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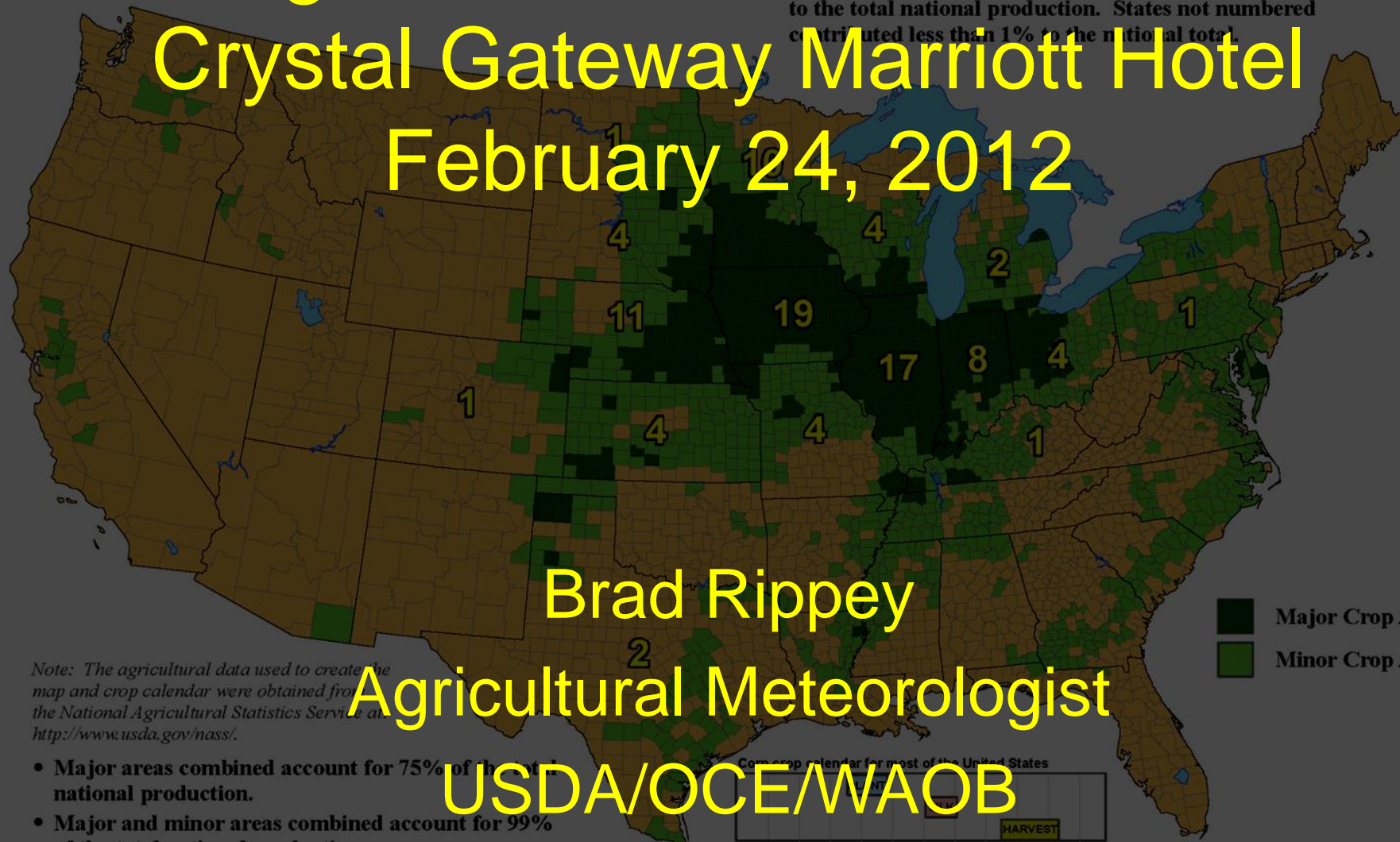
No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

United States: Corn

Agricultural Outlook Forum

Crystal Gateway Marriott Hotel

February 24, 2012



Brad Rippey

Agricultural Meteorologist

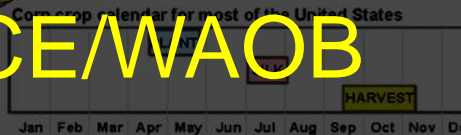
USDA/OCE/WAOB

Washington, D.C.

Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at <http://www.usda.gov/nass/>.

- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.

Minor areas and state production were based upon averaged NASS county-level and state-level data from 2000-2004.



Crop calendar dates are based upon NASS crop progress data from 2000-2004. The planting and crop development stages illustrated in the crop calendar represent the average time period when initial progress advanced from 10 to 90 percent.



U.S. Crop-Weather Outlook for the 2012 Growing Season

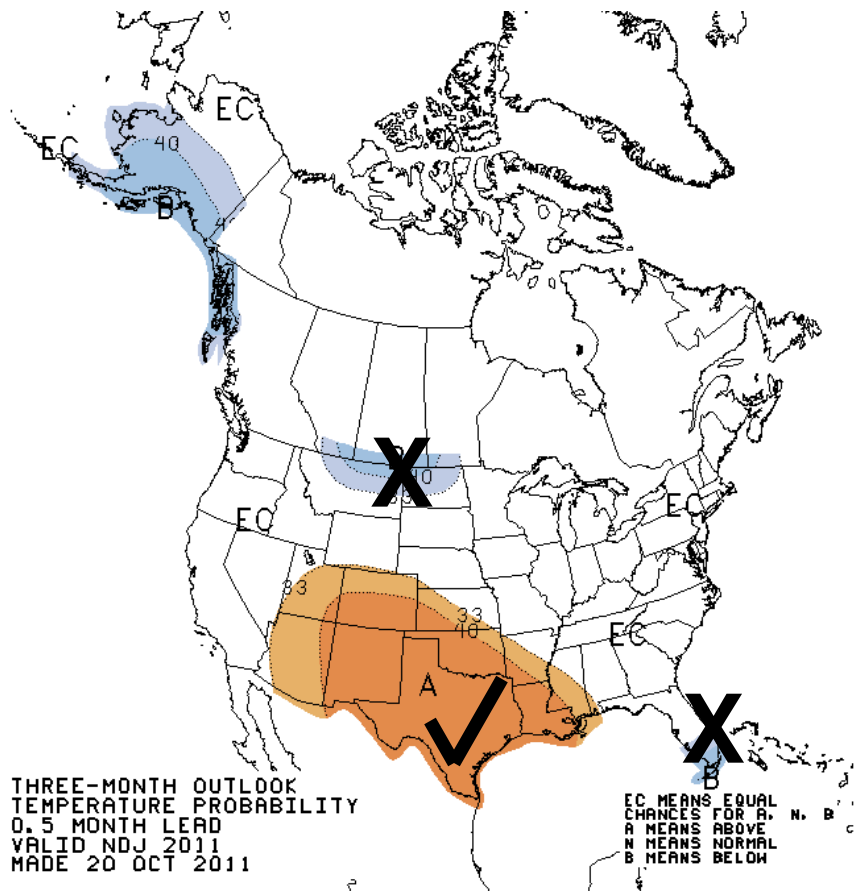
- **A review of conditions experienced in the winter of 2011-2012: “Year Without Winter”**
- Current conditions
- Projected weather patterns for the spring of 2012
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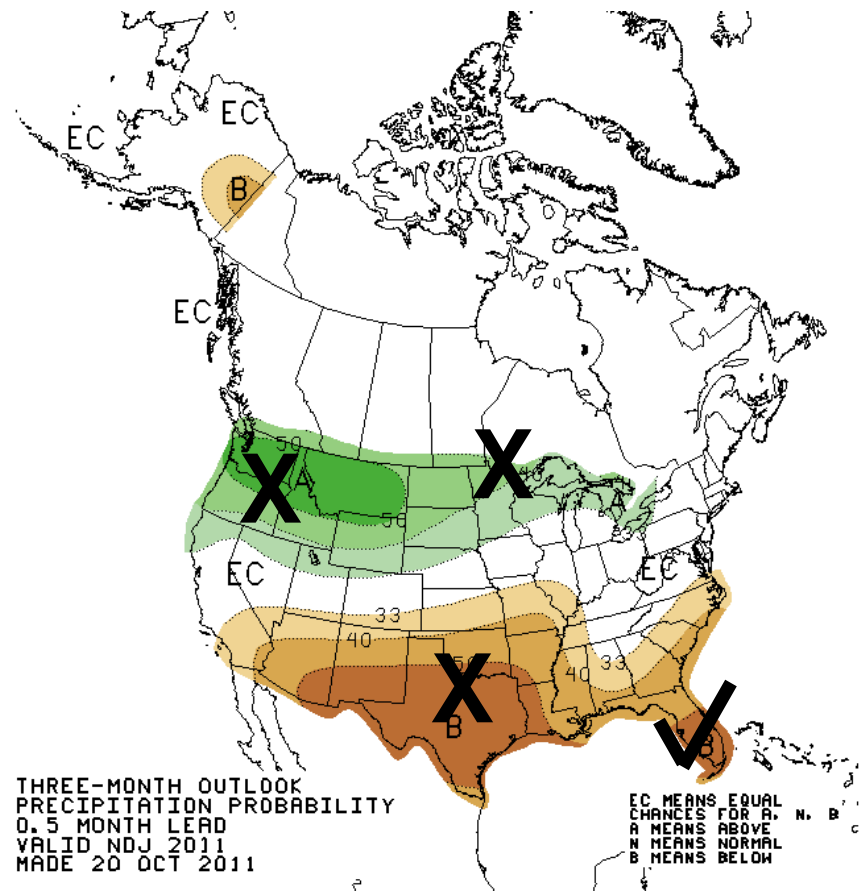
NWS Outlook

November 2011 – January 2012

Issued October 20, 2011



Temperature



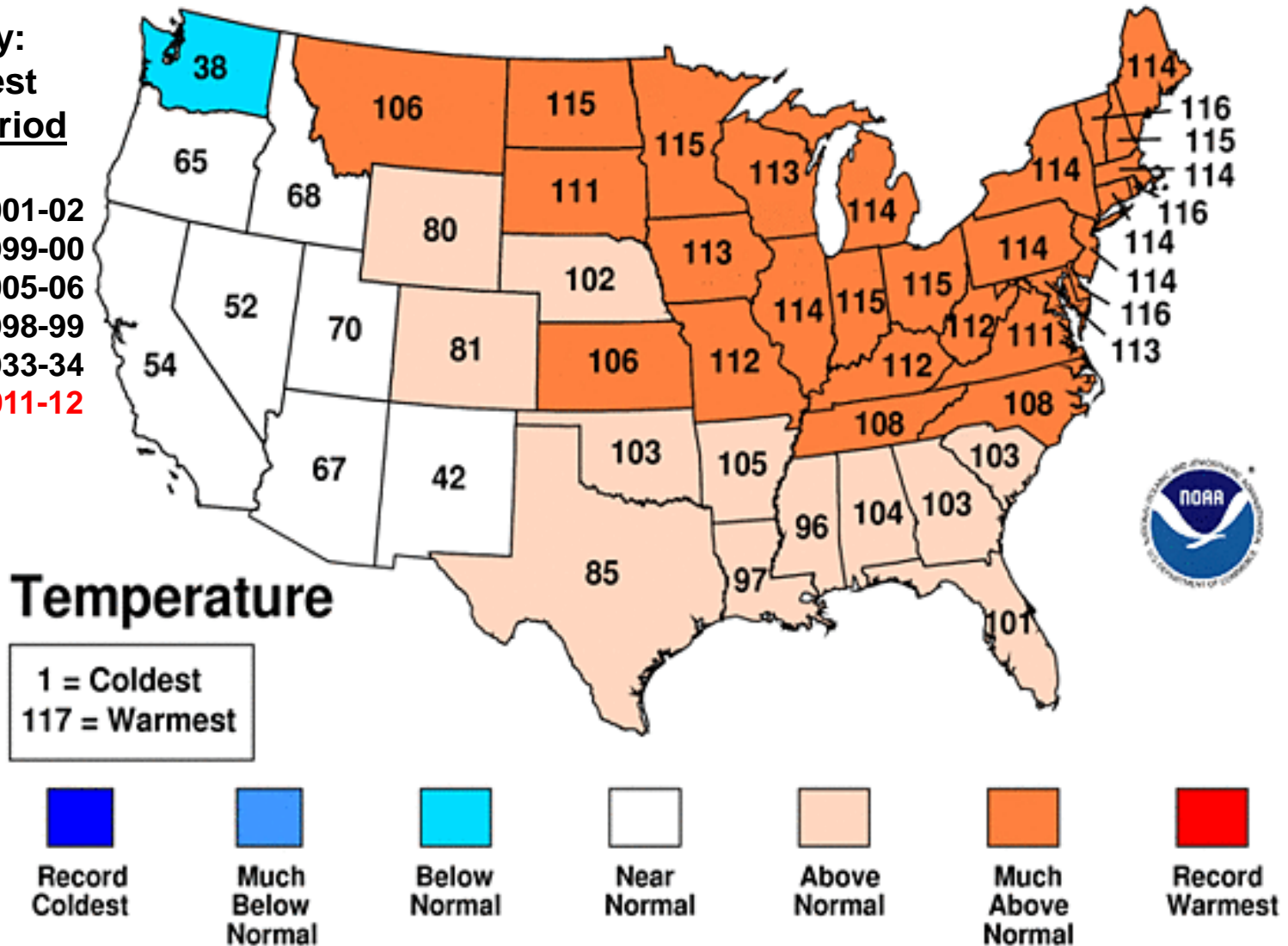
Precipitation

Nov 2011-Jan 2012 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA

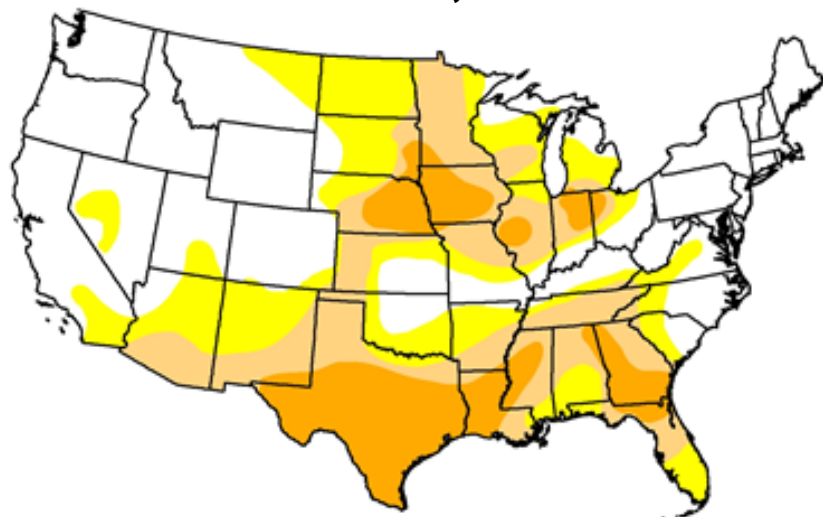
**Nationally:
6th-Warmest
Nov-Jan Period**

1. 40.0°F in 2001-02
2. 39.8°F in 1999-00
3. 39.4°F in 2005-06
4. 38.8°F in 1998-99
5. 38.8°F in 1933-34
6. **38.7°F in 2011-12**

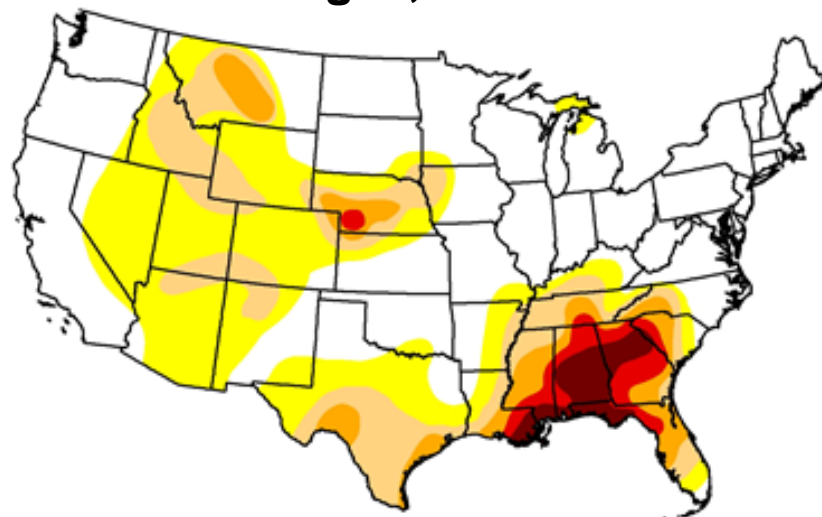


End-of-February and End-of-July Drought Monitors in Years with Warm Winters

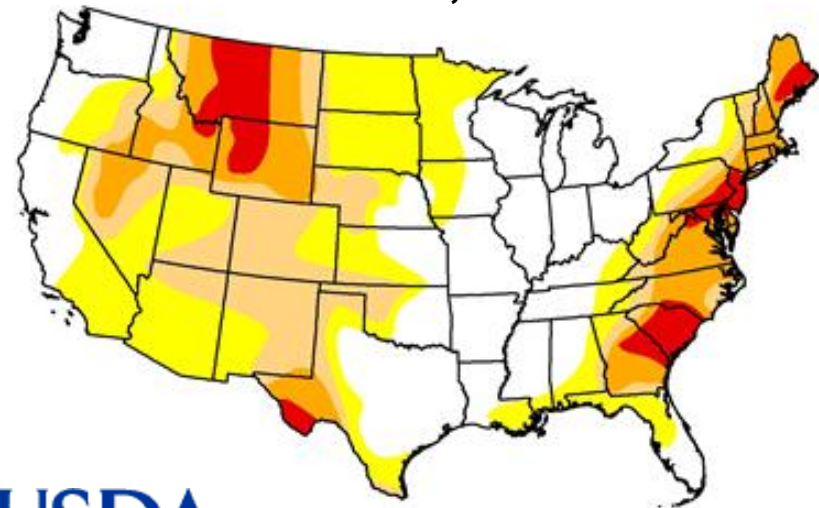
Feb. 29, 2000



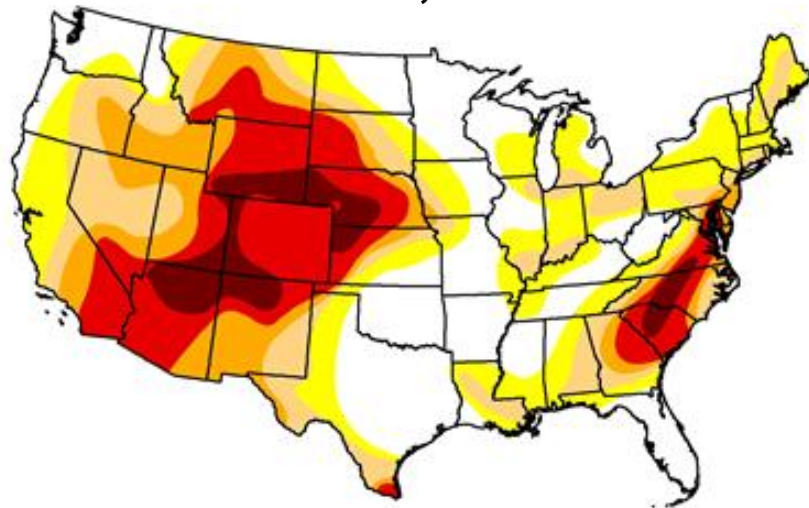
Aug. 1, 2000




Feb. 26, 2002





Jul. 30, 2002





Drought Severity

 D0 - Abnormally Dry

 D1 Drought - Moderate

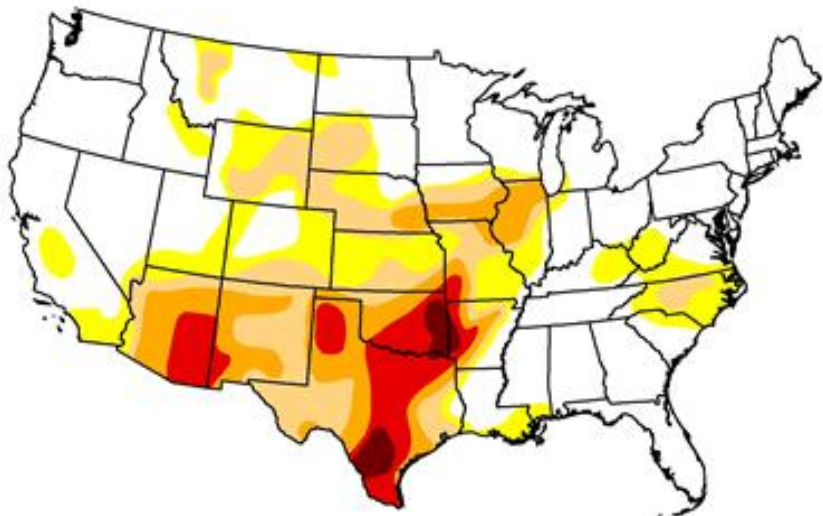
 D2 Drought - Severe

 D3 Drought - Extreme

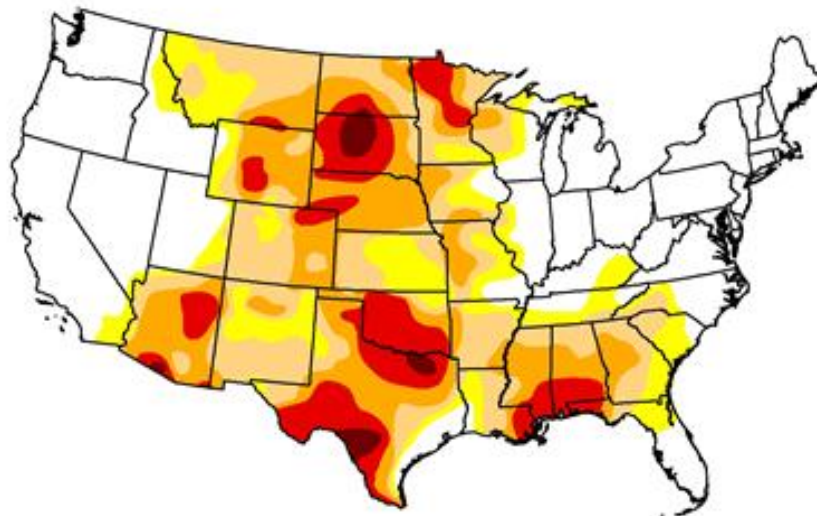
 D4 Drought - Exceptional

End-of-February and End-of-July Drought Monitors in Years with Warm Winters

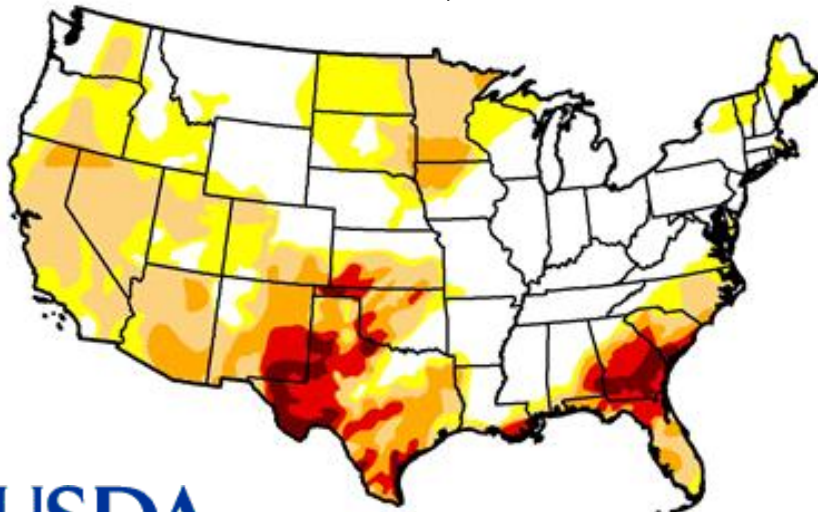
Feb. 28, 2006



Aug. 1, 2006

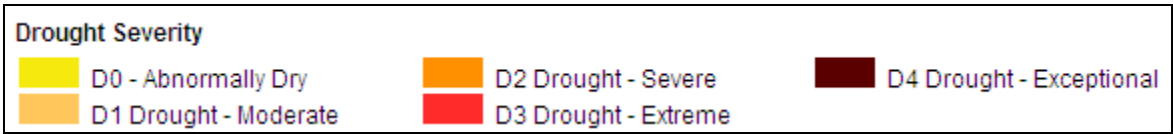


Feb. 21, 2012



Jul. 31, 2012

???



U.S. Crop-Weather Outlook for the 2012 Growing Season

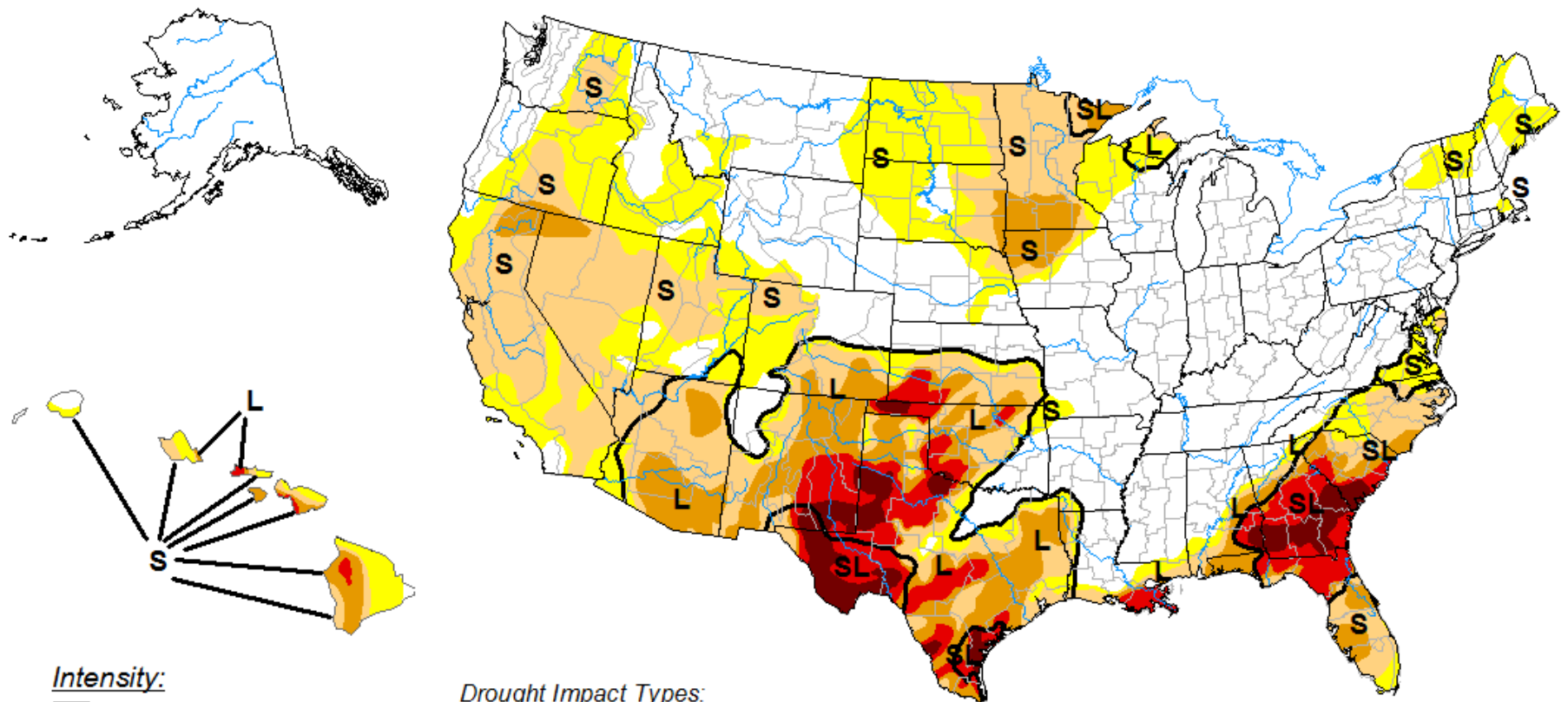
- A review of conditions experienced in the winter of 2011-2012: “Year Without Winter”
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U.S. Drought Monitor

February 21, 2012


Valid 7 a.m. EST



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.

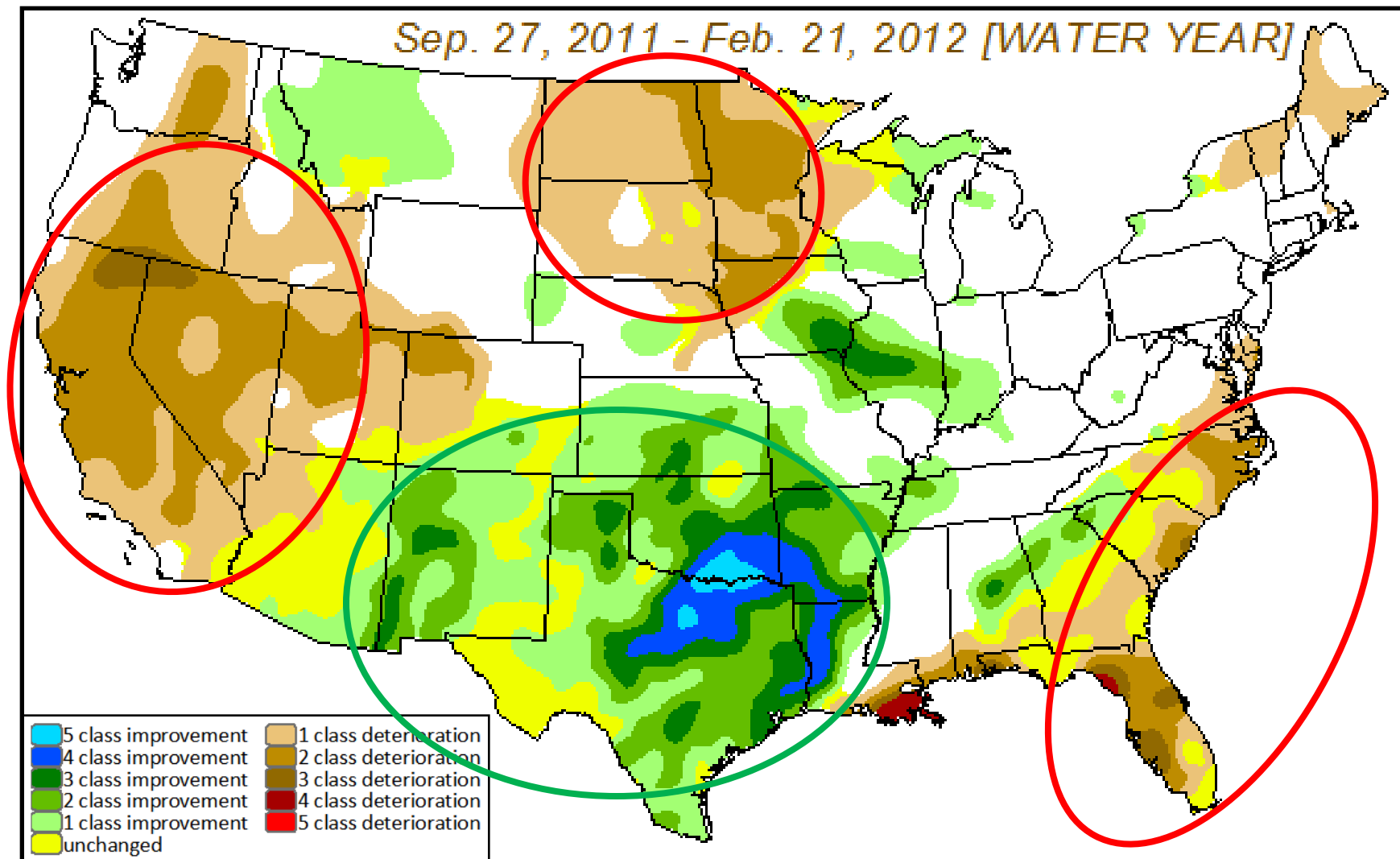


Released Thursday, February 23, 2012

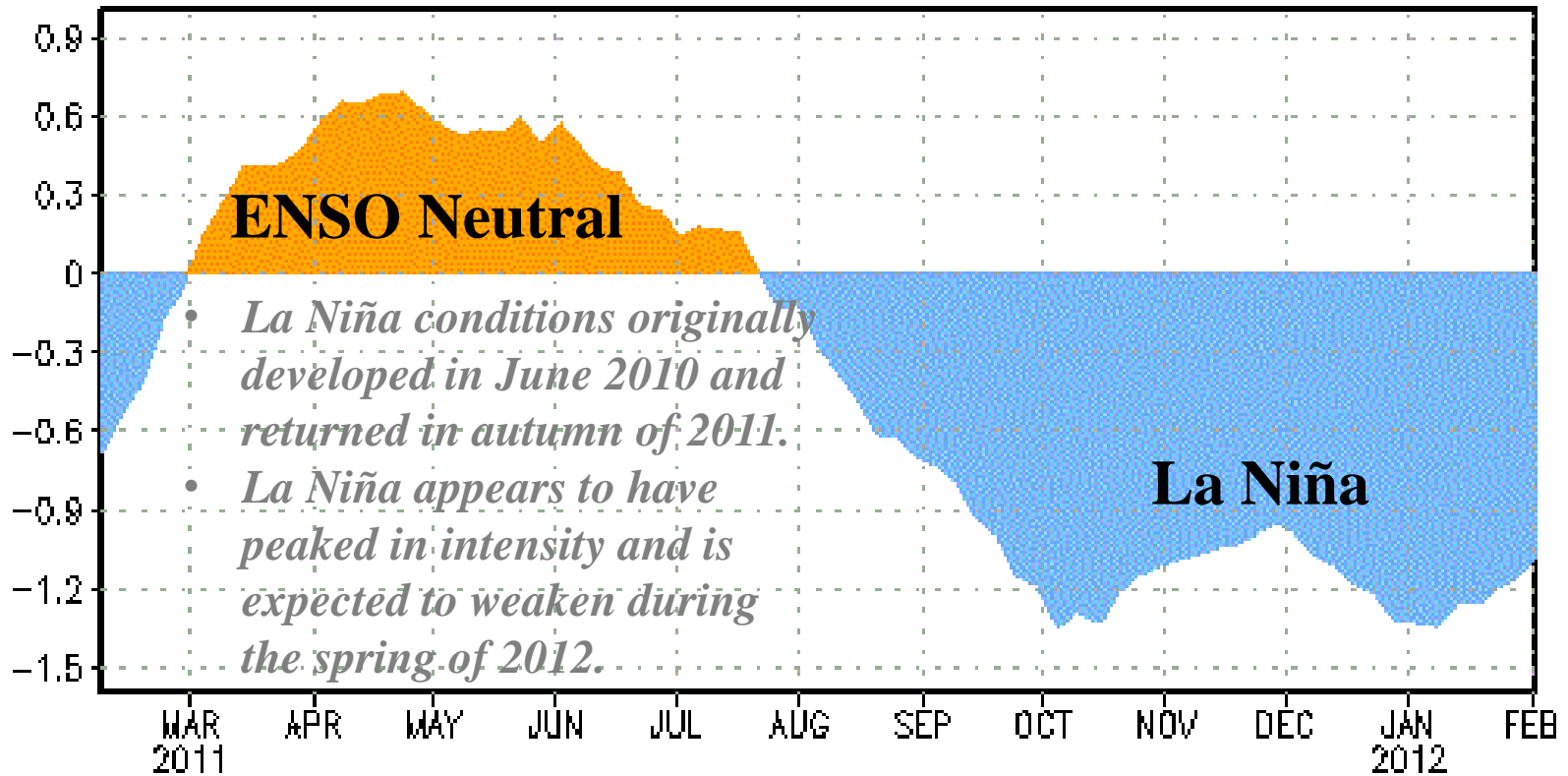
Author: Mark Svoboda, National Drought Mitigation Center

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

Drought Monitor Change Since September 27, 2011



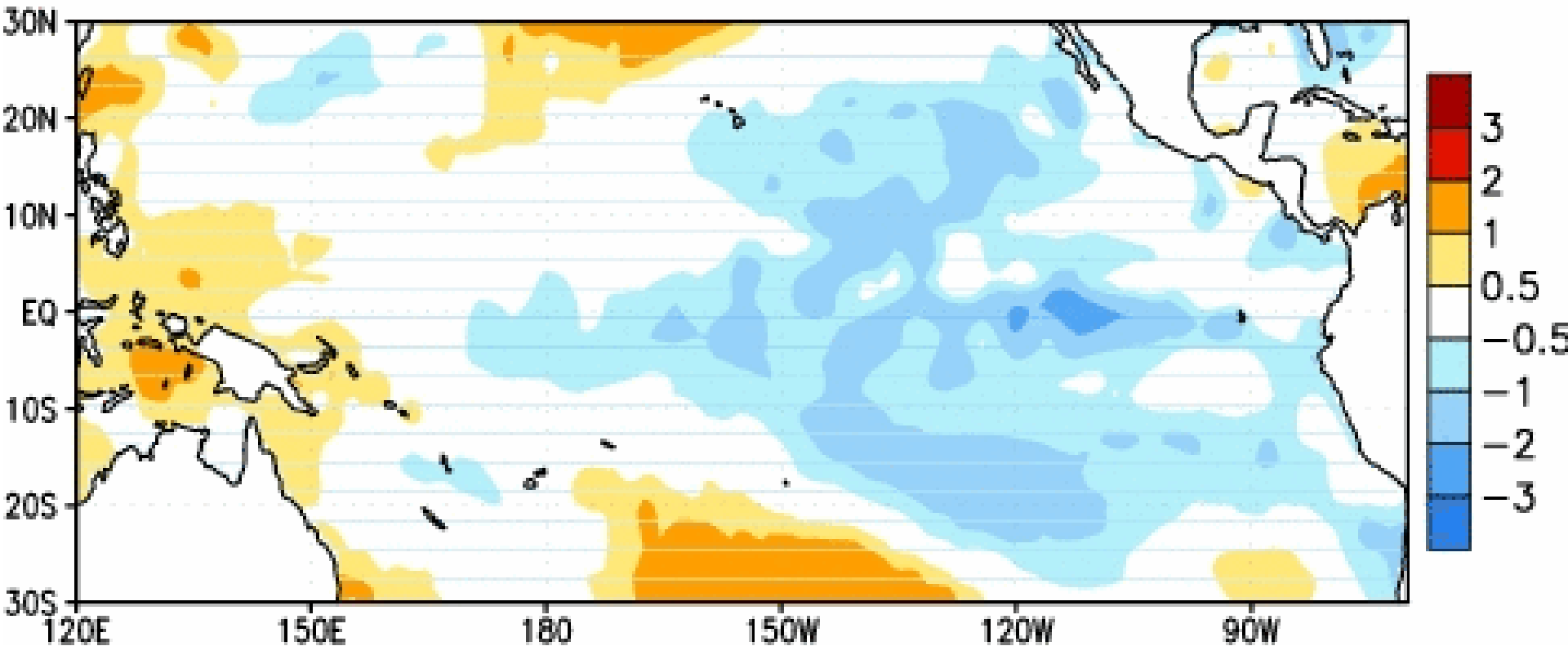
Equatorial Pacific (180-100°W) Sea Surface Temperature (SST) Departures From Normal (°C)



ENSO-neutral conditions during the spring and summer of 2011 were replaced by a return to La Niña during the autumn of 2011. Since early 2012, La Niña has appeared to weaken.

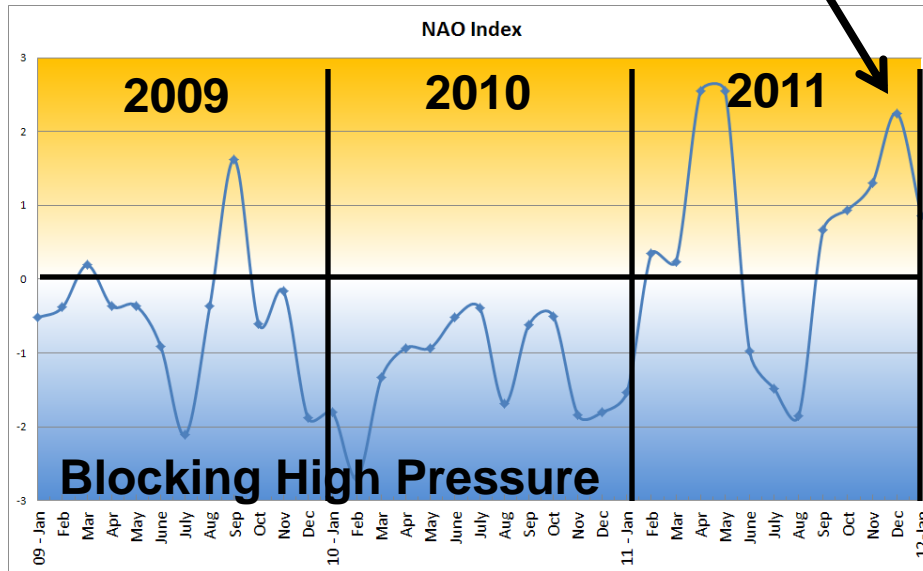
Sea Surface Temperature (SST) Animation

Week centered on 23 NOV 2011
SST Anomalies (°C)



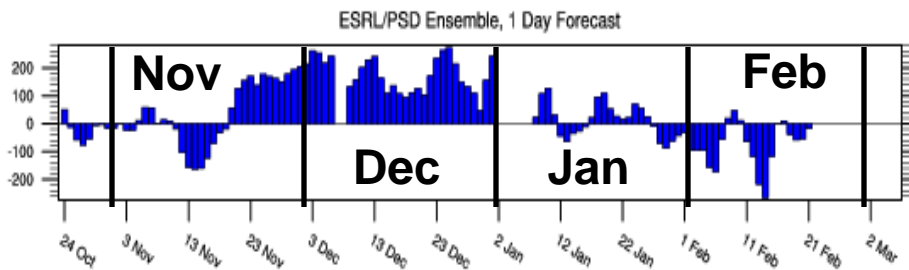
North Atlantic Oscillation

Low Pressure: Vacuum Effect



- Strongly negative most of the time from autumn 2009 to early 2011 (e.g. blocking high-pressure system over the North Atlantic Ocean), leading to cold, stormy U.S. weather.

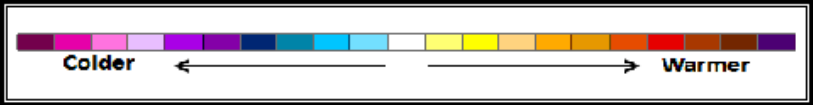
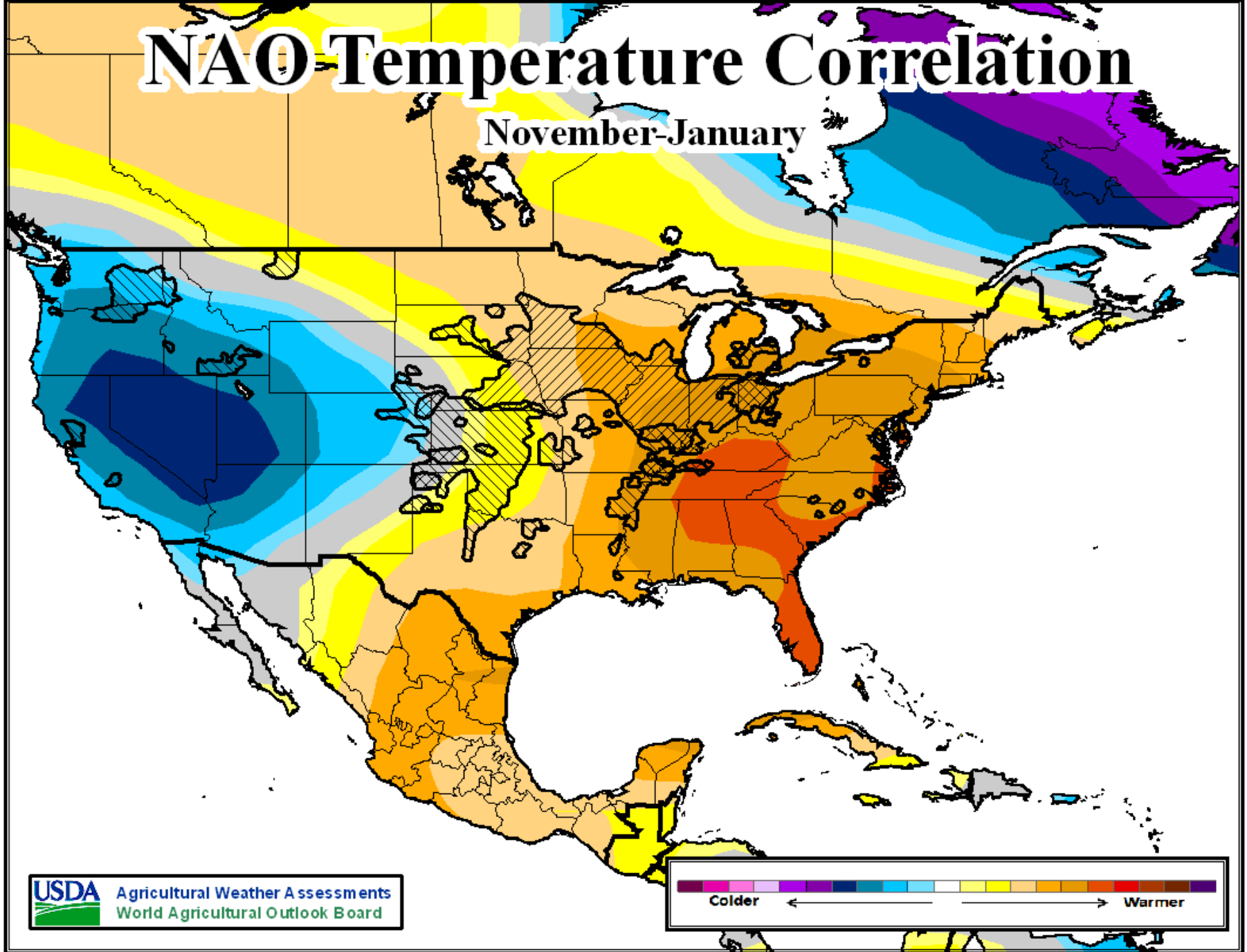
NAO Index. Last Fcst= 00Z 20 Feb



- Strongly positive for much of the winter of 2011-12, preventing cold air from reaching the U.S. for any length of time.

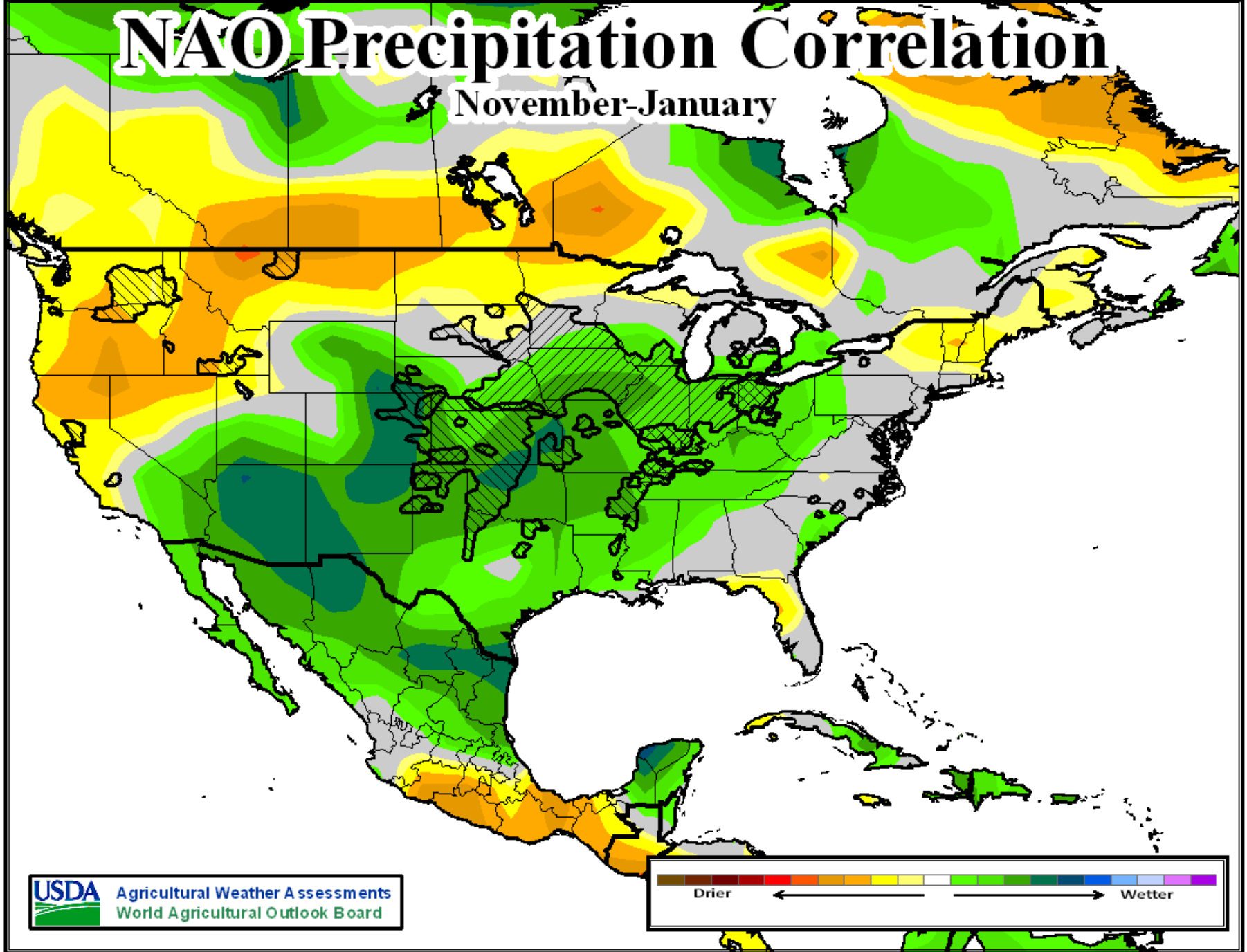
NAO Temperature Correlation

November-January

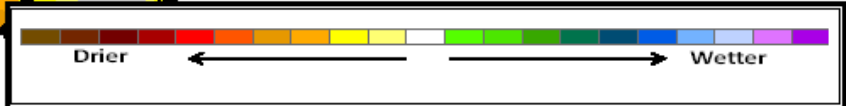


NAO Precipitation Correlation

November-January



USDA Agricultural Weather Assessments
World Agricultural Outlook Board



U.S. Crop-Weather Outlook for the 2011 Growing Season

- A review of conditions experienced in the winter of 2011-2012
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- **Projected weather patterns for the spring of 2012**
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Note: USDA does not make official weather or climate forecasts for the federal government. The National Weather Service's Climate Prediction Center provides such outlooks.



Pacific Niño 3.4 SST Outlook

- Nearly all models indicate that La Niña will weaken in the coming months.
- A majority of models and all three multi-model forecasts indicate ENSO-neutral conditions developing during spring 2012 (Niño-3.4 SST anomalies between -0.5°C and $+0.5^{\circ}\text{C}$).

Mid-Feb 2012 Plume of Model ENSO Predictions

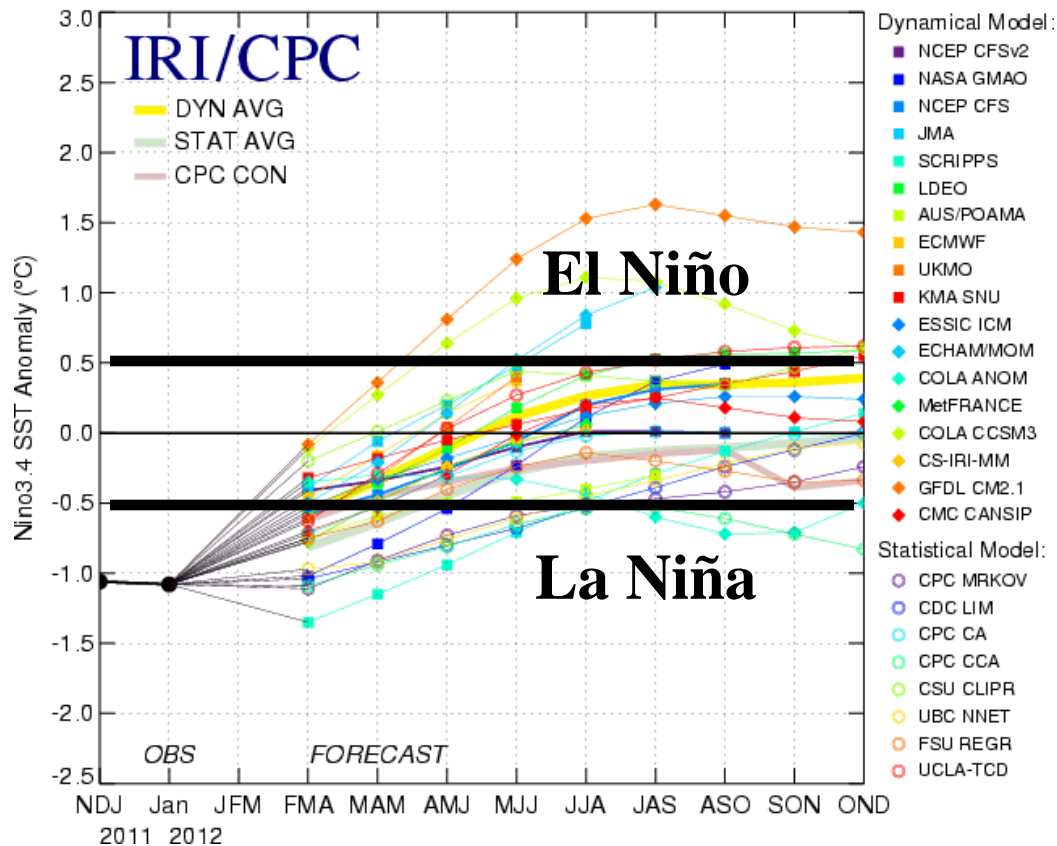
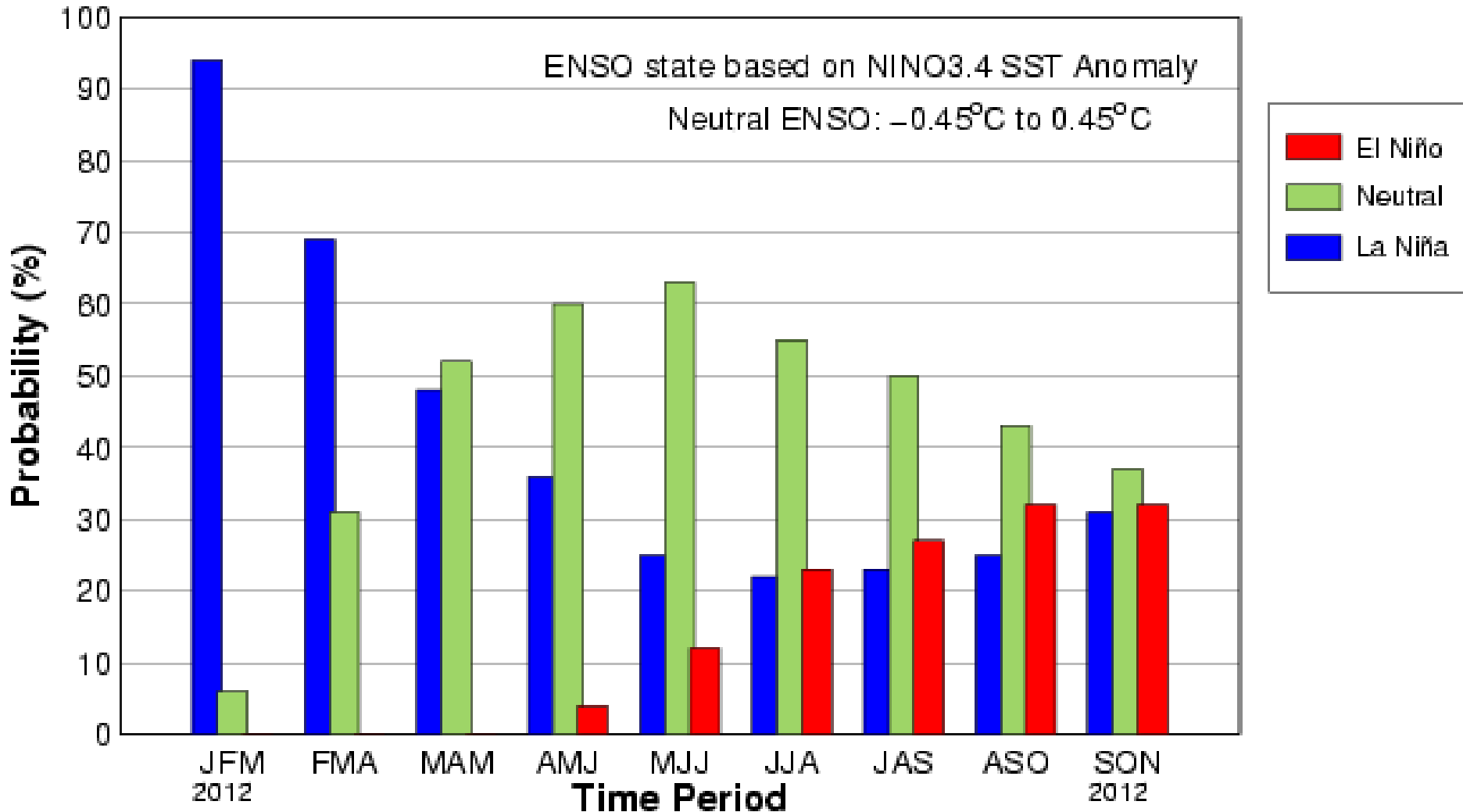


Figure provided by the International Research Institute (IRI) for Climate and Society (updated 16 February 2012).

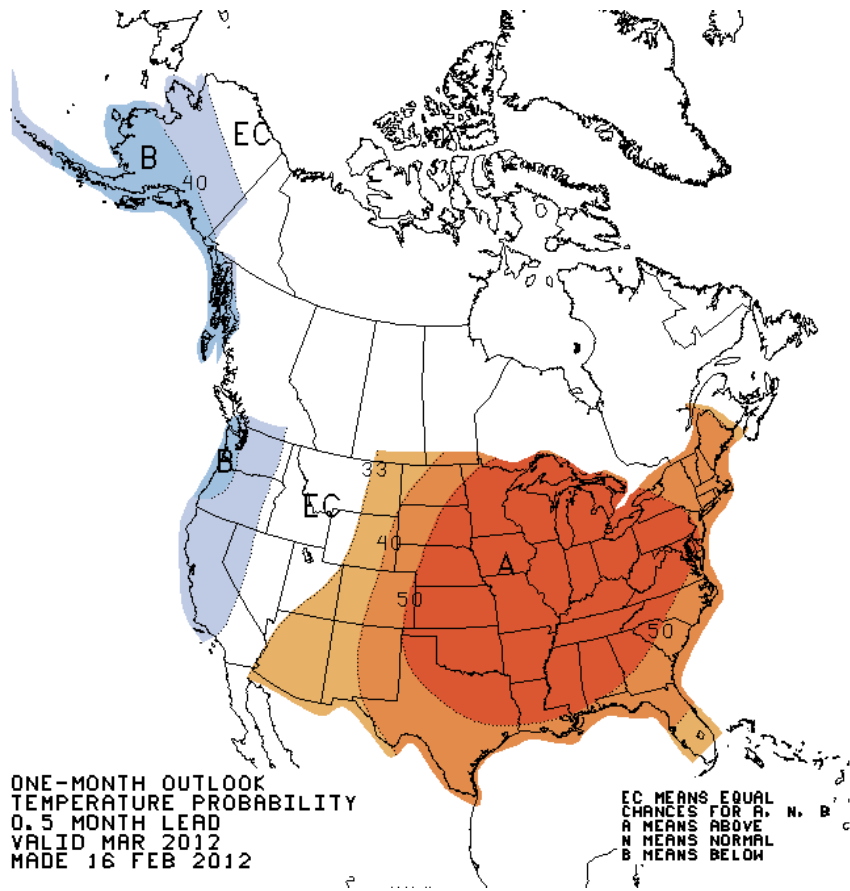
For more information go to: <http://www.cpc.noaa.gov/products/precip/CWlink/MJO/enso.shtml>

ENSO Probabilities for 2012

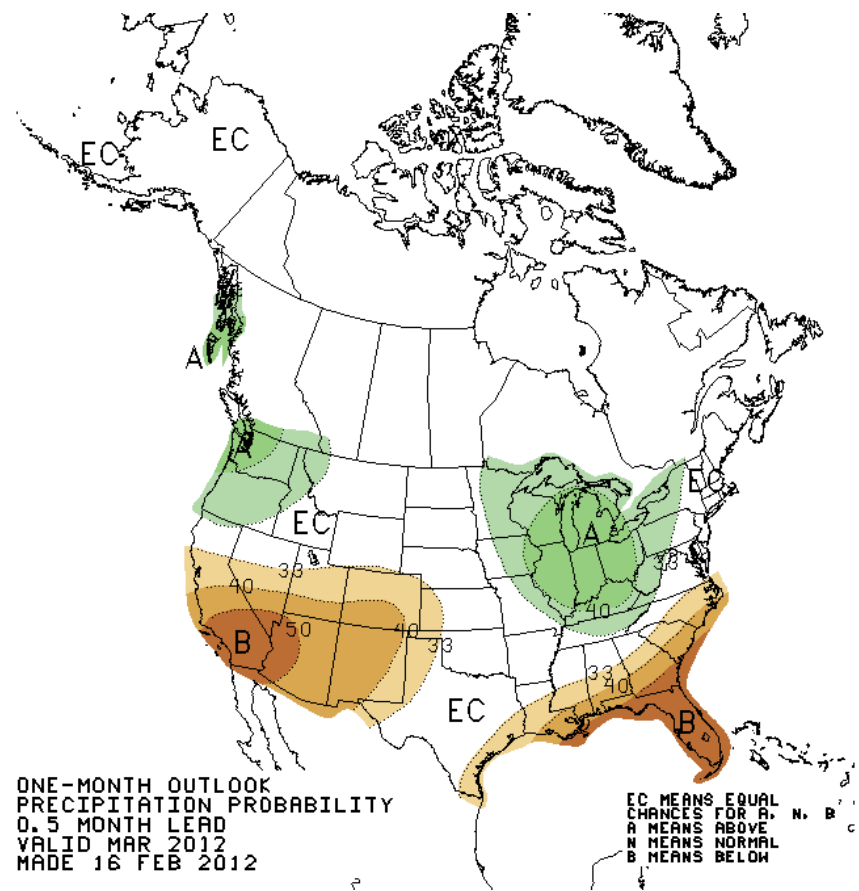
Official Early-Feb CPC/IRI Consensus Probabilistic ENSO Forecast



NWS Outlook March 2012 Issued February 16



Temperature

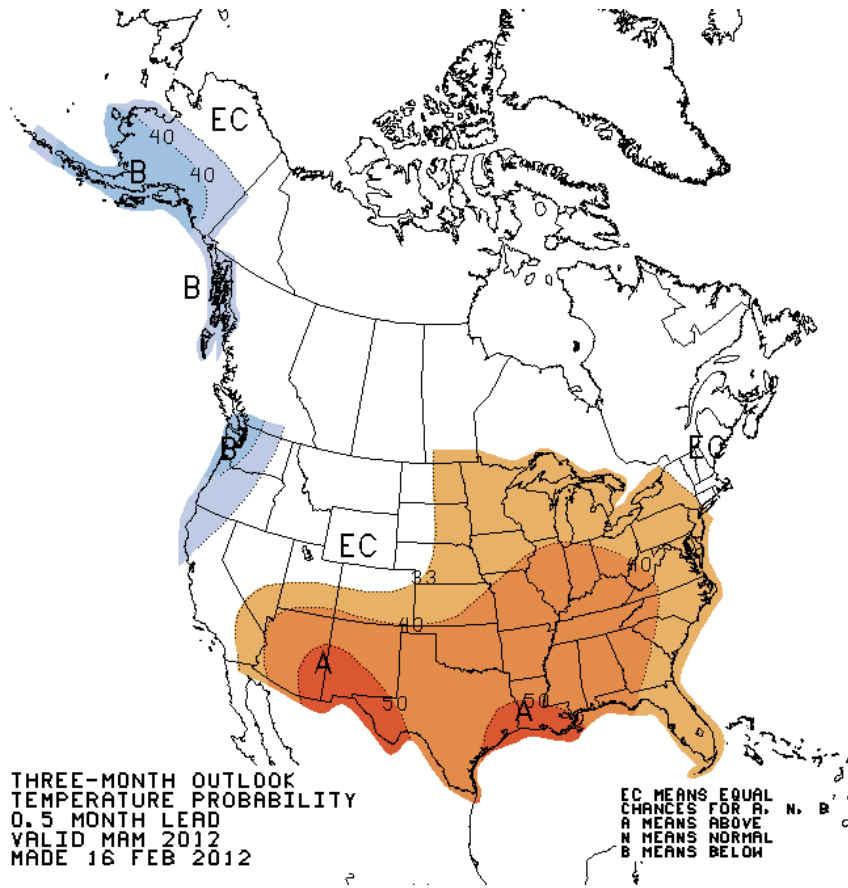


Precipitation

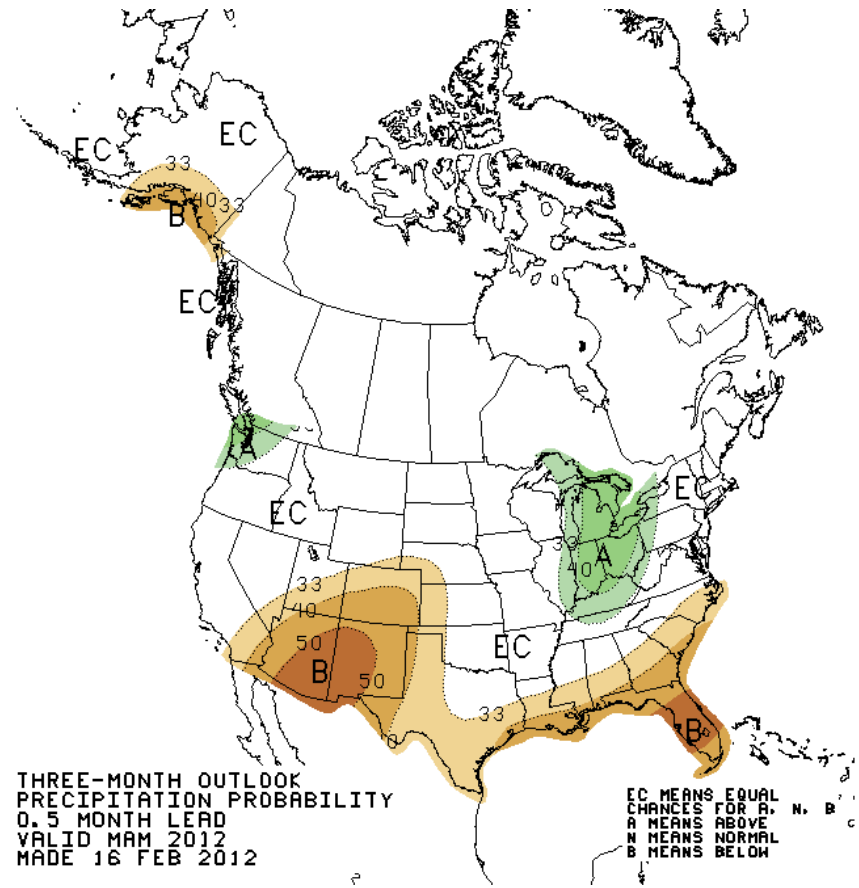
NWS Outlook

March – May 2012

Issued February 16



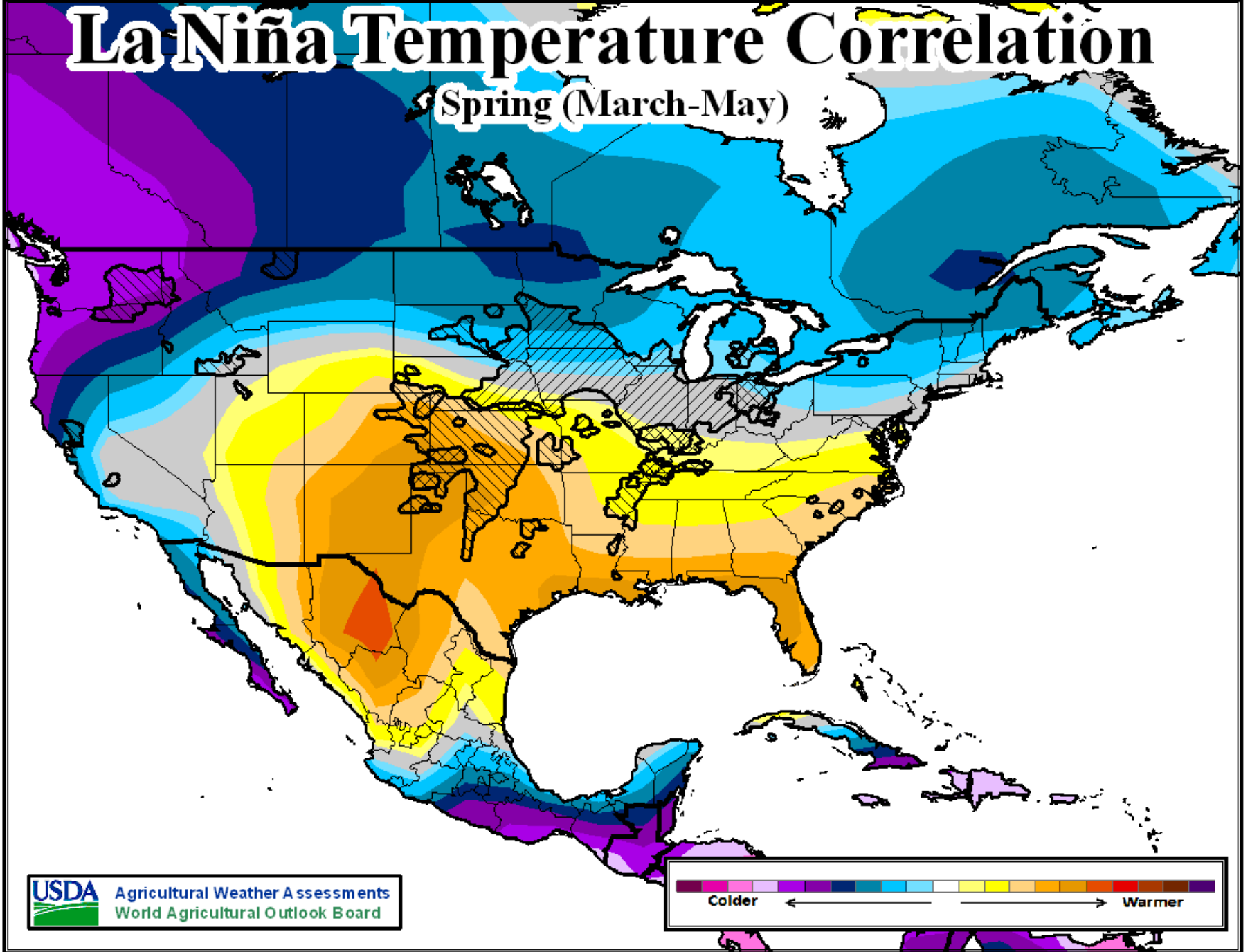
Temperature



Precipitation

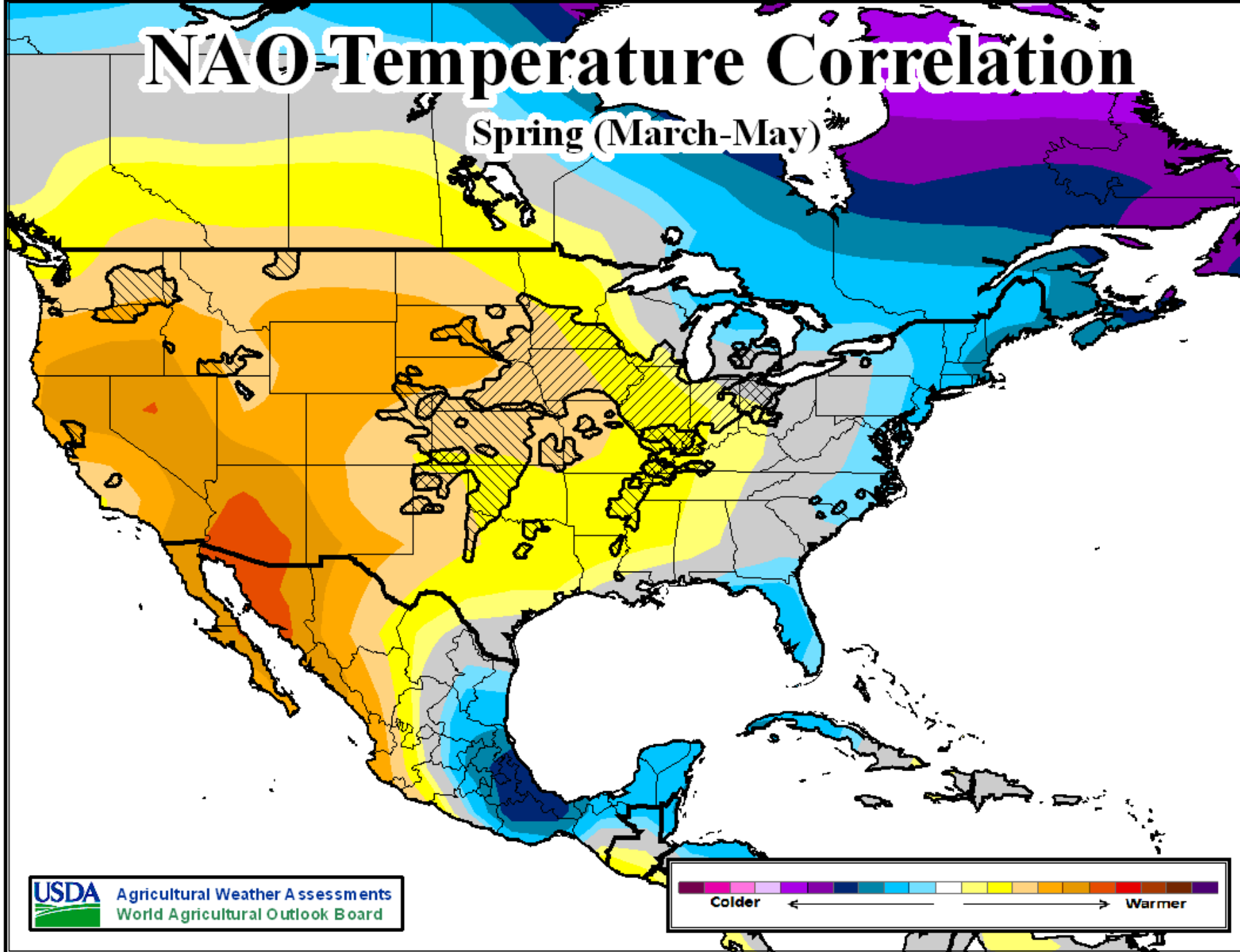
La Niña Temperature Correlation

Spring (March-May)



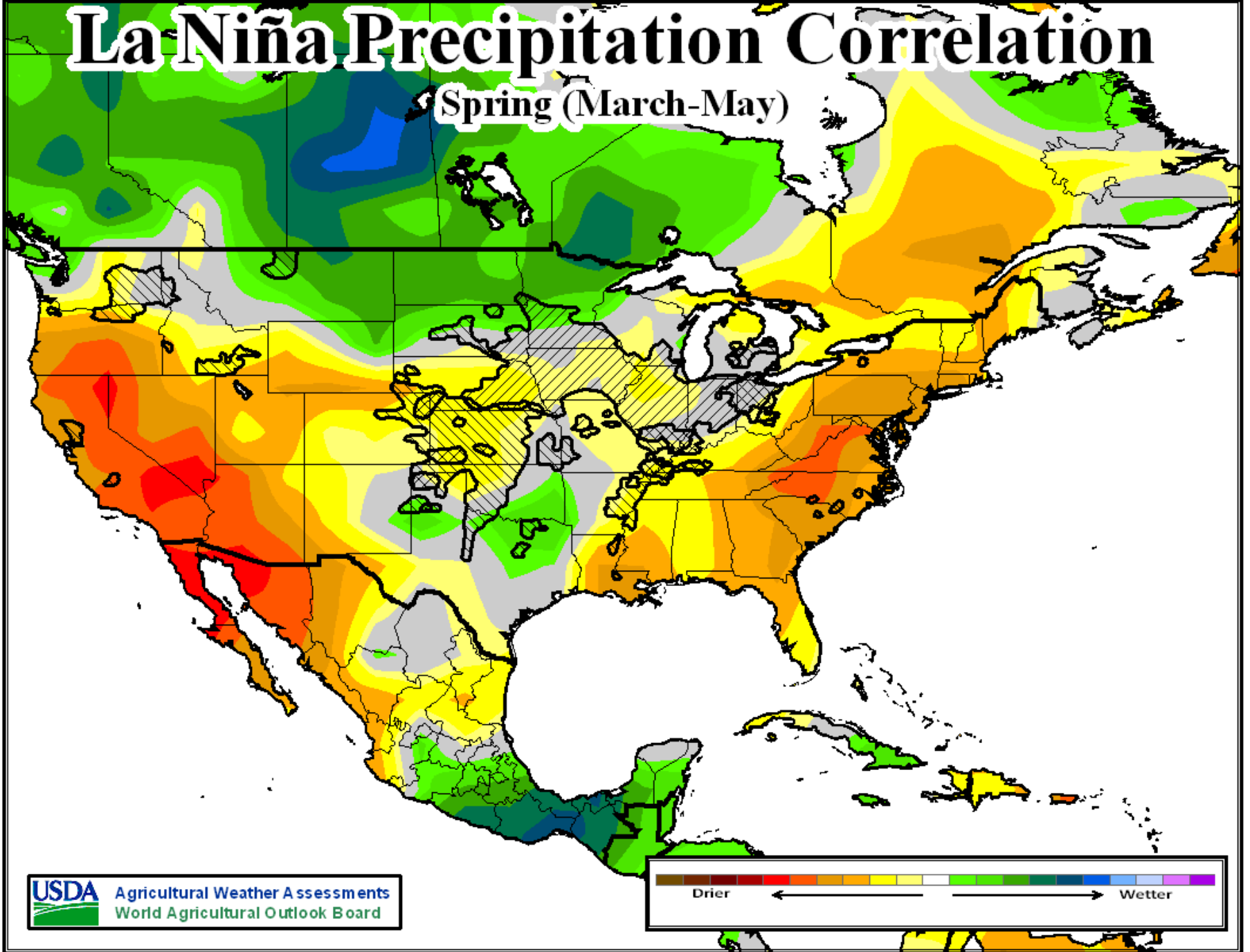
NAO Temperature Correlation

Spring (March-May)

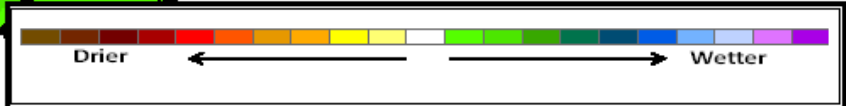


La Niña Precipitation Correlation

Spring (March-May)

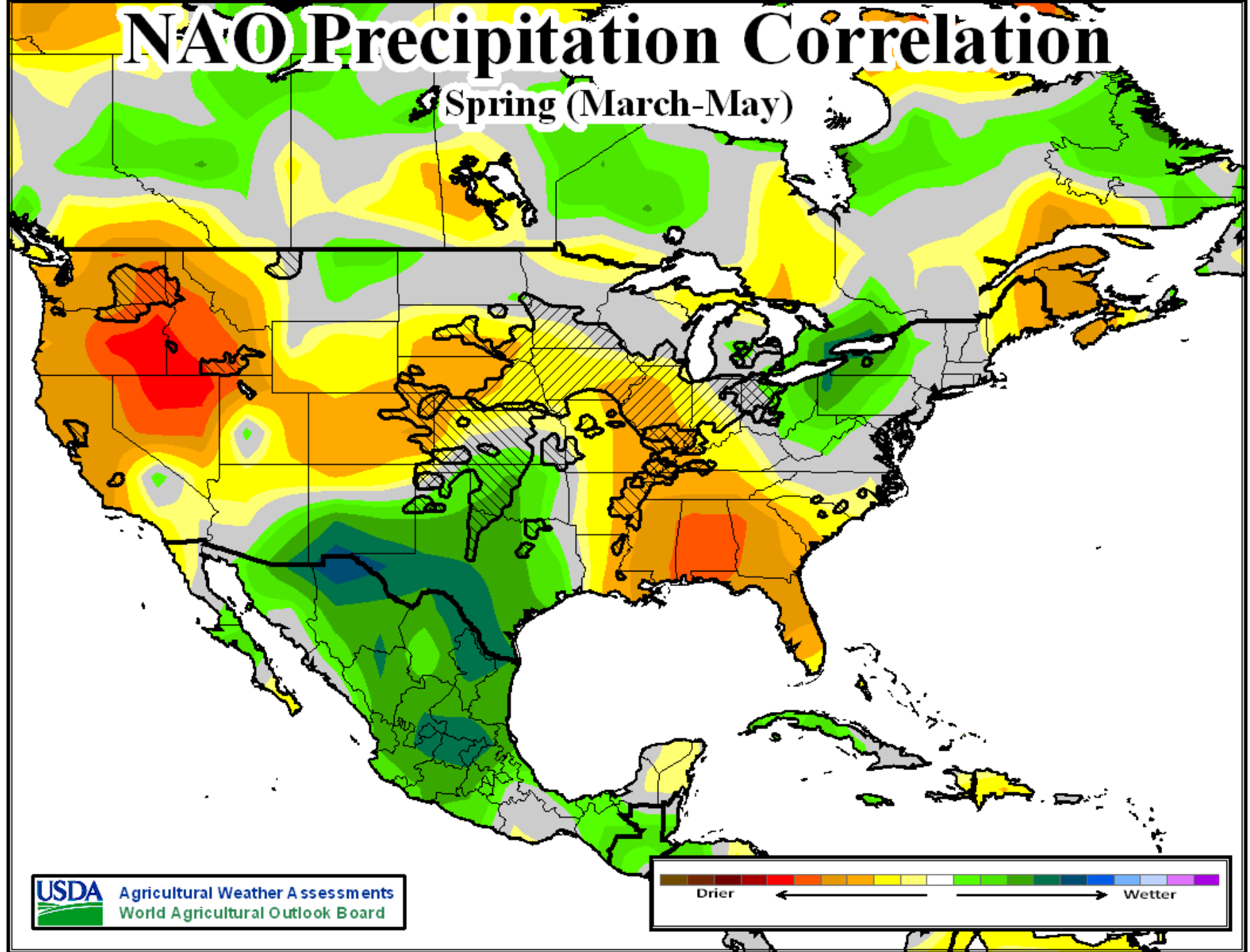


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NAO Precipitation Correlation

Spring (March-May)



USDA Agricultural Weather Assessments
World Agricultural Outlook Board



The Bottom Line: March-May 2012

- If La Niña rules the roost, expect a dry spring in the ***Southeast*** and ***Southwest***. Cool conditions will likely be confined to the ***Northwest***.
- If the positive phase of the North Atlantic Oscillation overwhelms the La Niña signal, unexpectedly wet conditions may continue in the ***south-central U.S.*** Wetness could also affect the ***lower Great Lakes region***, while dry conditions will plague the ***Southeast*** and much of the ***West***. Warm conditions may shift farther north and west than expected.

U.S. Crop-Weather Outlook for the 2011 Growing Season

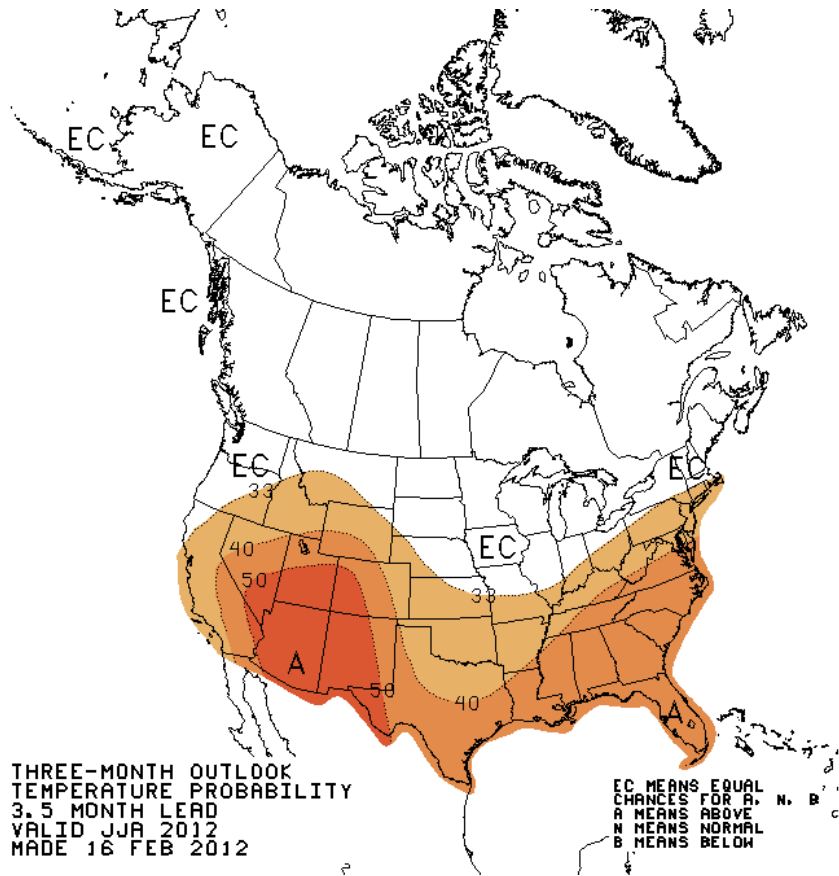
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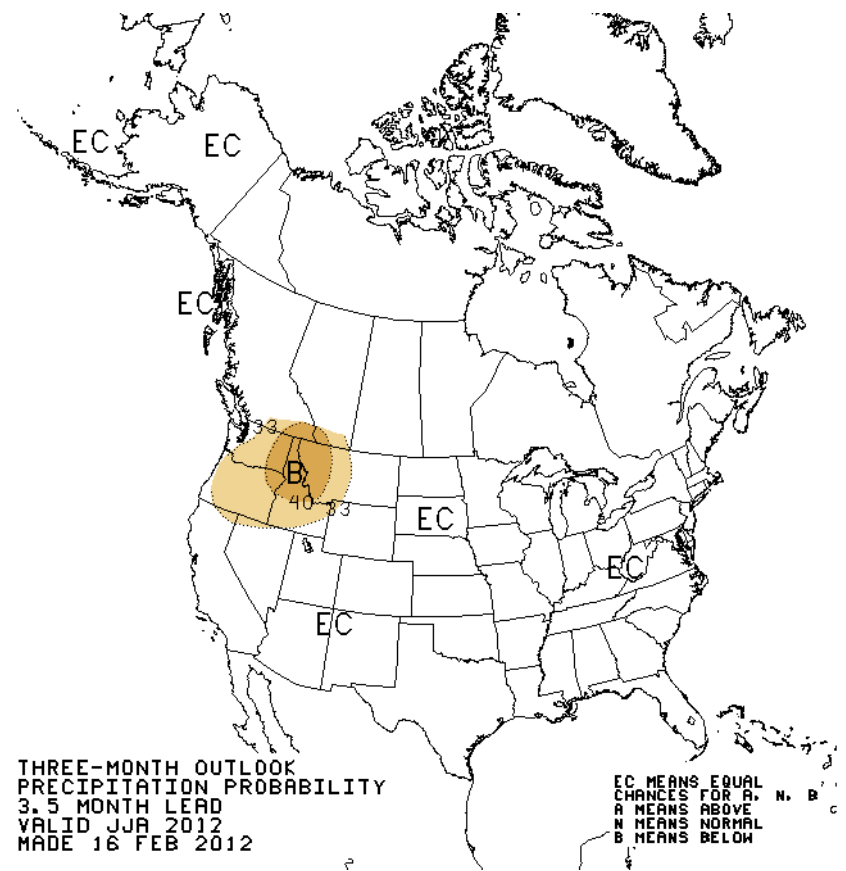
NWS Outlook

June – August 2012

Issued February 16



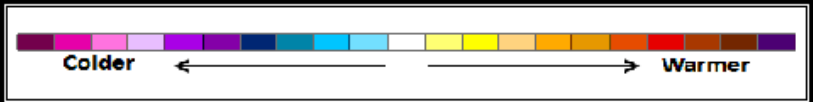
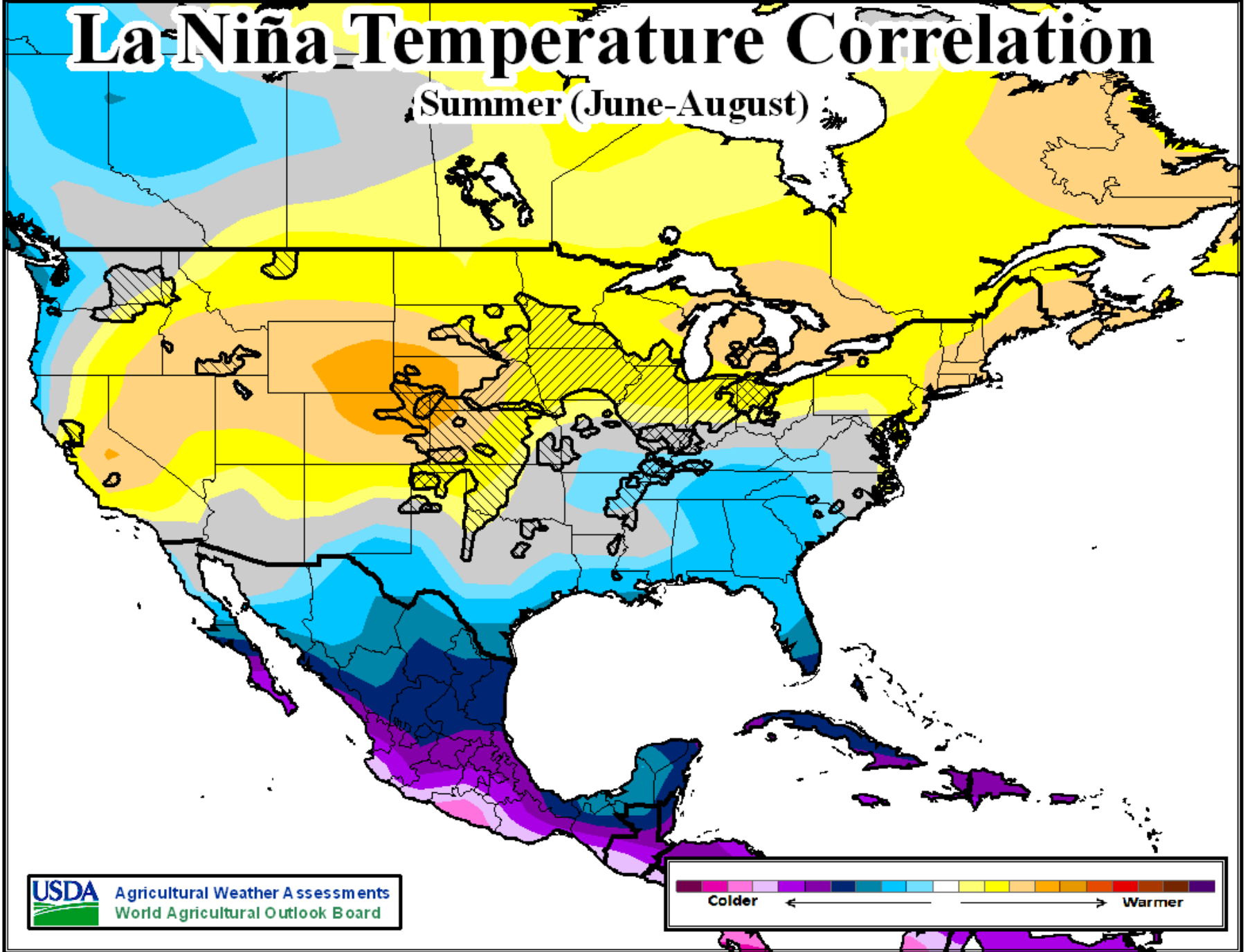
Temperature



Precipitation

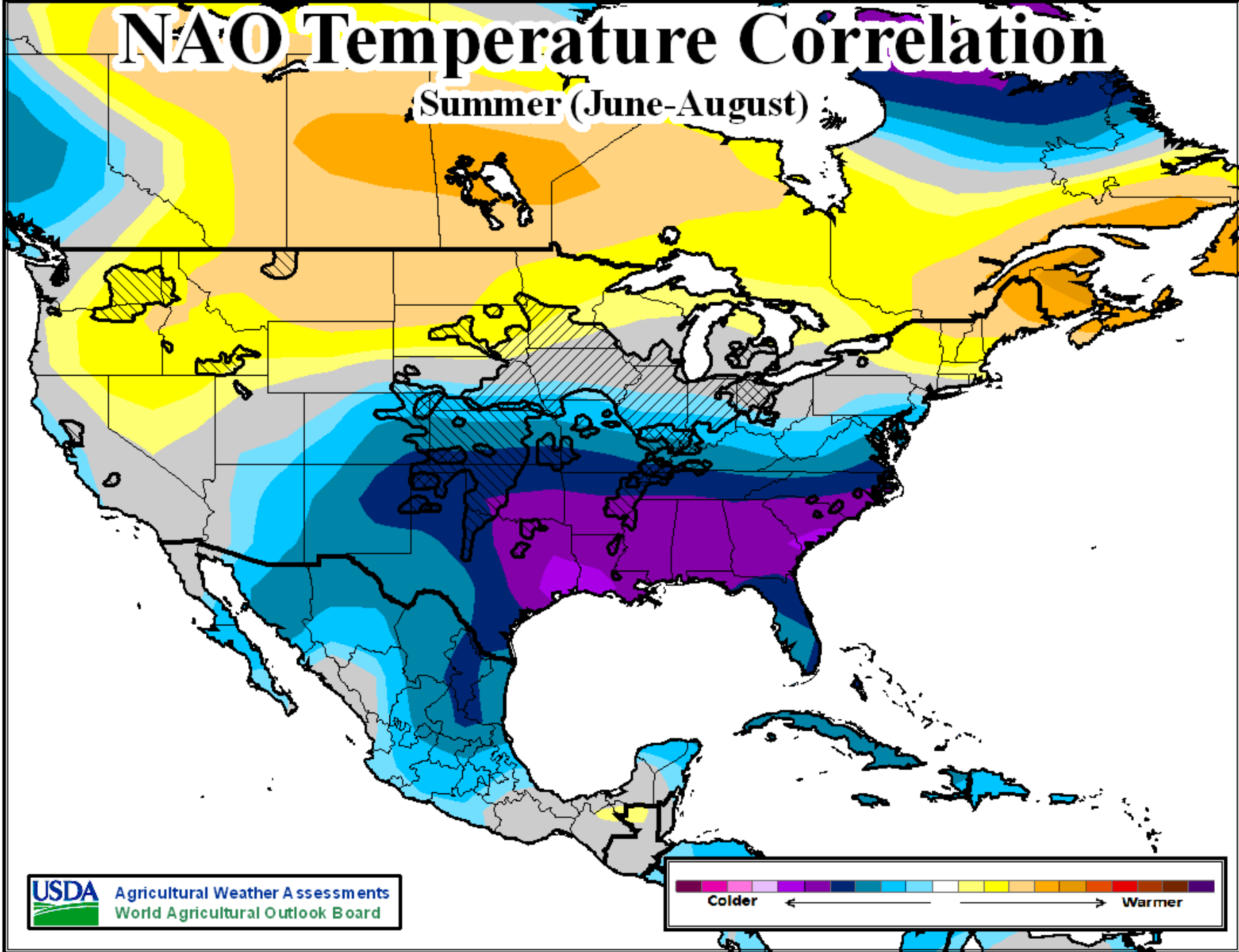
La Niña Temperature Correlation

Summer (June-August)



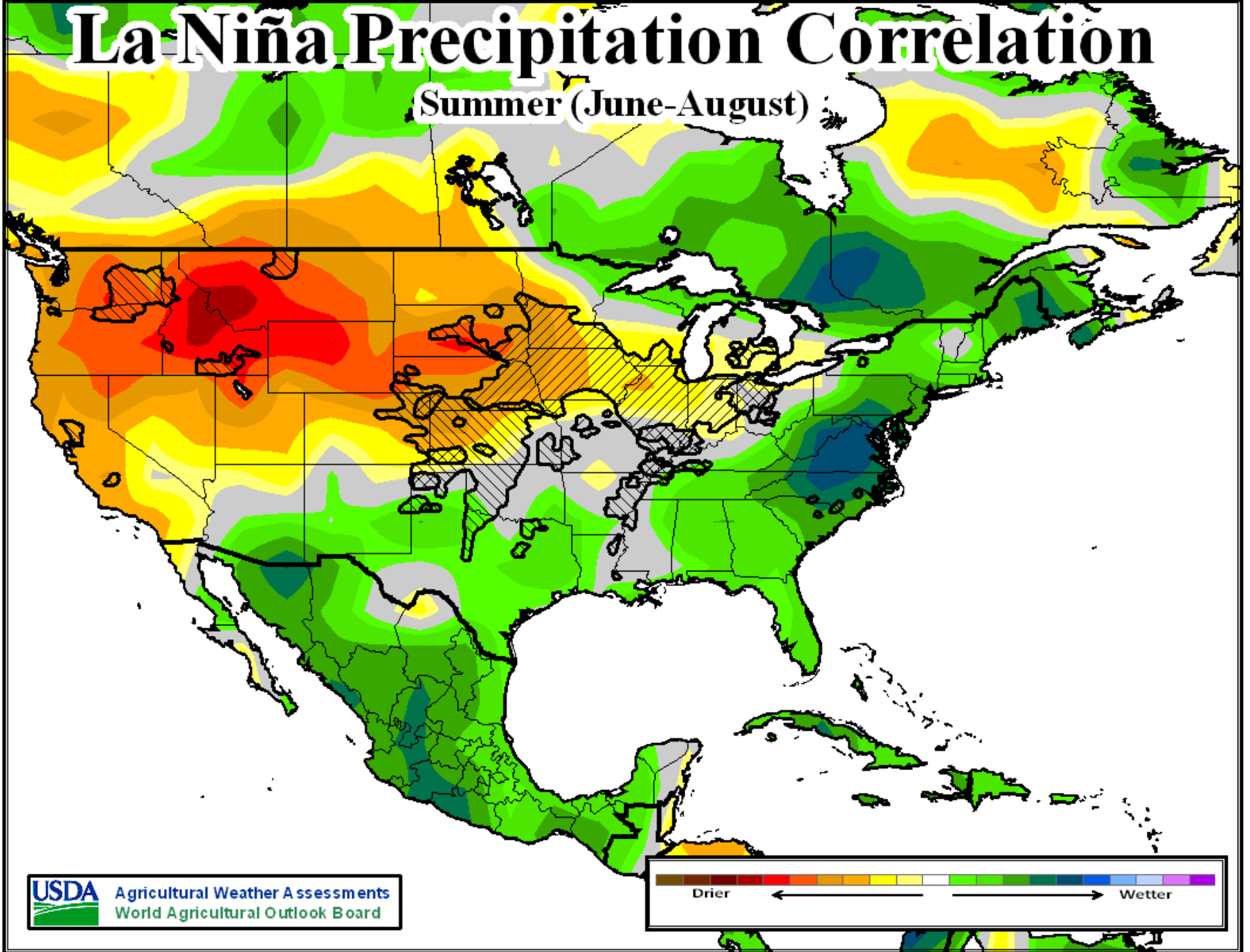
NAO Temperature Correlation

Summer (June-August)

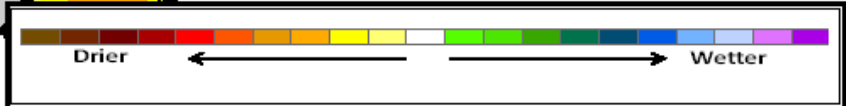


La Niña Precipitation Correlation

Summer (June-August)

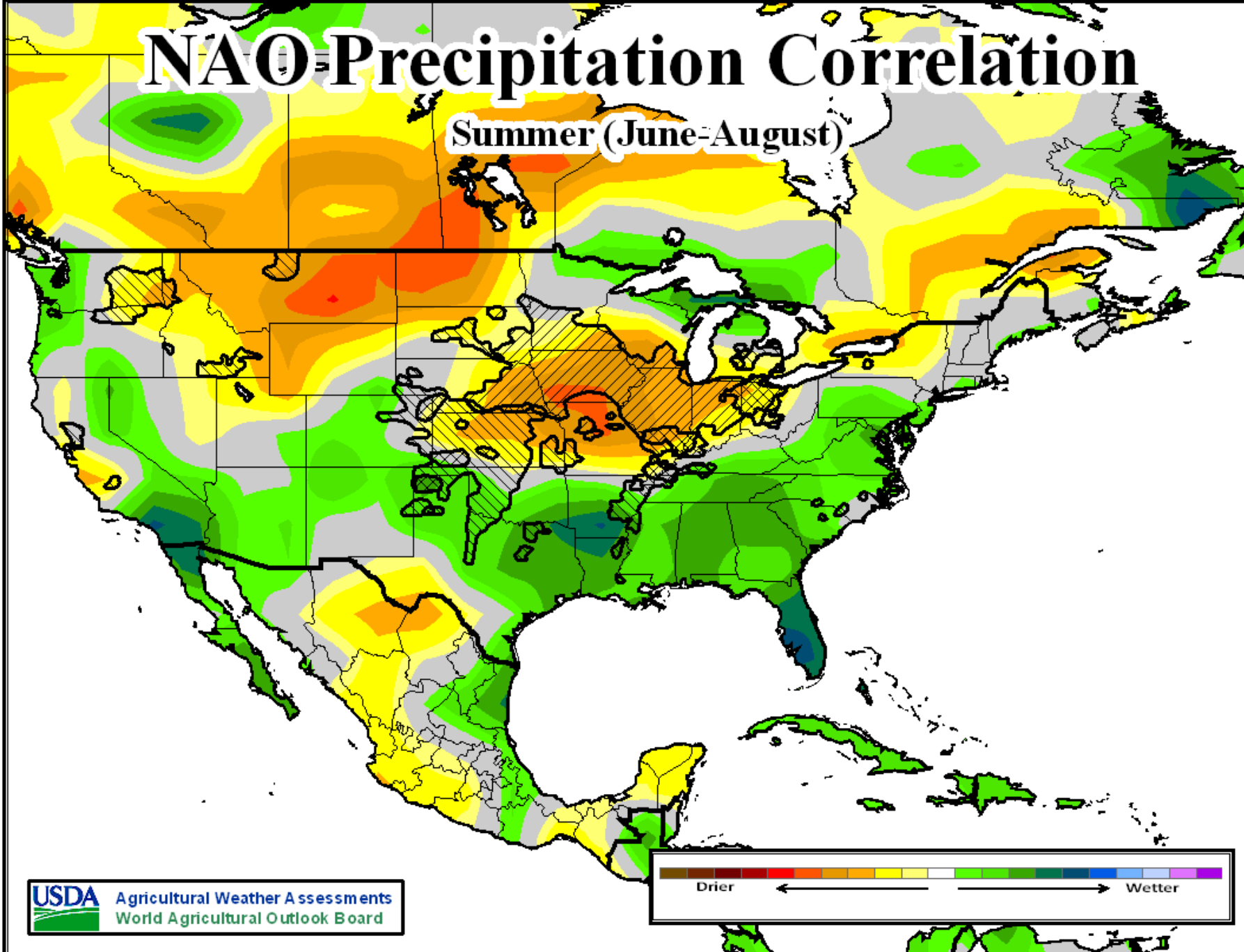


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NAO-Precipitation Correlation

Summer (June-August)



The Bottom Line: June-August 2012

- If La Niña remains a force, abundant rainfall across the **South** and **East** will contrast with hot, dry conditions from the **Pacific Coast into the western Corn Belt**.
- If the positive phase of the North Atlantic Oscillation plays a big role, expect a warm summer across the **nation's northern tier** and a rather cool summer from the **southern Plains into the Southeast**. The **northern Plains** and **Midwest** will need to be watched for potential drought development or intensification.

Questions or Comments?

- Contact Information:
 - E-mail: brippyey@oce.usda.gov
 - Phone: (202) 720-2397

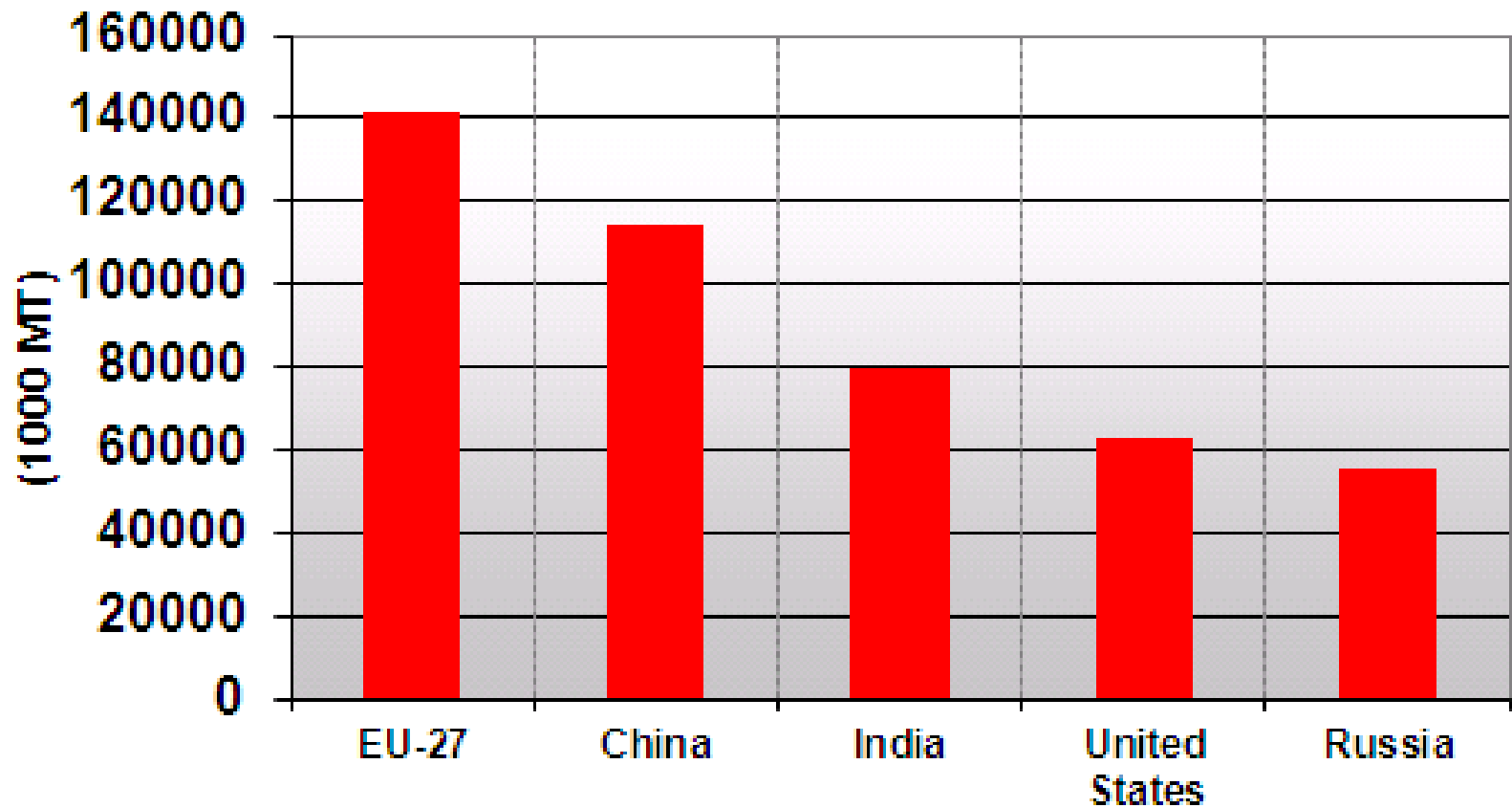


U.S. Winter Wheat Condition, 2011-12

<u>State</u>	<u>Date</u>	<u>VP</u>	<u>P</u>	<u>F</u>	<u>G</u>	<u>EX</u>
Montana	11/27/11	1	7	55	34	3
	1/1/12	2	7	61	26	4
	1/29/12	2	10	62	23	3
Nebraska	11/27/11	0	2	24	64	10
	1/1/12	0	1	25	70	4
	1/29/12	0	3	32	61	4
Kansas	11/27/11	4	9	40	42	5
	1/1/12	2	7	38	46	7
	1/29/12	3	9	39	42	7
Oklahoma	11/27/11	2	8	34	49	7
	1/1/12	1	6	30	54	9
	1/29/12	1	8	37	47	7
Texas	11/27/11	16	24	35	21	4
	1/8/12	15	23	37	22	3
	1/29/12	15	23	36	22	4
	2/19/12	13	23	32	25	7

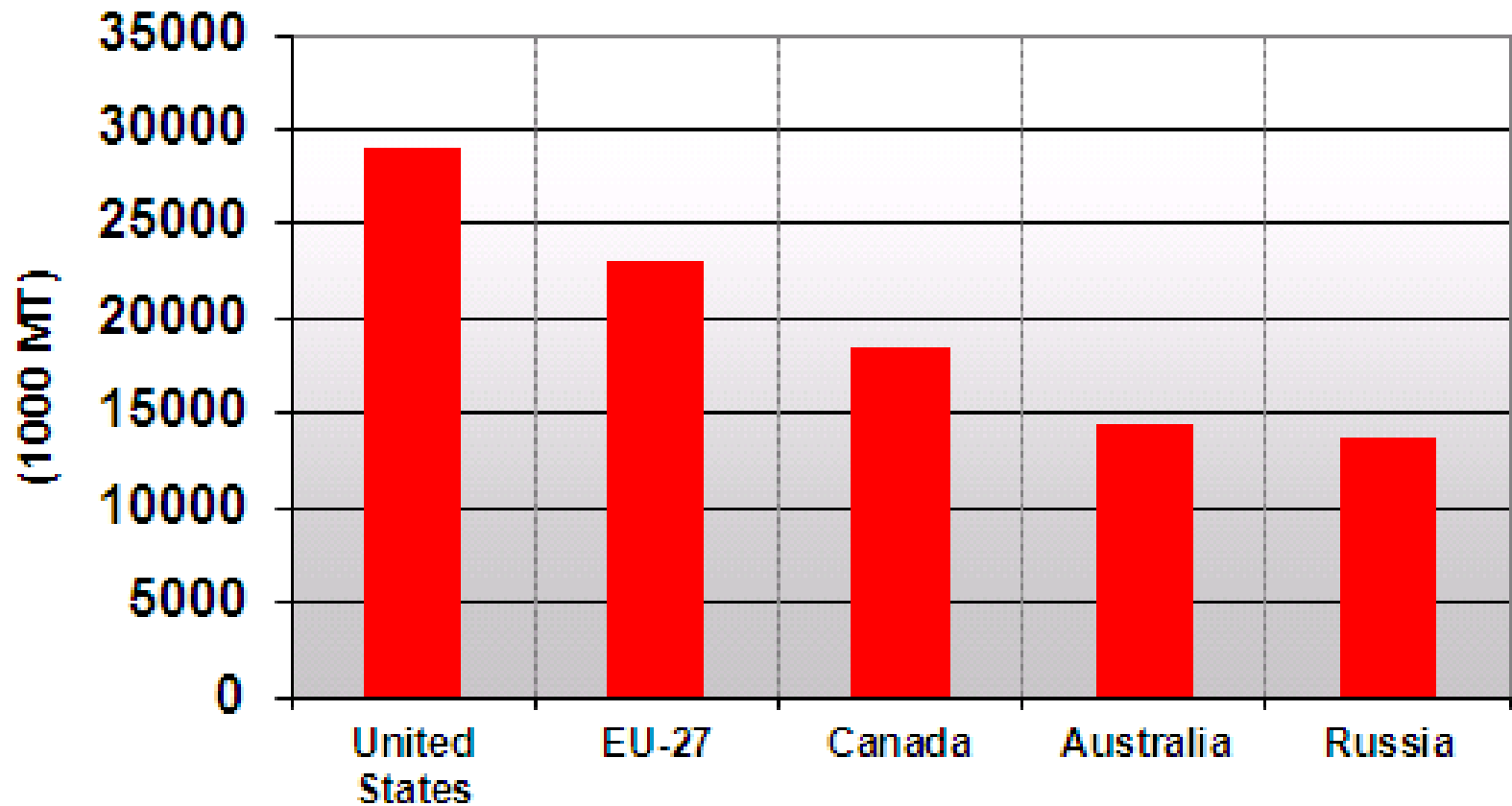


Wheat Production



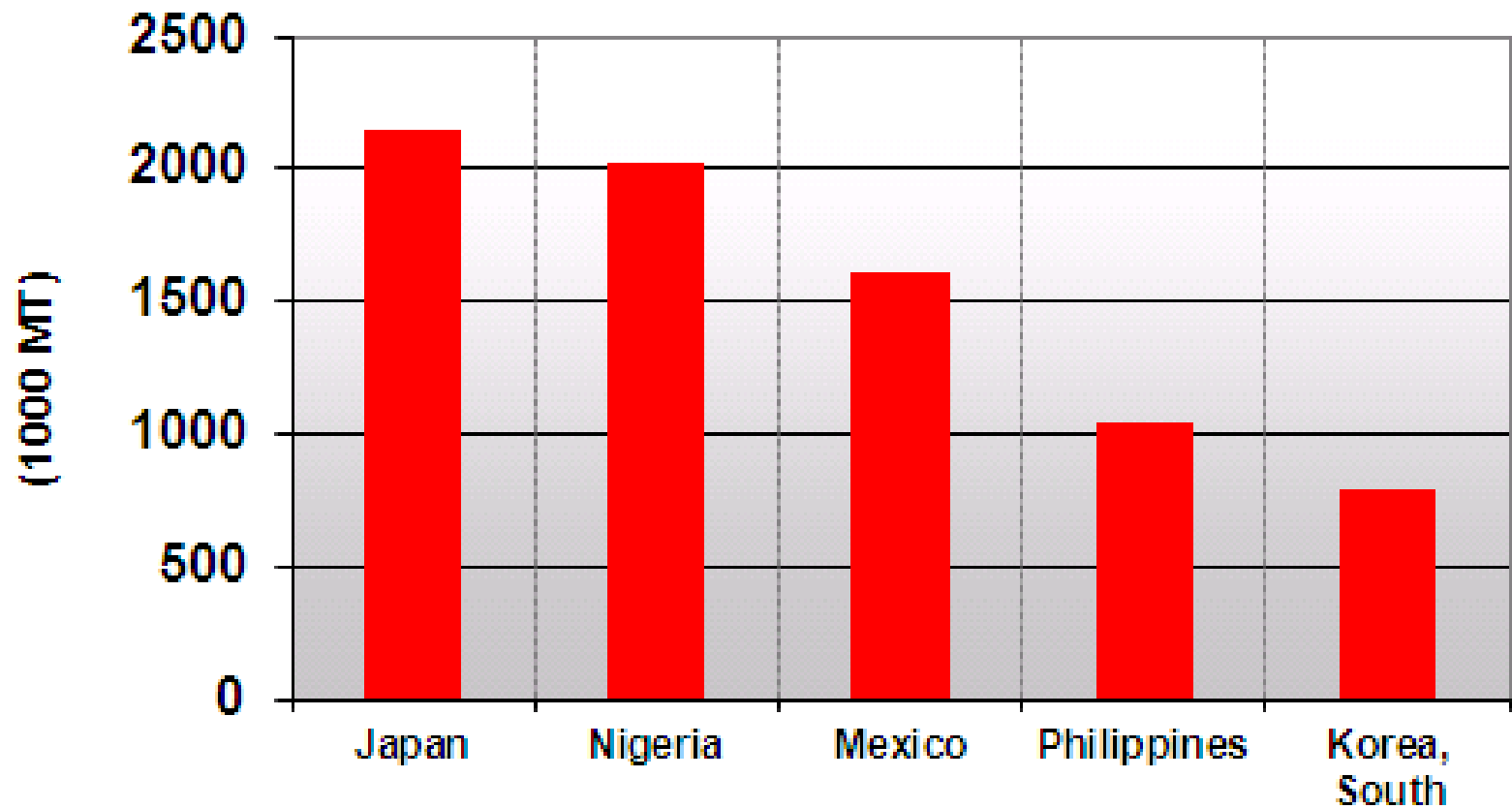
■ 2008 to 2010 Average (Last Update: February 2011)

Wheat Exports



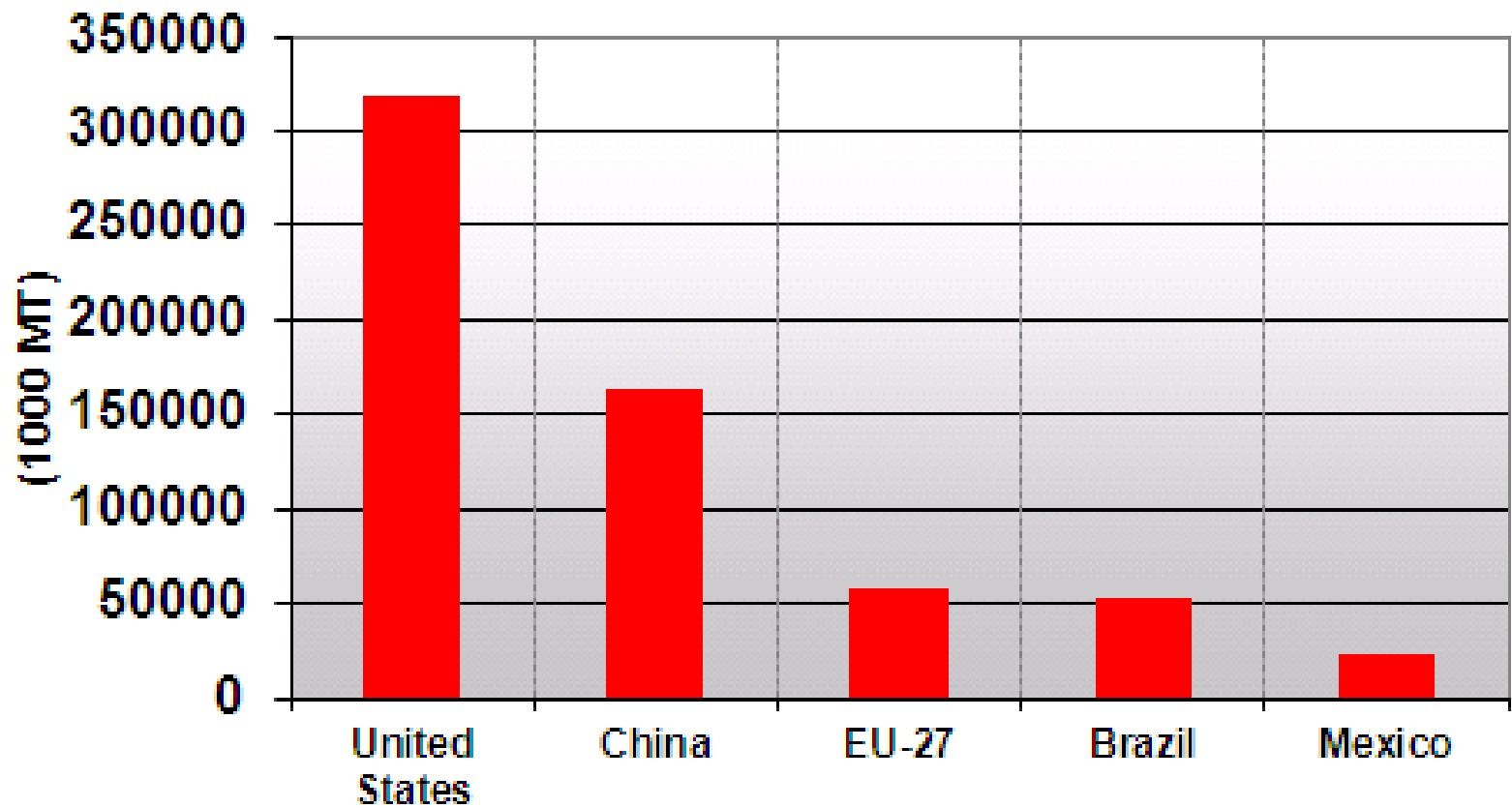
■ 2008 to 2010 Average (Last Update: February 2011)

Wheat TY Imp. from U.S.



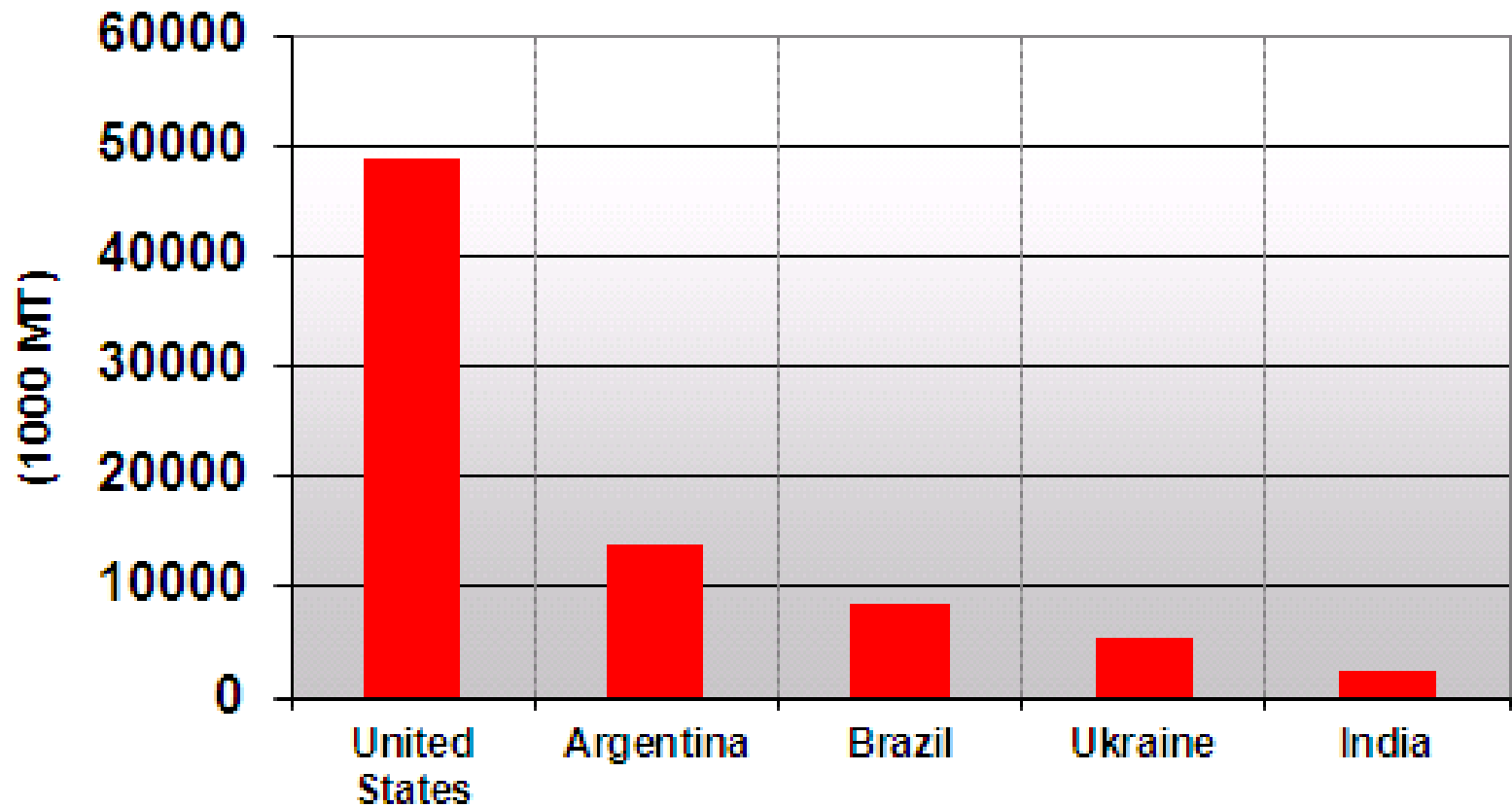
■ 2008 to 2010 Average (Last Update: February 2011)

Corn Production



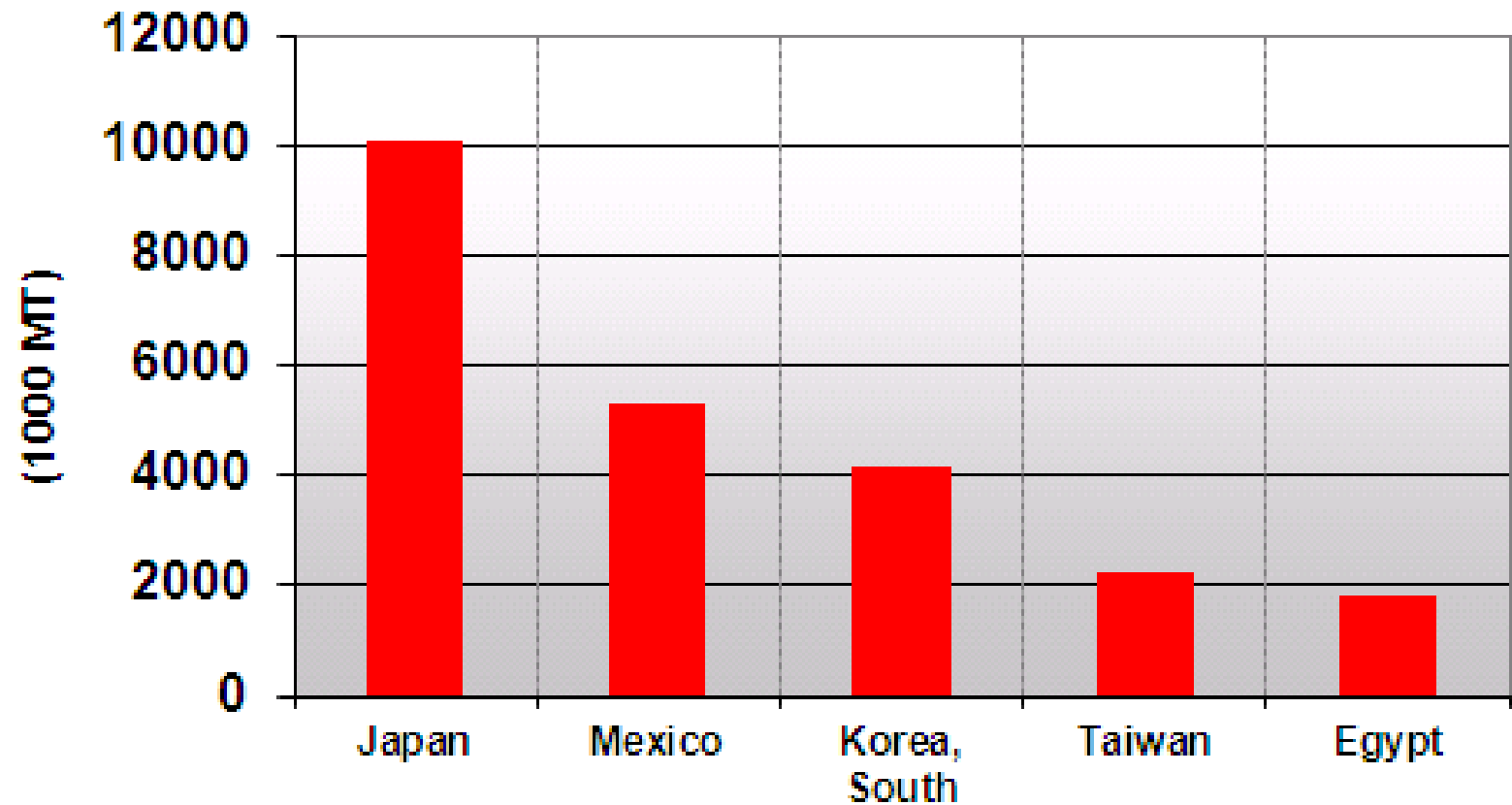
■ 2008 to 2010 Average (Last Update: February 2011)

Corn Exports



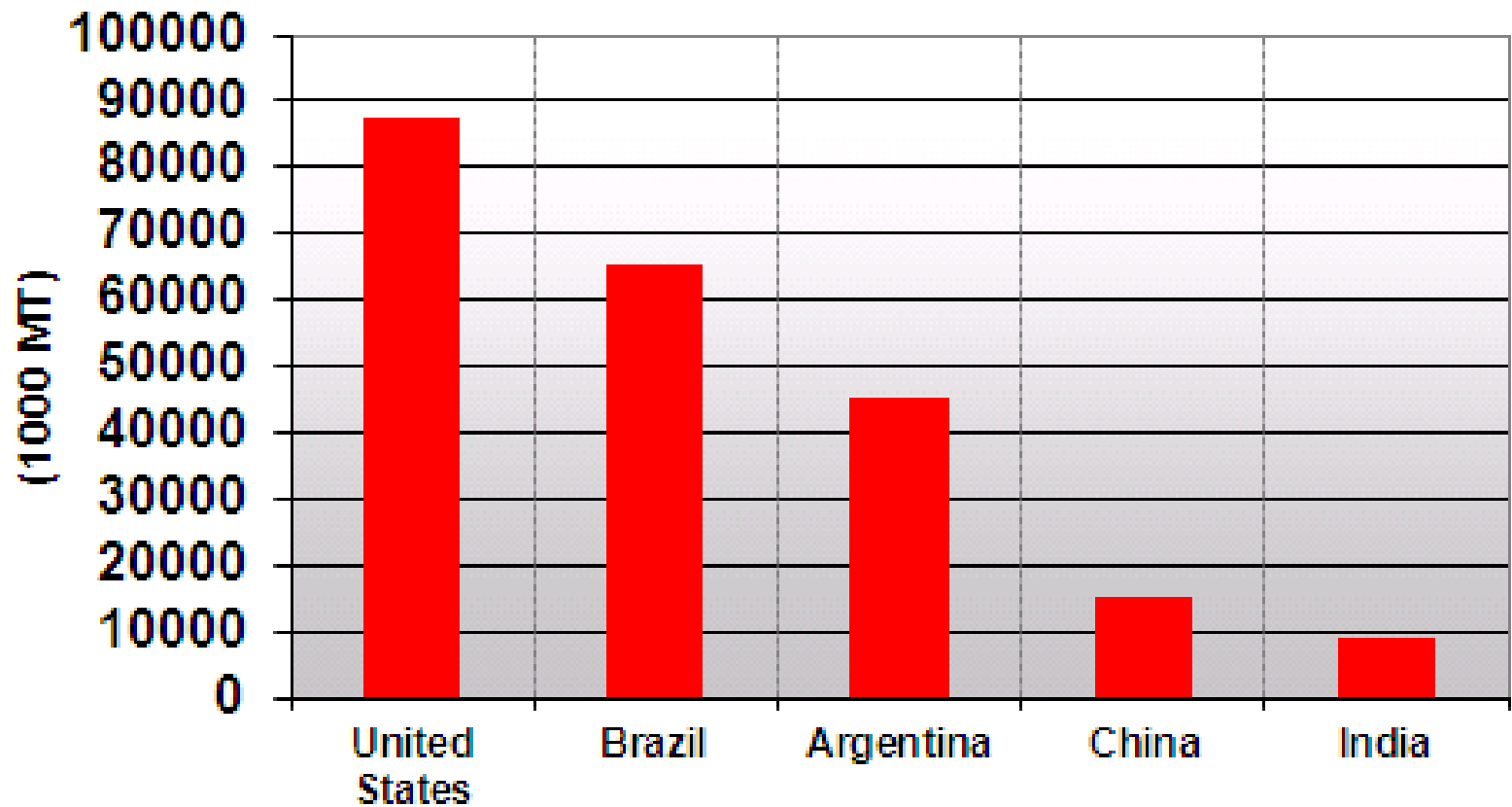
■ 2008 to 2010 Average (Last Update: February 2011)

Corn TY Imp. from U.S.



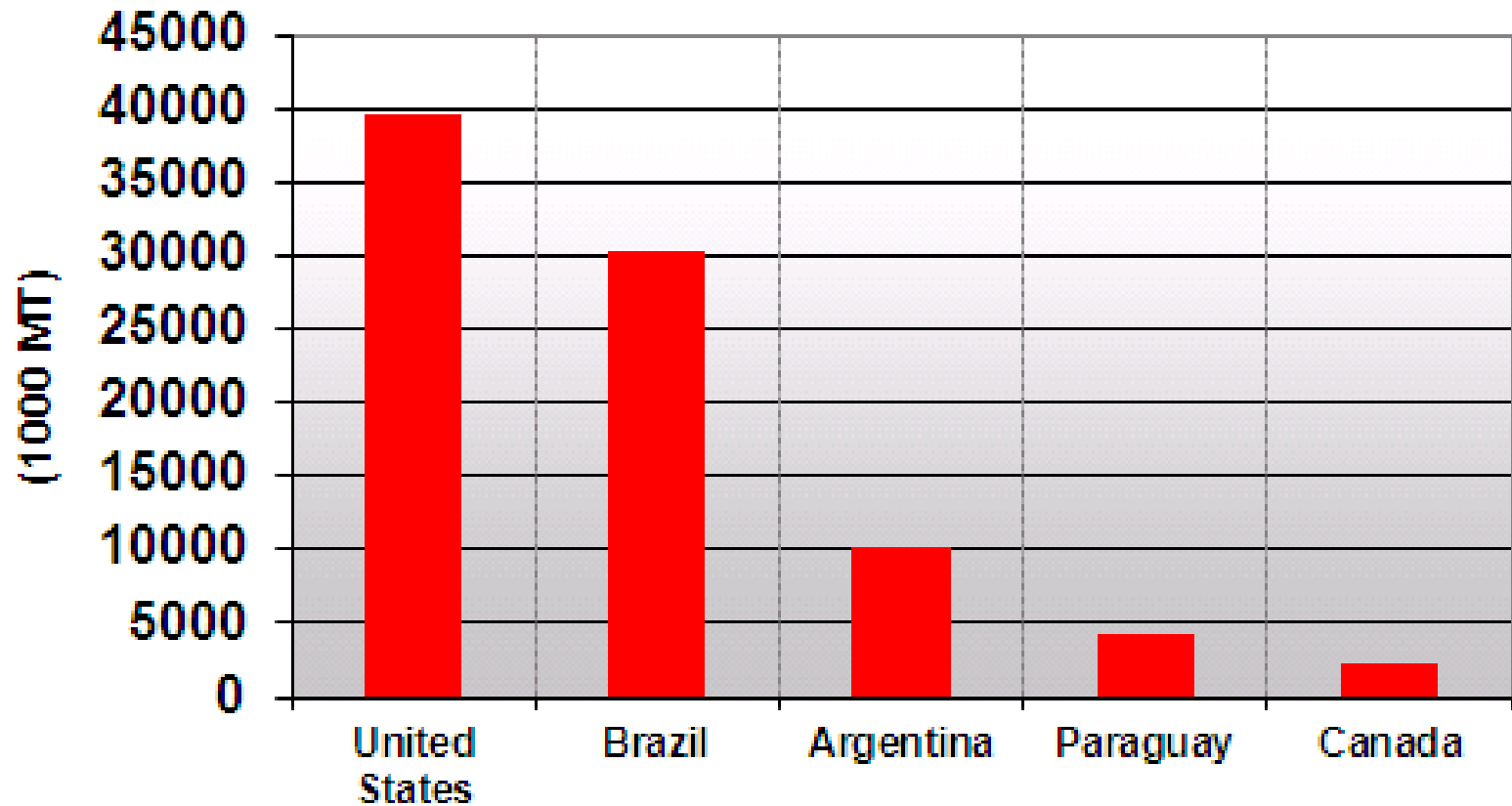
■ 2008 to 2010 Average (Last Update: February 2011)

Oilseed, Soybean Production



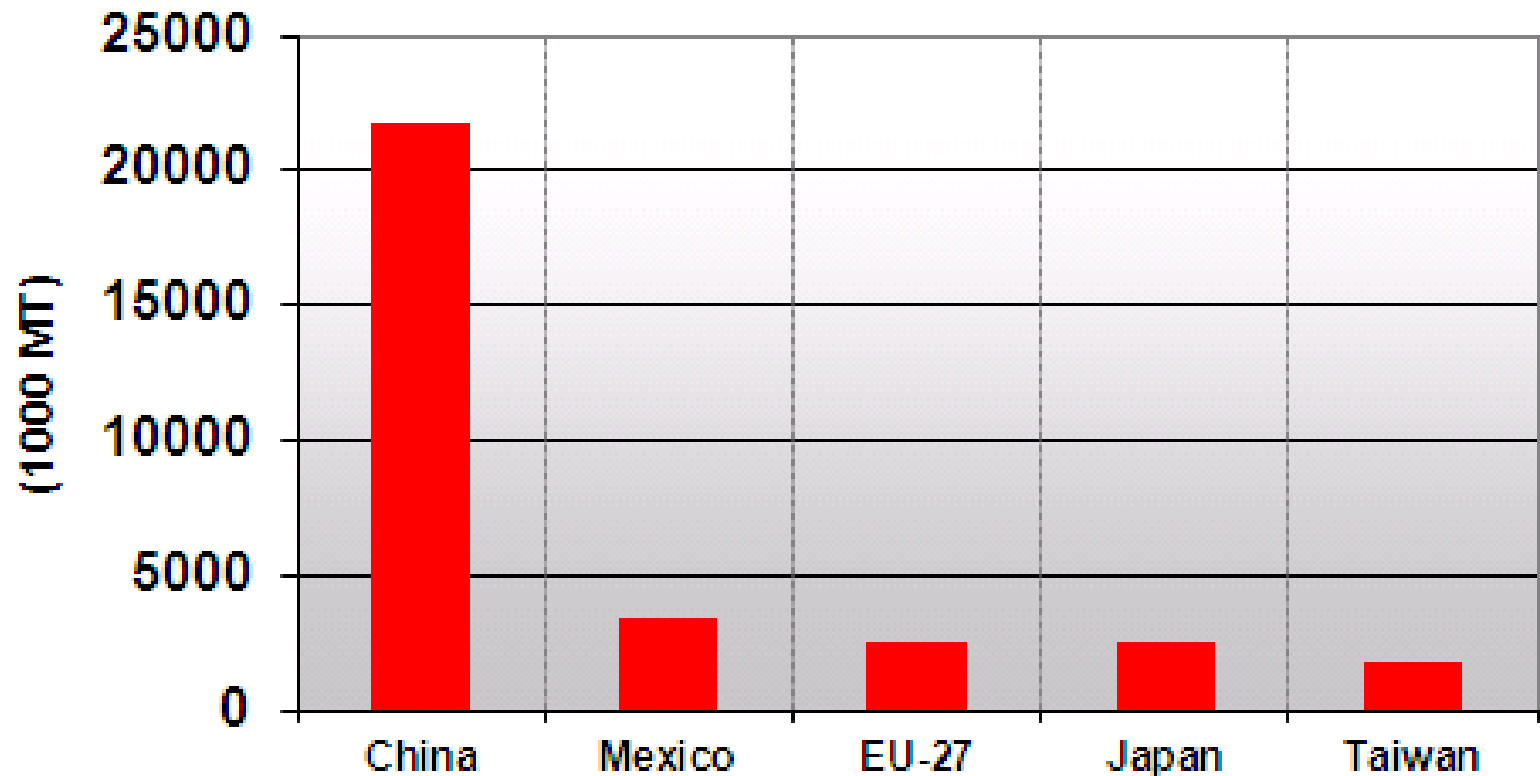
■ 2008 to 2010 Average (Last Update: February 2011)

Oilseed, Soybean Exports



■ 2008 to 2010 Average (Last Update: February 2011)

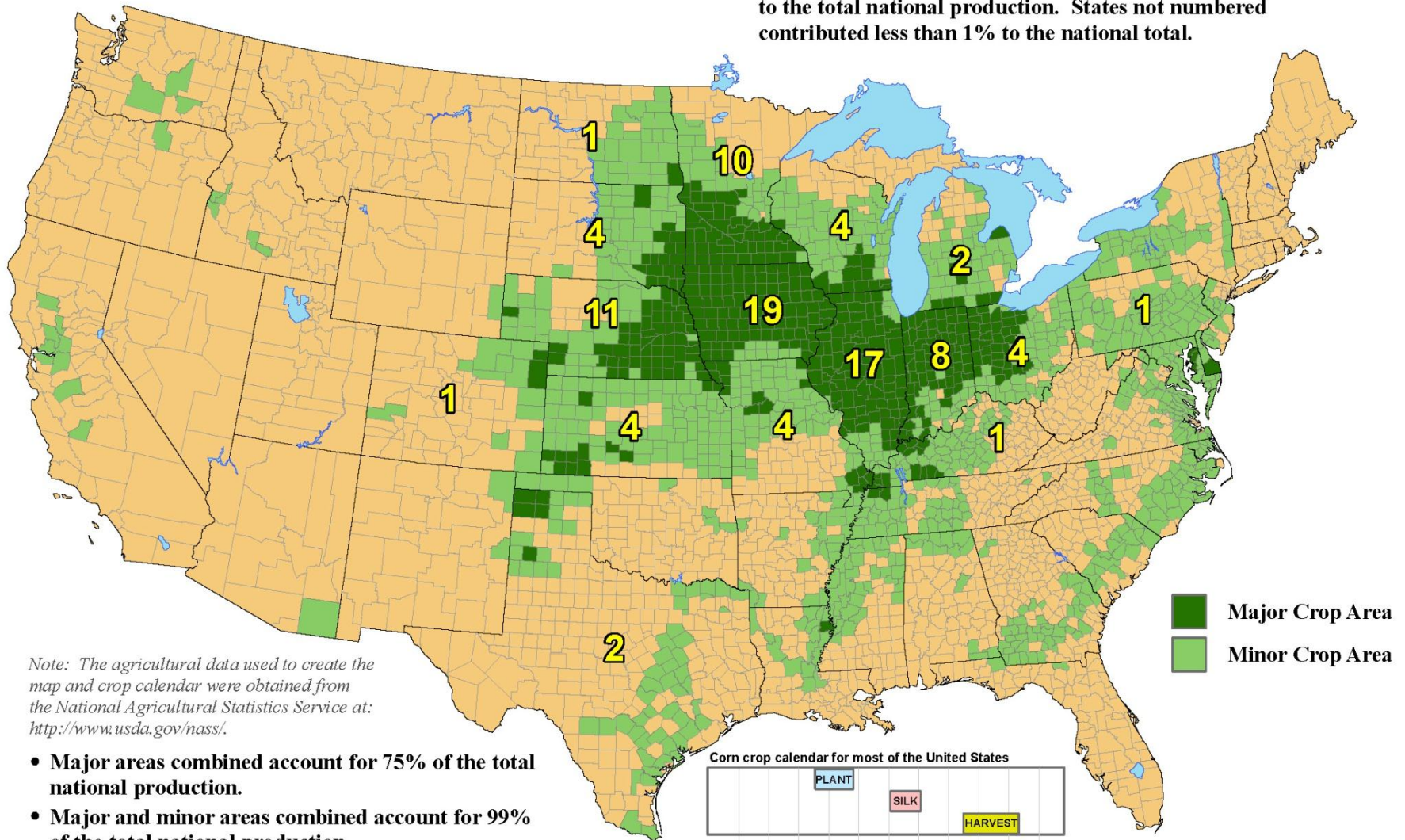
Oilseed, Soybean MY Imp. from U.S.



■ 2008 to 2010 Average (Last Update: February 2011)

United States: Corn

Yellow numbers indicate the percent each state contributed to the total national production. States not numbered contributed less than 1% to the national total.

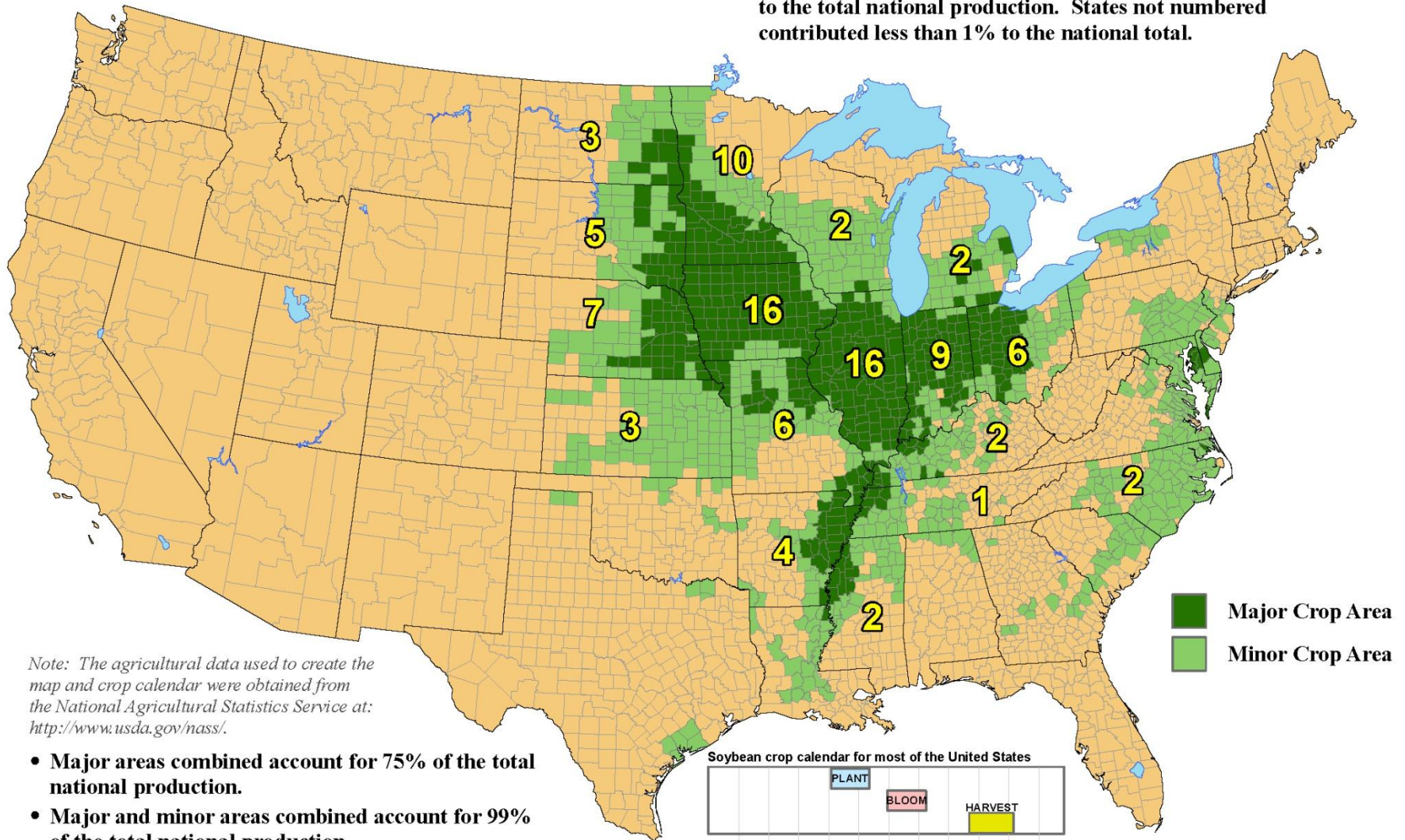


Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at: <http://www.usda.gov/nass/>.

- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are based upon averaged NASS county-level and state production data from 2000-2004.

United States: Soybeans

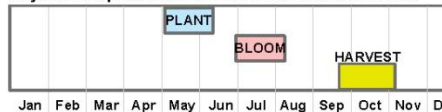
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Soybean crop calendar for most of the United States



Crop calendar dates are based upon NASS crop progress data from 2000-2004. The field activities and crop development stages illustrated in the crop calendar represent the average time period when national progress advanced from 10 to 90 percent.

