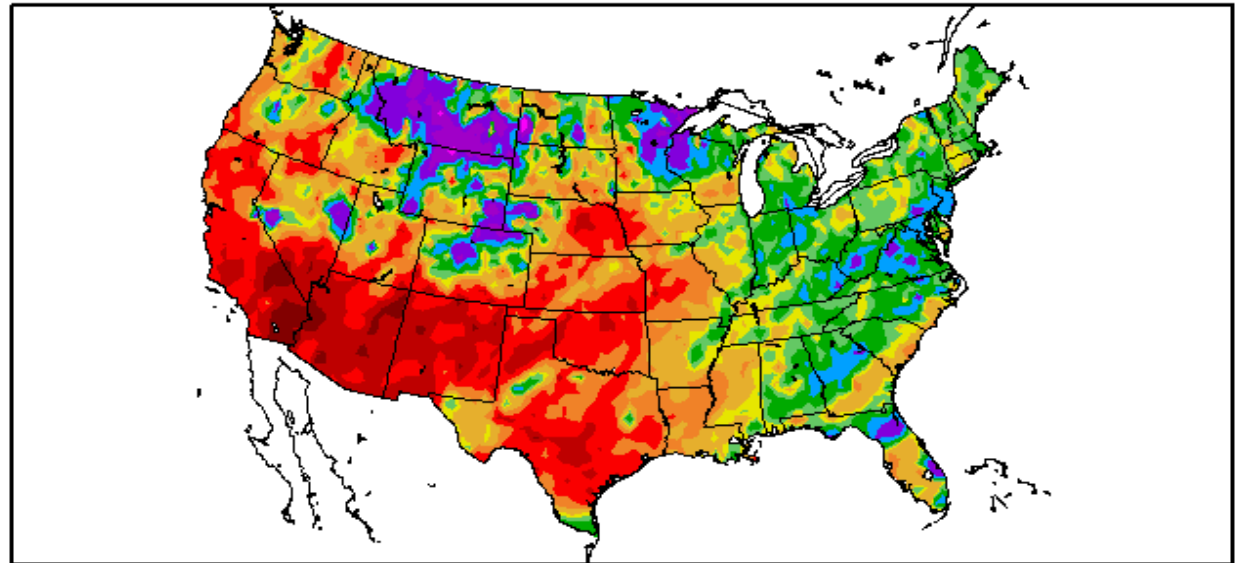
Generated 3/11/2014 at HPRCC using provisional data.

Regional Climate Centers



Winter Precipitation Trend

Percent of Normal Precipitation (%)
12/1/2013 – 2/28/2014



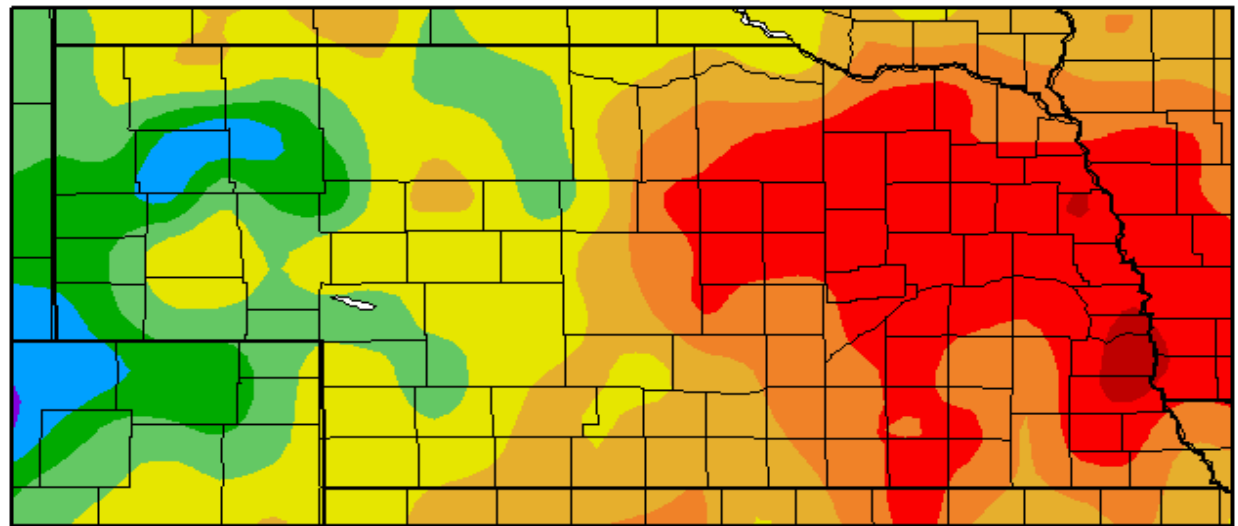
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Regional Climate Centers



Winter Precipitation Departures

Departure from Normal Precipitation (in)
12/1/2013 – 2/28/2014



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Regional Climate Centers



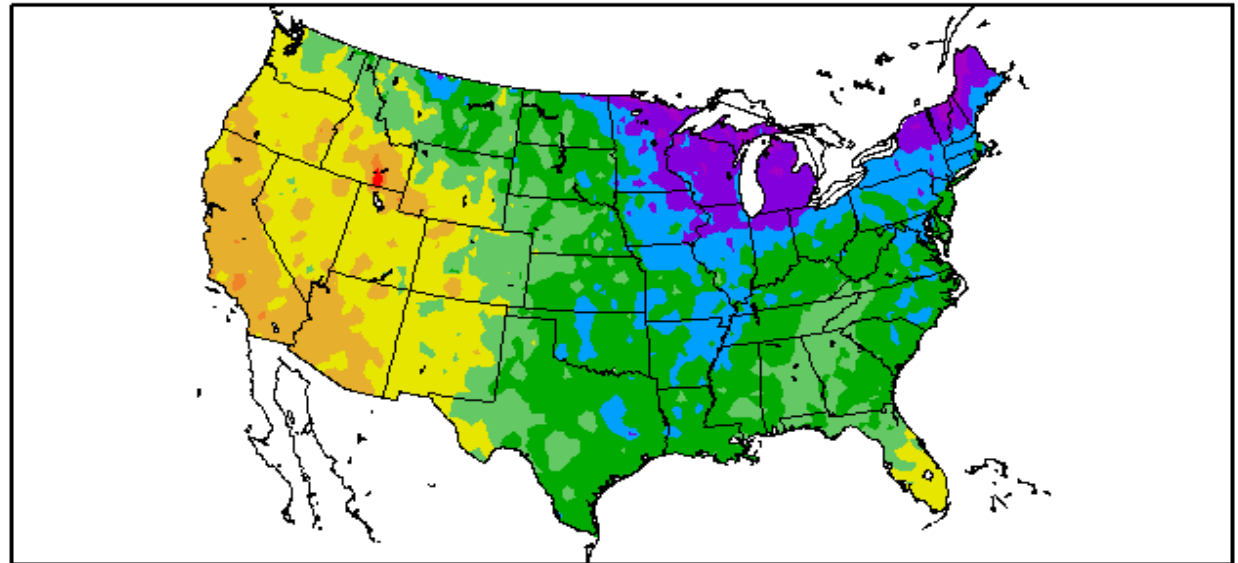
Winter Facts

- Eastern Nebraska 2-6 F below normal
- Eastern Nebraska 4-8 F colder than 2013
- Western Nebraska 1-3 F below normal
- Western Nebraska 2-5 F colder than 2013
- 20+ days of minimum temperatures 0 F or lower
- Above average snowfall across Panhandle
- Below average snowfall eastern $\frac{3}{4}$ of Nebraska



March Temperature Trend

Departure from Normal Temperature (F)
3/1/2014 - 3/26/2014



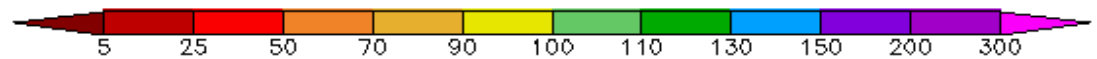
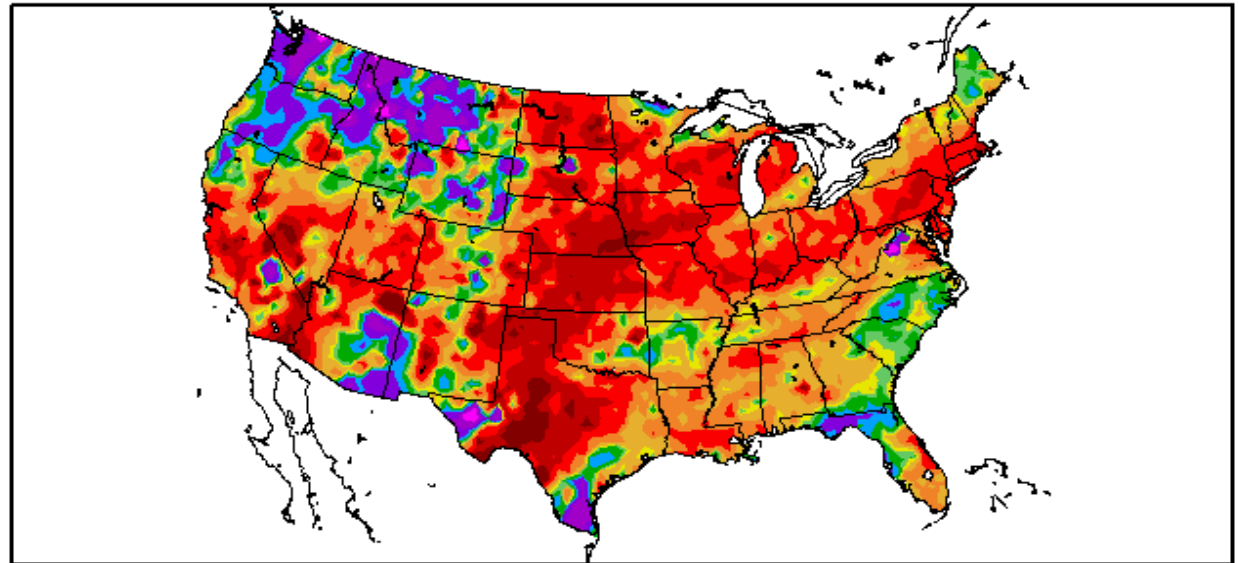
Generated 3/27/2014 at HPRCC using provisional data.

Regional Climate Centers



March Precipitation Trend

Percent of Normal Precipitation (%)
3/1/2014 - 3/26/2014



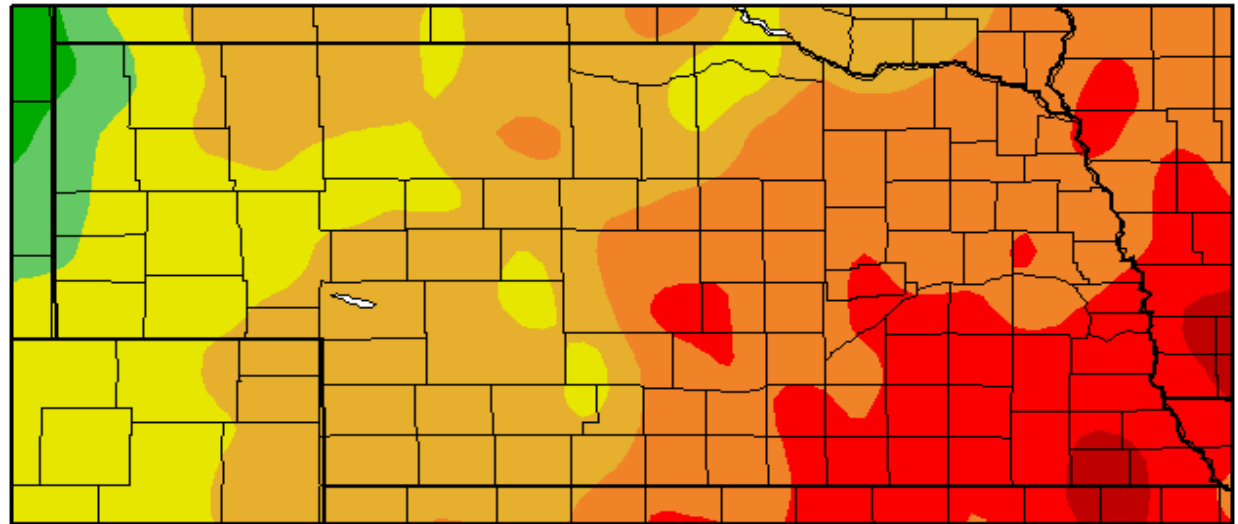
Generated 3/27/2014 at HPRCC using provisional data.

Regional Climate Centers



March Precipitation Trend

Departure from Normal Precipitation (in)
3/1/2014 - 3/26/2014



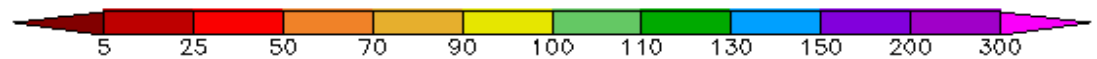
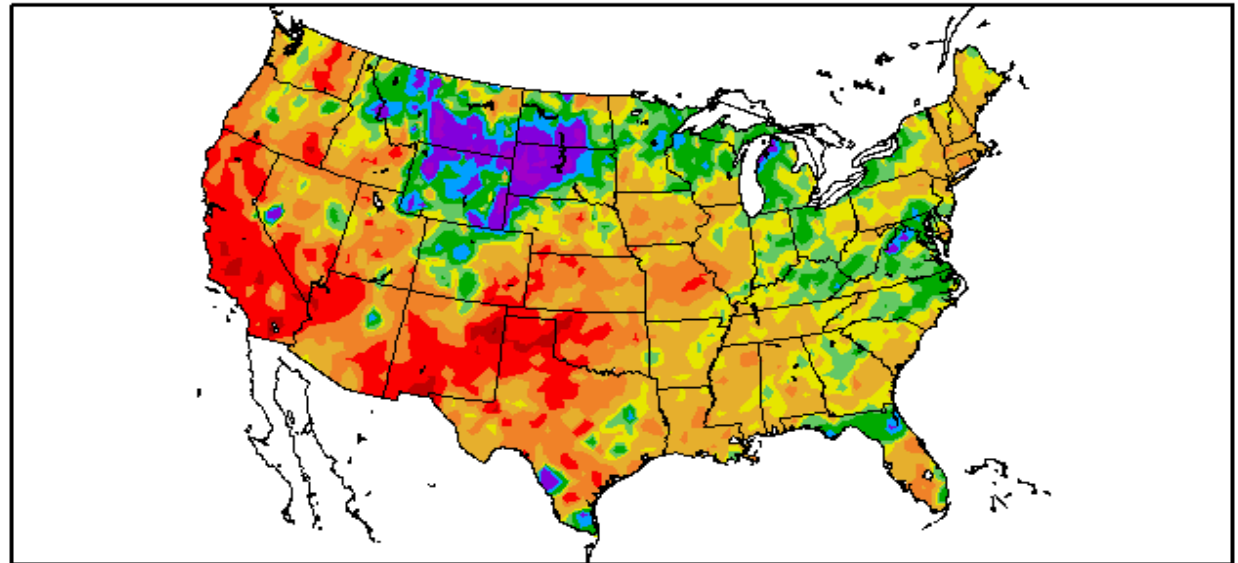
Generated 3/27/2014 at HPRCC using provisional data.

Regional Climate Centers



Soil Recharge Period Trend

Percent of Normal Precipitation (%)
10/1/2013 – 3/26/2014



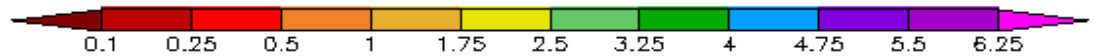
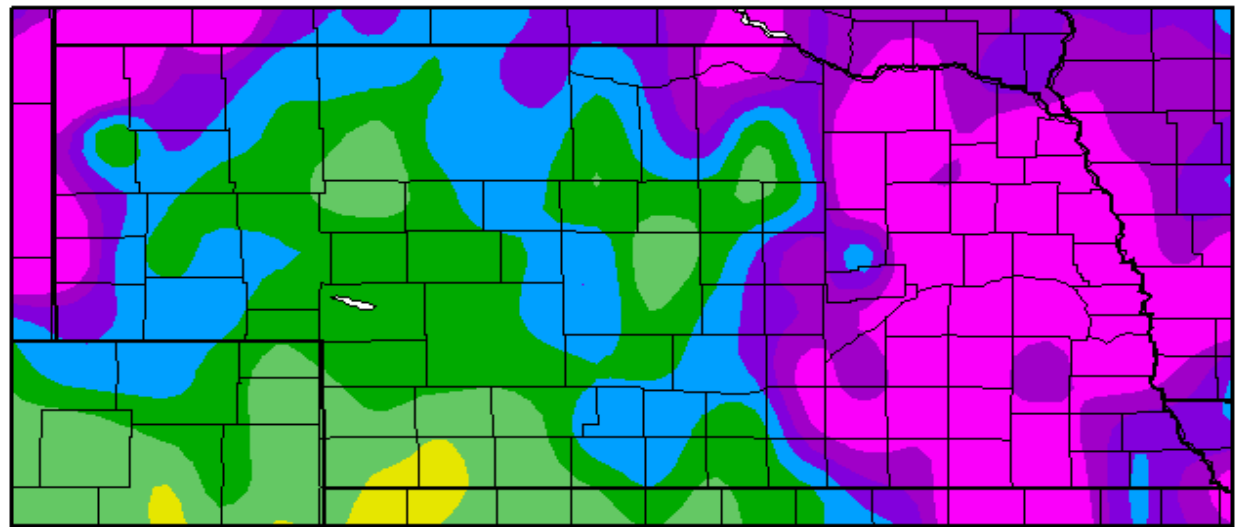
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Regional Climate Centers



Soil Recharge Period Precipitation

Precipitation (in)
10/1/2013 – 3/26/2014



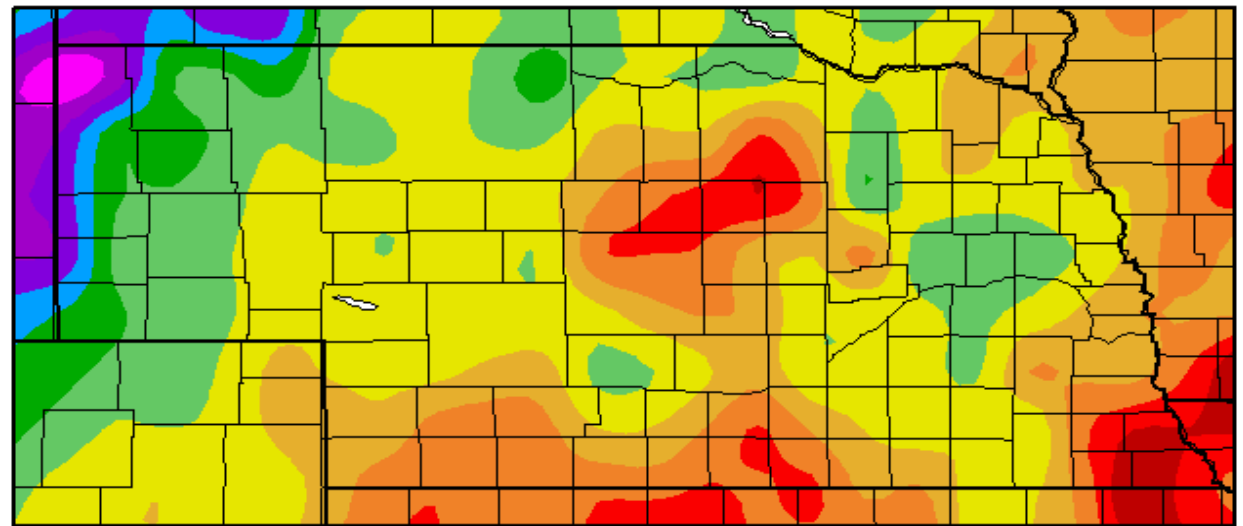
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Regional Climate Centers



Soil Moisture Recharge Period Trend

Departure from Normal Precipitation (in)
10/1/2013 – 3/26/2014



Generated 3/27/2014 at HPRCC using provisional data.

Regional Climate Centers



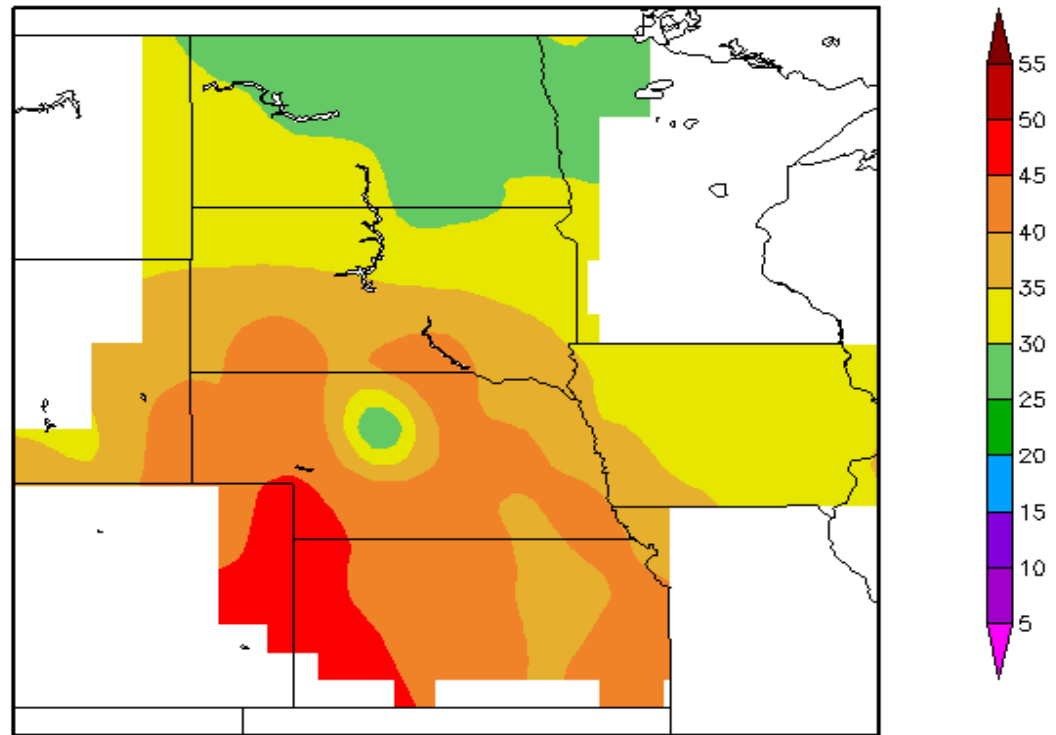
Soil Moisture Recharge Period Facts

- Very dry winter and March period has led to elimination of moisture surplus from October/November precipitation events
- 6-7 inches of moisture across eastern Nebraska, isolated locations have received 8+ inches
- Surplus of 1-4 inches across Panhandle
- Deficits of 2-4 inches for eastern Sandhills, Southeast, South Central, and Southwest
- Extremely dry soil surfaces, dust storms, high fire danger, no deep profile moisture (below 3 feet)



One Day Soil Temperature Average

Soil Temperature (F at 4 inches)
3/26/2014 – 3/26/2014

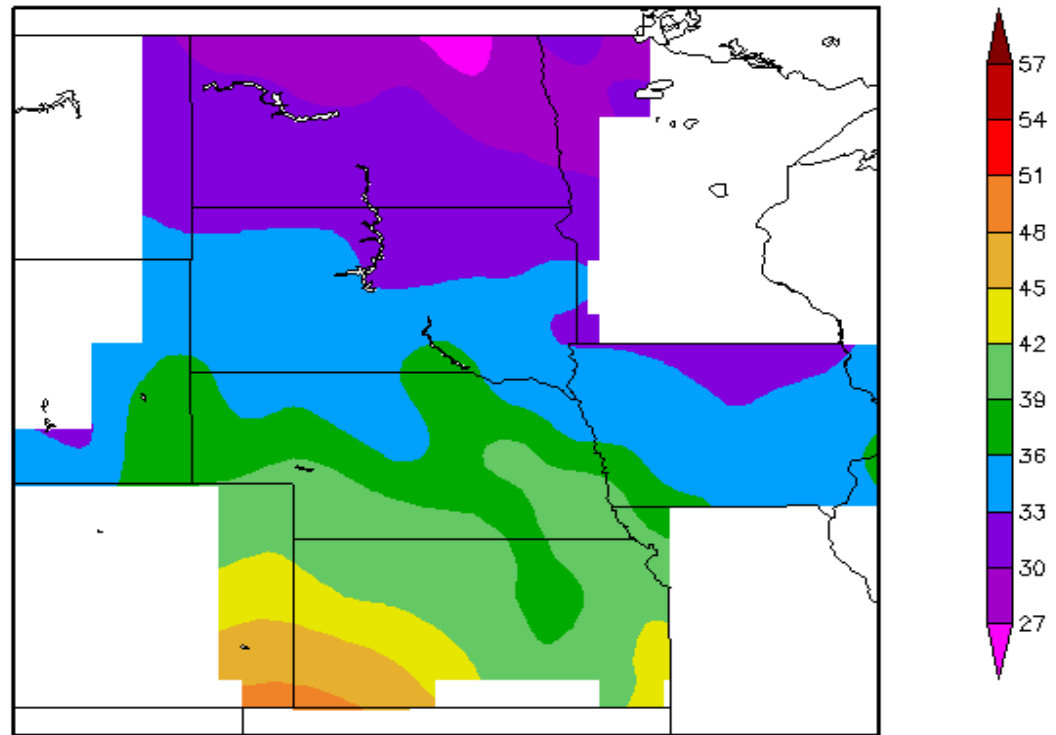


High Plains Regional Climate Center
Generated 3/27/2014 using AWDN data.



One Week Soil Temperature Average

Soil Temperature (F at 4 inches)
3/20/2014 – 3/26/2014



High Plains Regional Climate Center
Generated 3/27/2014 using AWON data.



Soil Temperature Impacts

- Potential wheat/alfalfa winterkill issues
- Minimum 4 inch soil temperatures <20 F (northern Panhandle, Sandhills, Northeast, Southwest, South Central, Central)
- Pockets of soil temperatures <15 F (northern Panhandle, northern Sandhills, Northeast, eastern ½ Southwest)
- Isolated pockets of soil temperatures <10 F (McCook, Gordon, Ainsworth, extreme Northeast)
- Very slow dormancy break

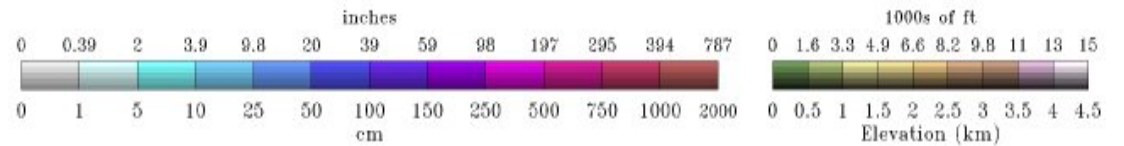
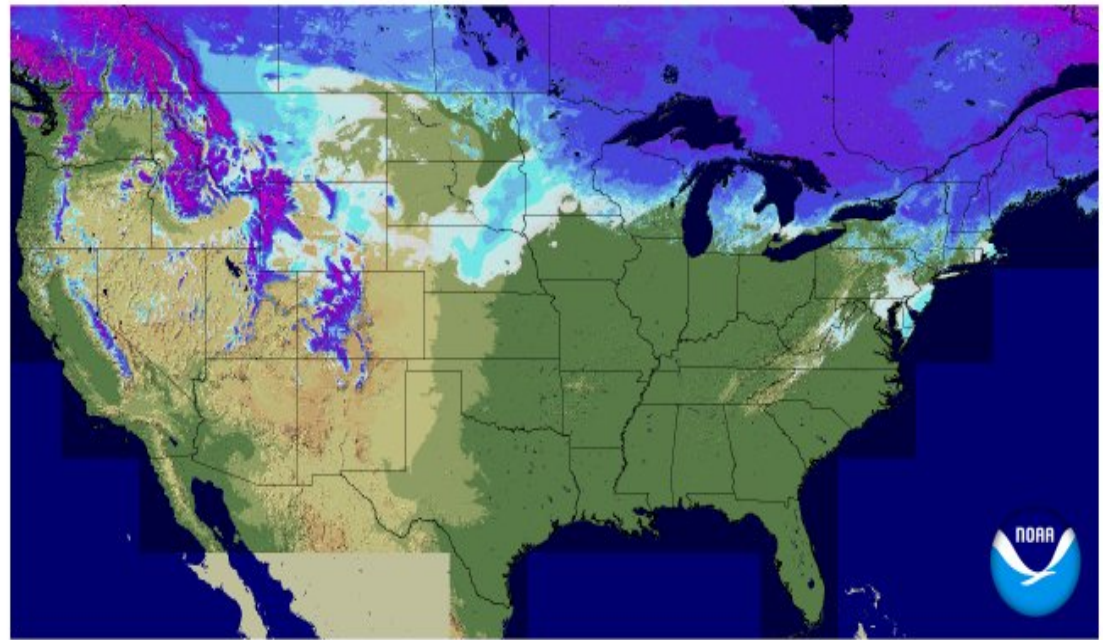


Current Snow Depth

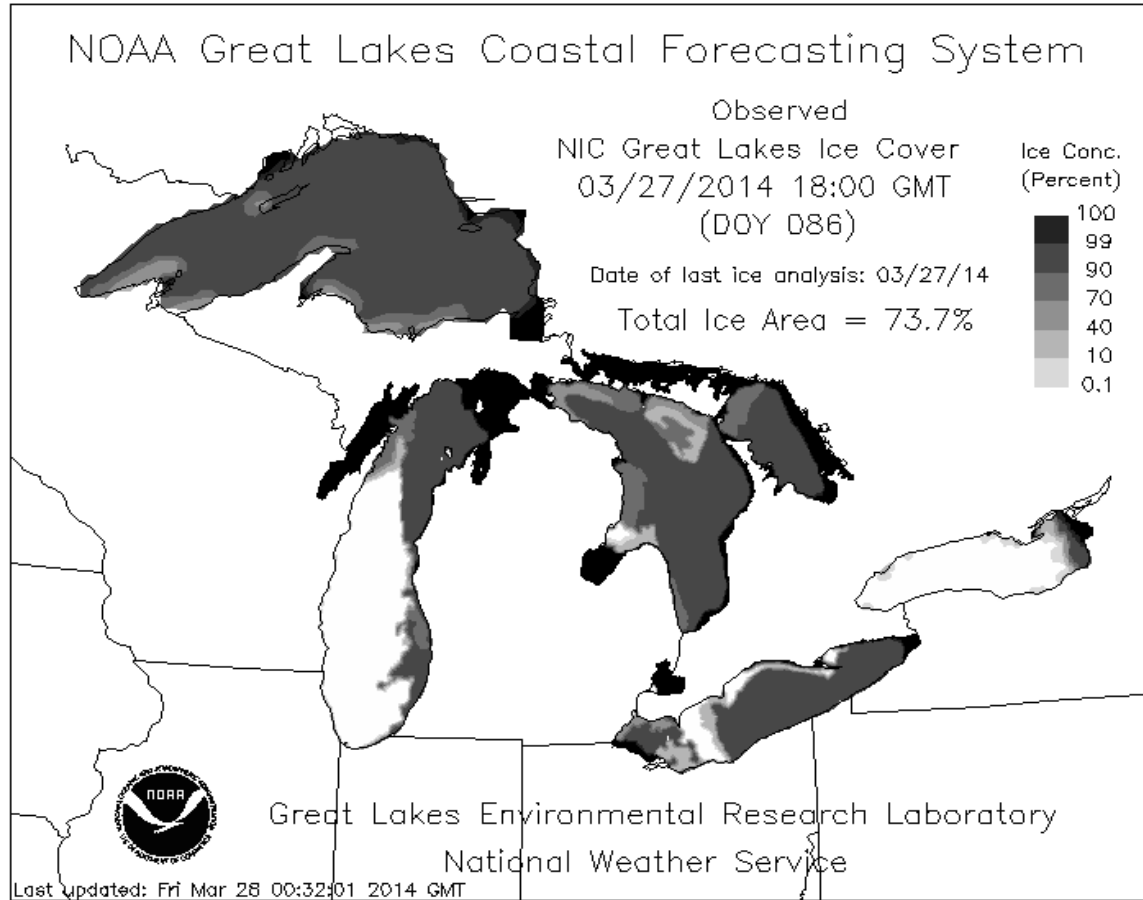
National Snow 2013-
Analysis 2014
NOHRSC

Snow Depth

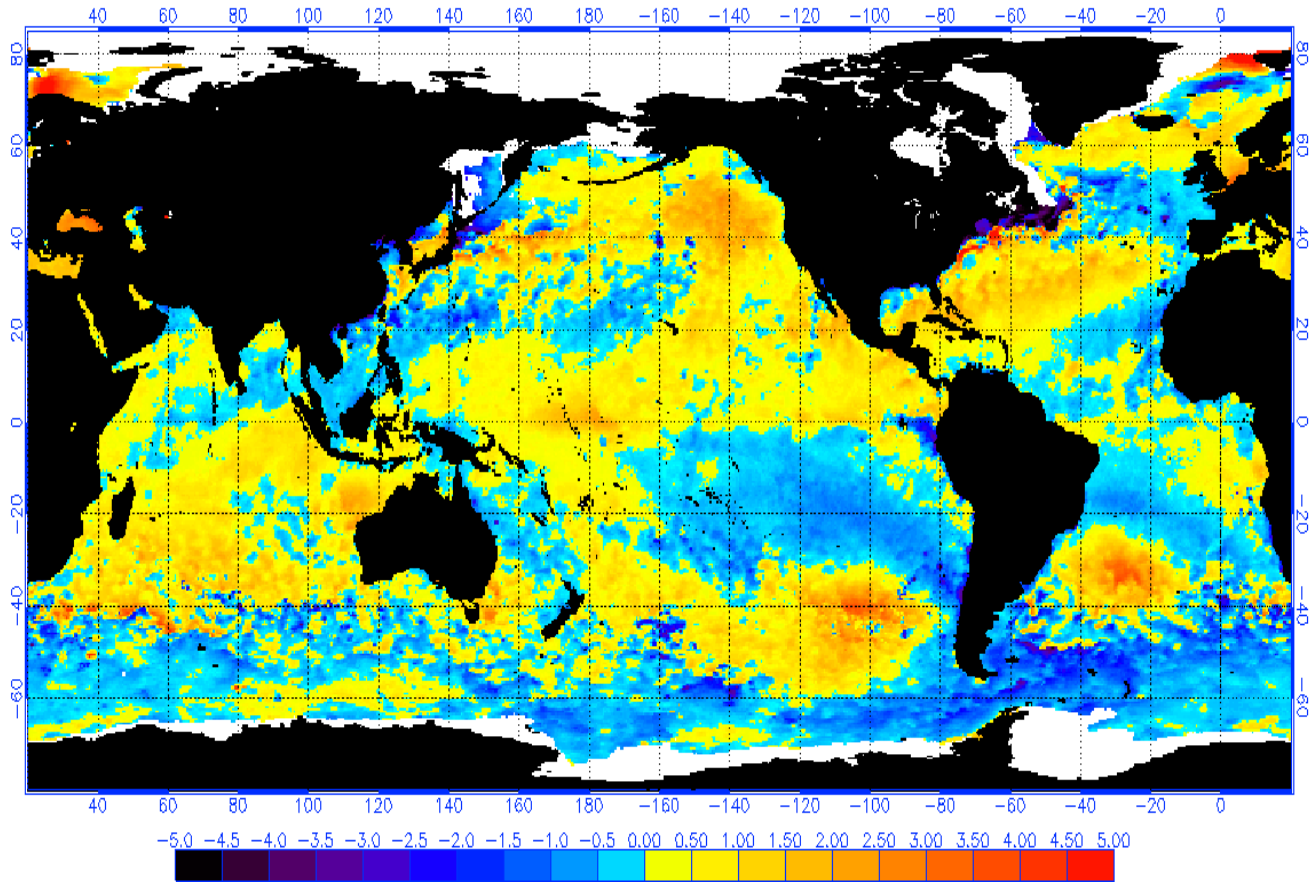
2014-03-28 06 UTC



Great Lakes Ice Cover

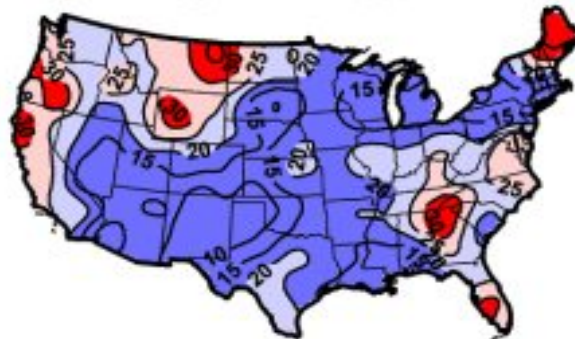


NOAA/NESDIS 50 KM GLOBAL ANALYSIS: SST Anomaly (degrees C), 3/27/2014
(white regions indicate sea-ice)

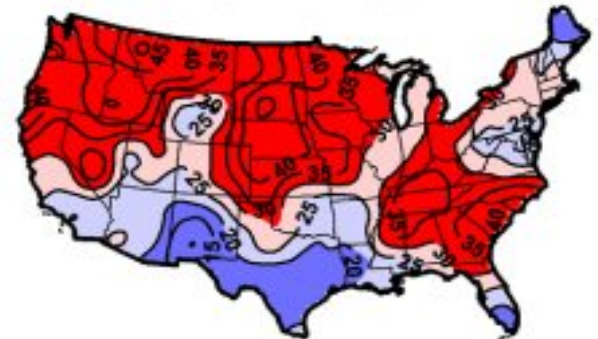


PDO/AMO Relationships

+PDO -AMO



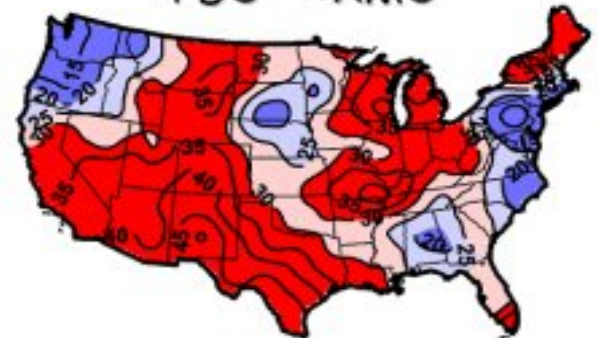
+PDO +AMO



-PDO -AMO



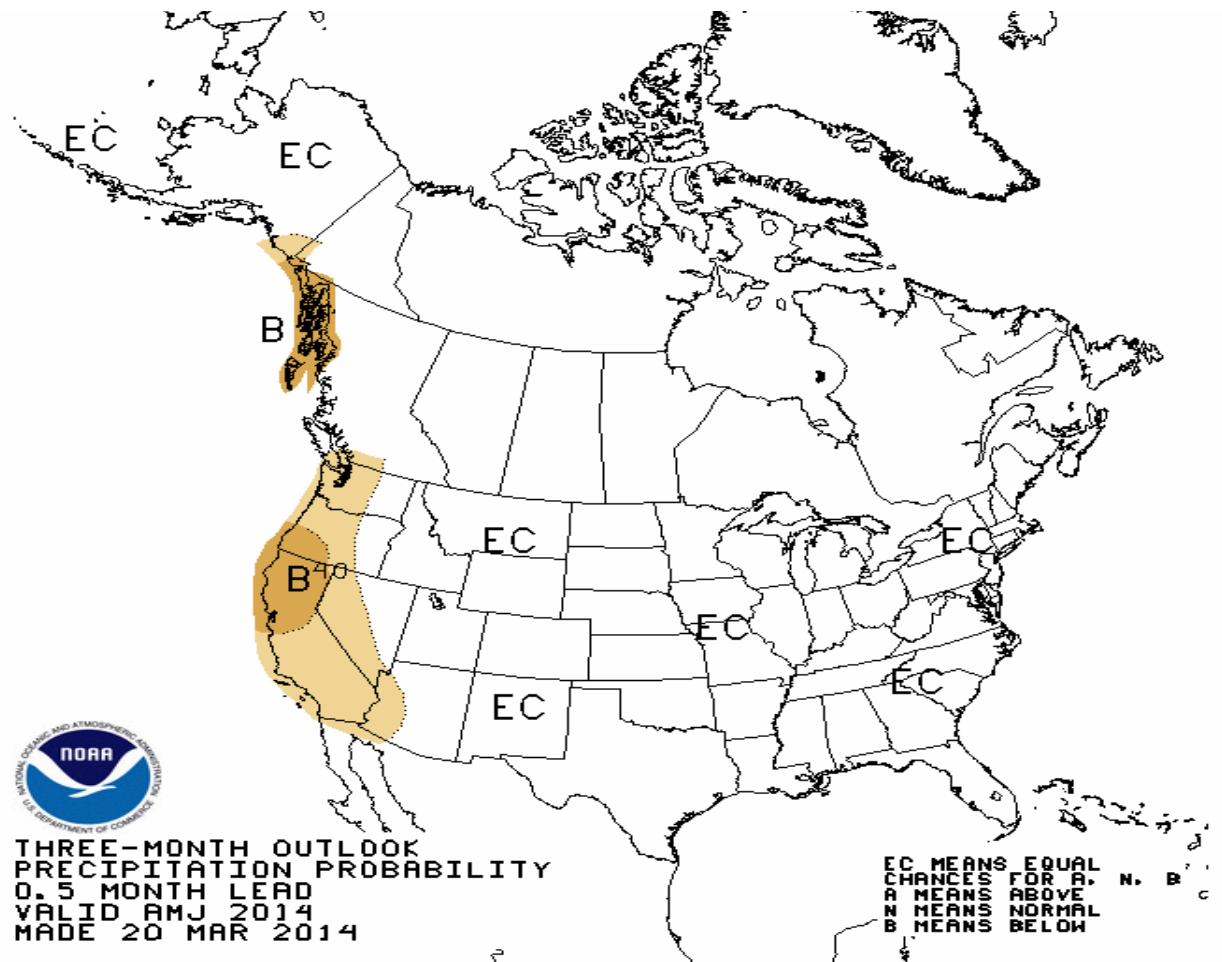
-PDO +AMO



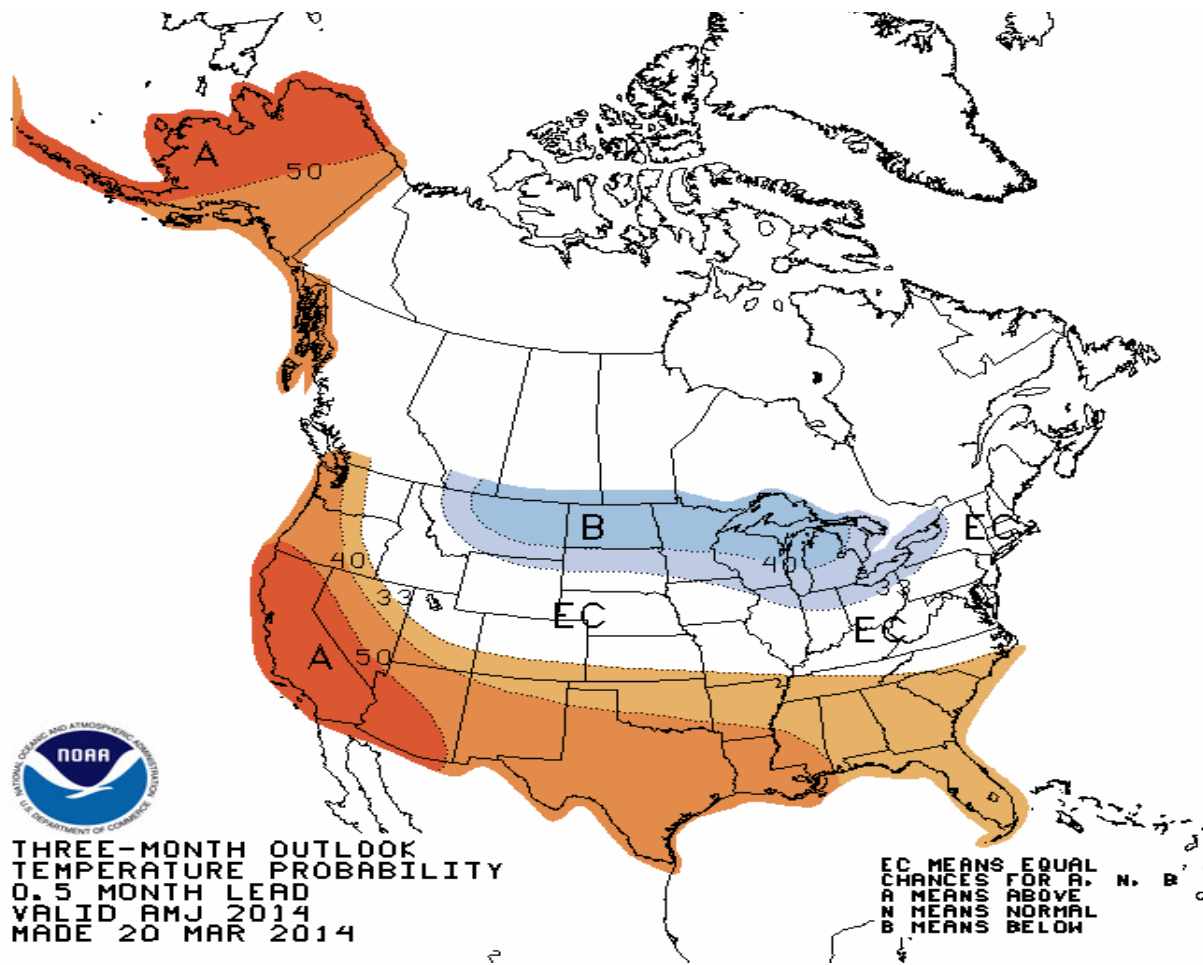
25% = normal drought frequency



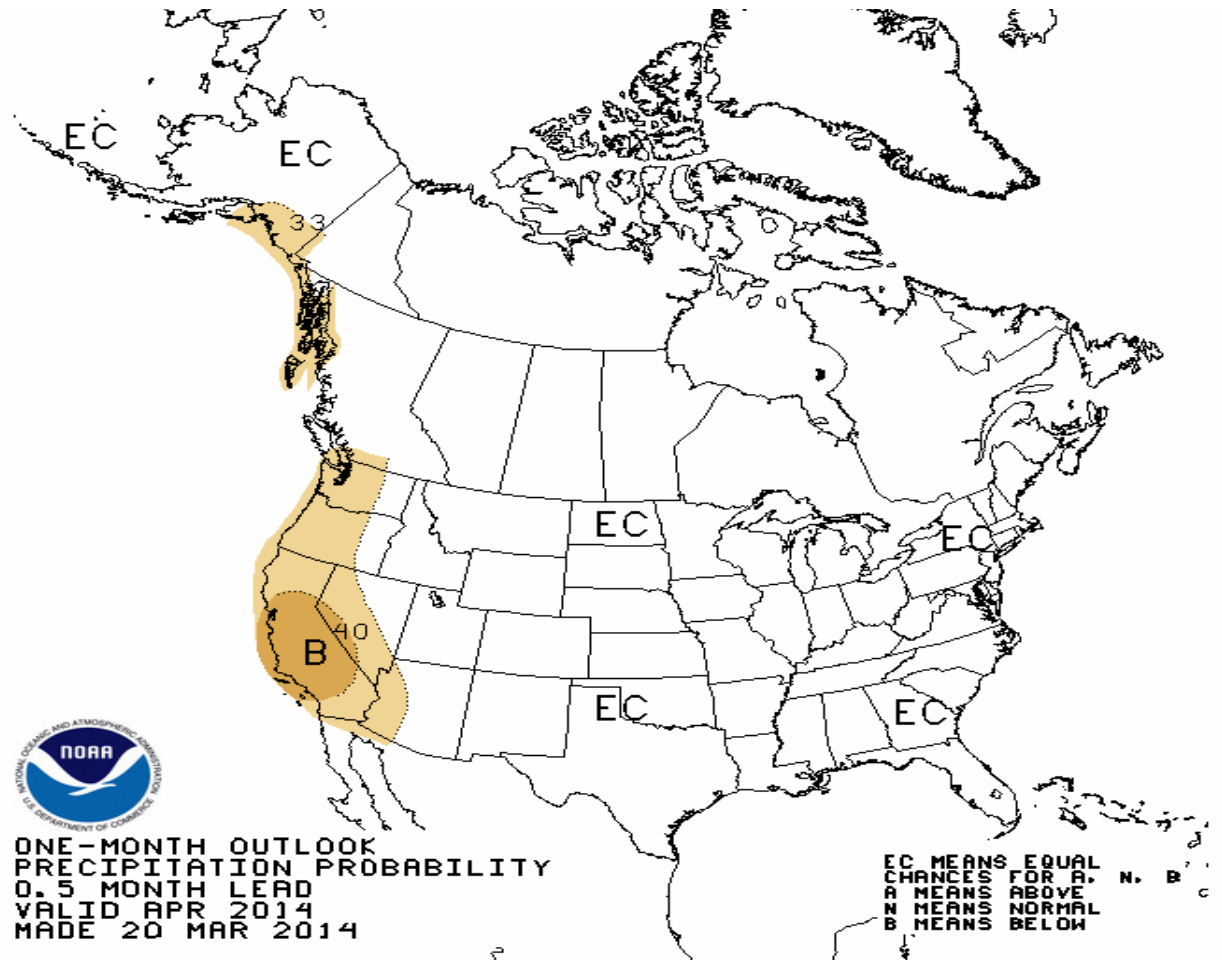
Three Month Outlook Precipitation



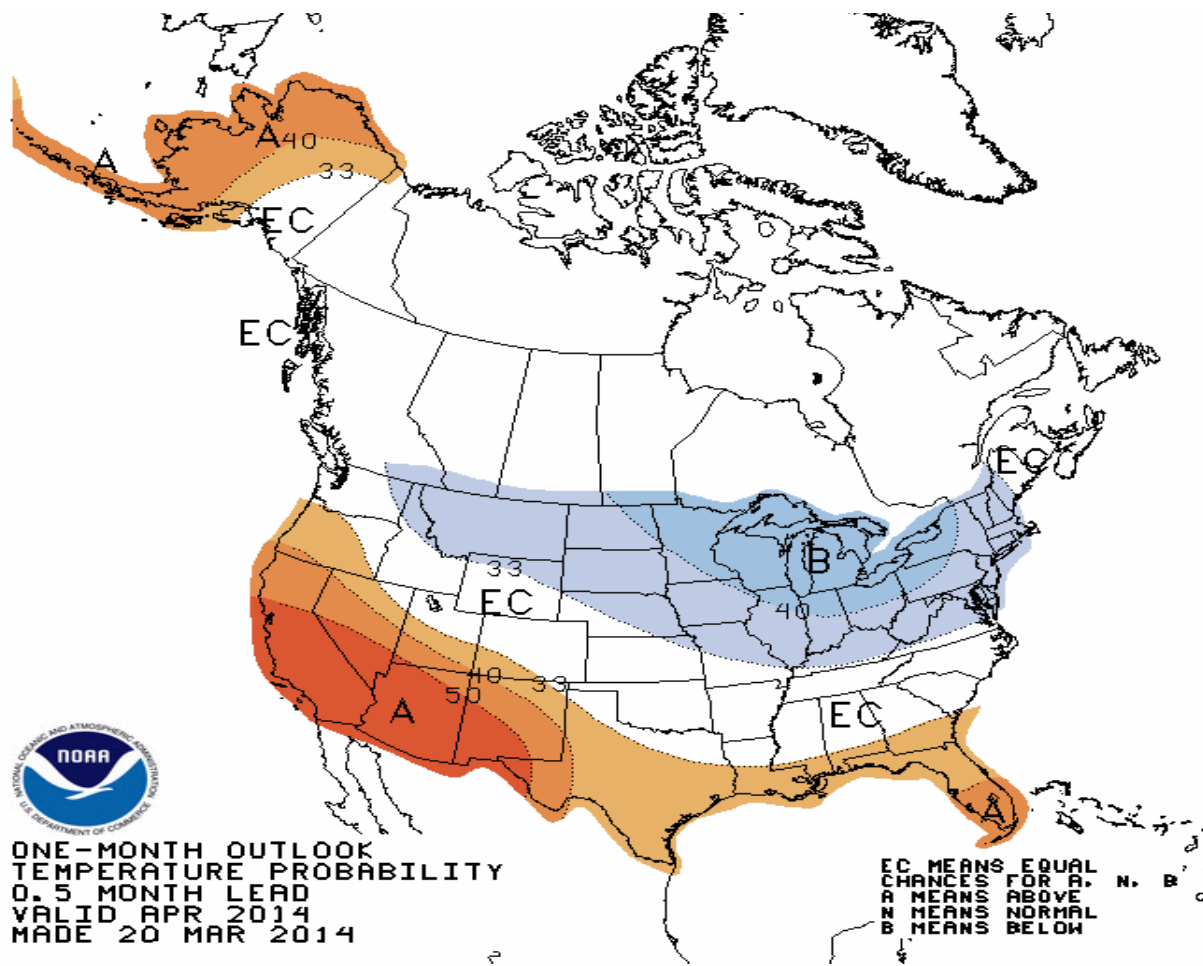
Three Month Temperature Outlook



April Precipitation Outlook



April Temperature Outlook



Short Term Influences

- Canadian Snowpack, Great Lakes ice cover
- Deep frost still remains across upper Midwest
- Polar Vortex appears to be weakening
- Warmer conditions developing?
- Central and northern Rockies Snowpack
- No El Nino formation now, increased odds late summer
- Eastern Pacific above normal, Atlantic neutral

