

Drought Monitoring Technical Committee Update

to the

Arizona Interagency Coordinating Group

May 7, 2010

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Arizona Drought Monitoring Technical Committee



ARIZONA DIVISION OF
EMERGENCY MANAGEMENT



OFFICE OF THE ARIZONA
STATE CLIMATOLOGIST



MTC has re-assessed our methodology for reporting drought status in Arizona.

The MTC no longer calculates monthly short-term drought status for our own state map. Instead, the committee will:

- **Provide weekly input to the U.S. Drought Monitor authors to make their map reflect the conditions we see here in Arizona, and post the weekly DM map on the state drought website.**
 - **We use a number of near-real-time precipitation products, streamflow data, vegetation maps and impacts information from various sectors to assess changes to our drought status.**
- **Post a monthly drought summary on the state drought website.**
- **Continue to generate a quarterly (seasonal) long-term drought status map and summary and post them on the state drought website**

Advantages:

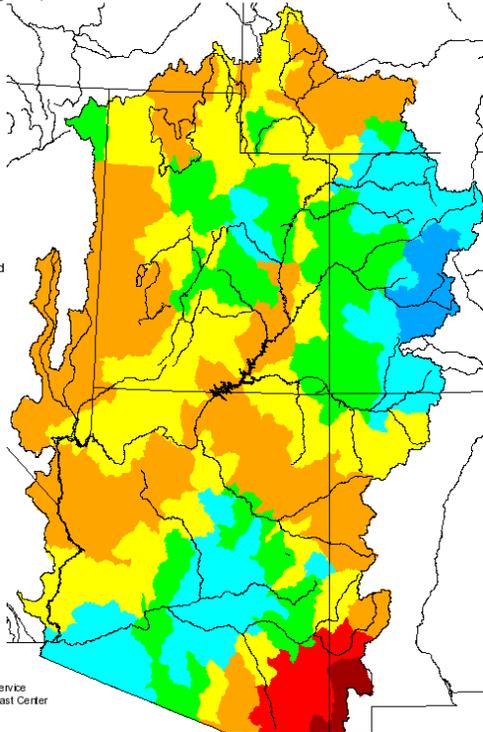
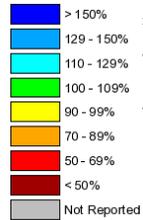
- 1. The data we use are all near-real-time.**
- 2. There will be no inconsistent maps between the state and the DM. This should reduce confusion among our stakeholders.**
- 3. The DM, which is the official drought map for disaster declarations, better reflects the conditions in Arizona.**
- 4. More efficient use of our time and personnel rather than duplicating effort by producing our own monthly maps.**
- 5. By reviewing drought weekly we will have a better chance of early warning when conditions start to get dry.**

Precipitation Comparison Colorado River Basin

WY 2008 to April

Seasonal Precipitation, October 2007 - April 2008
(Averaged by Hydrologic Unit)

% Average

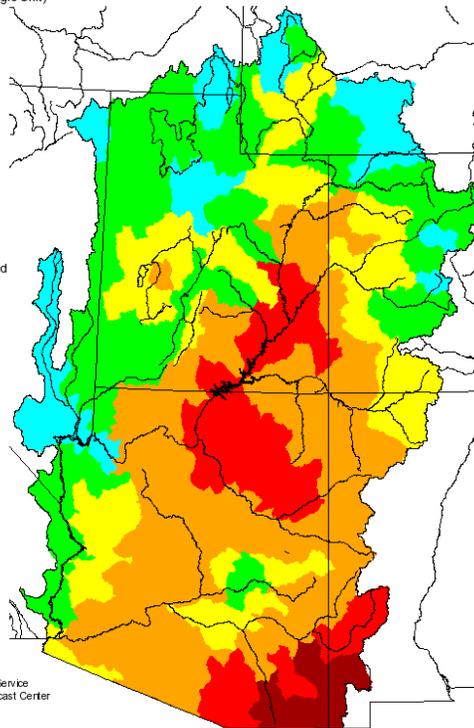
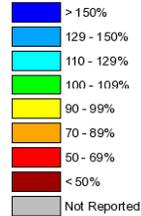


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

WY 2009 to April

Seasonal Precipitation, October 2008 - April 2009
(Averaged by Hydrologic Unit)

% Average

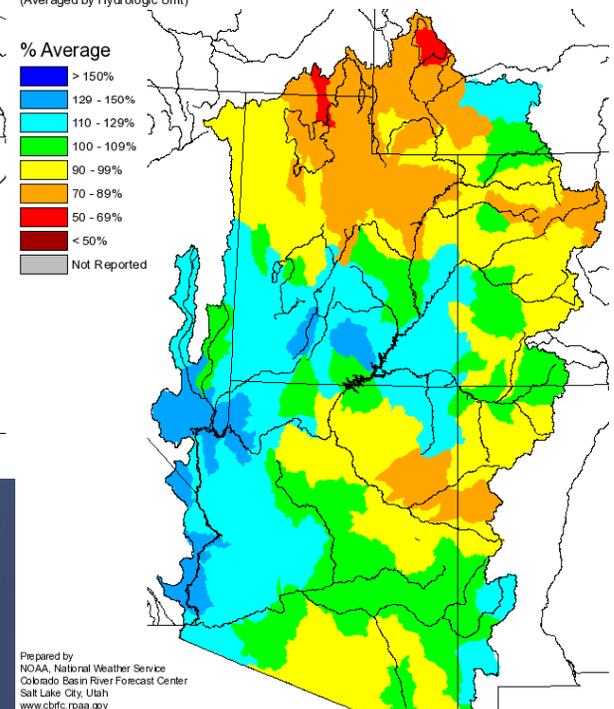
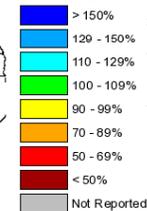


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WY 2010 to April

Seasonal Precipitation, October 2009 - April 2010
(Averaged by Hydrologic Unit)

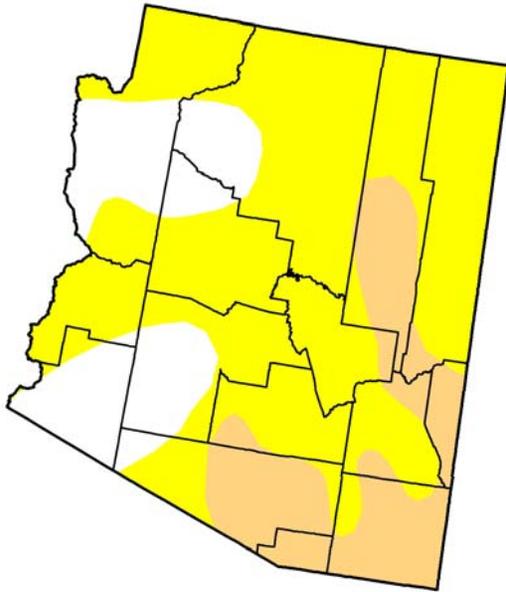
% Average



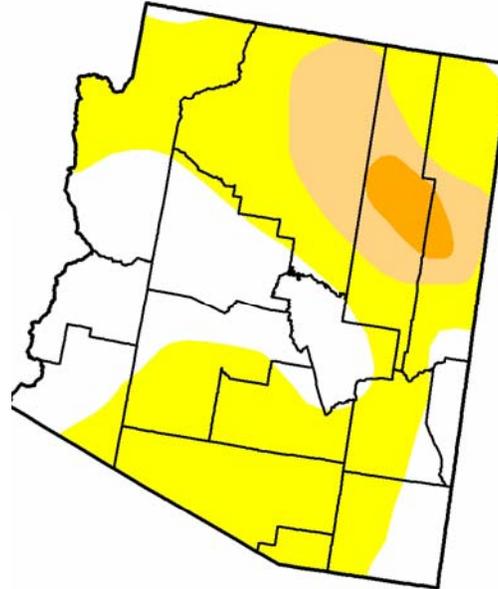
Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

National Drought Monitor Comparison (Short-Term)

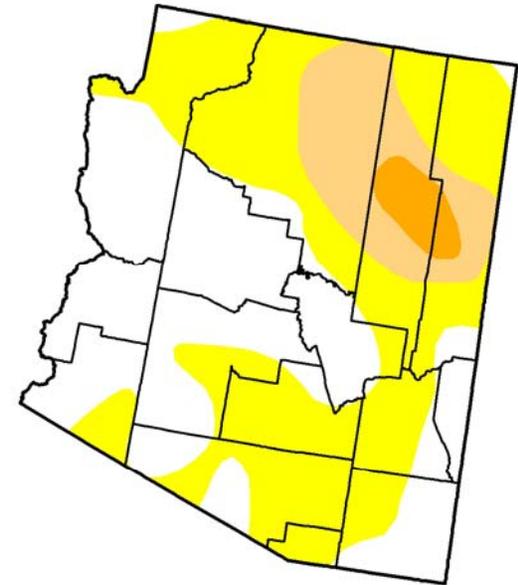
May 5, 2009



March 30, 2010



May 4, 2010



Long Term Drought Status Comparison

April 2010

January 2009

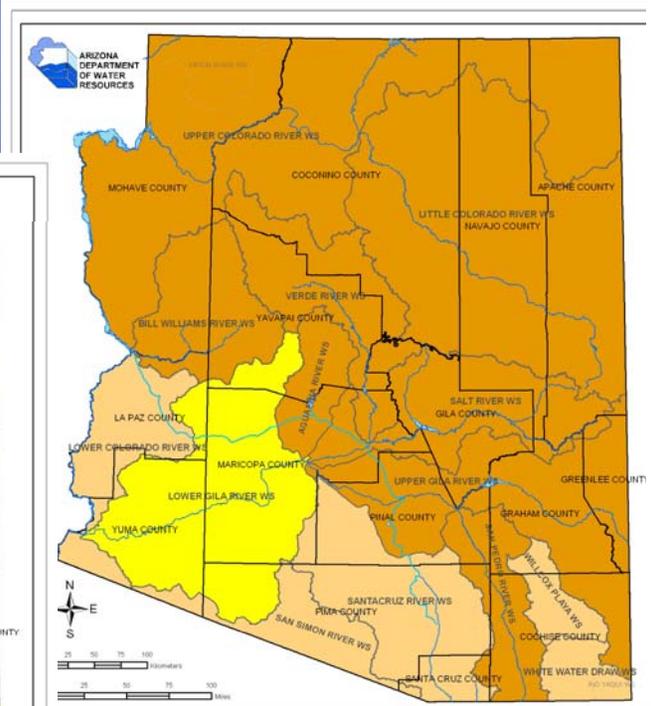
April 2009



April 2009 Long Term Drought Status
Data Through March 31st, 2009

Arizona Drought Preparedness Plan
Monitoring Technical Committee

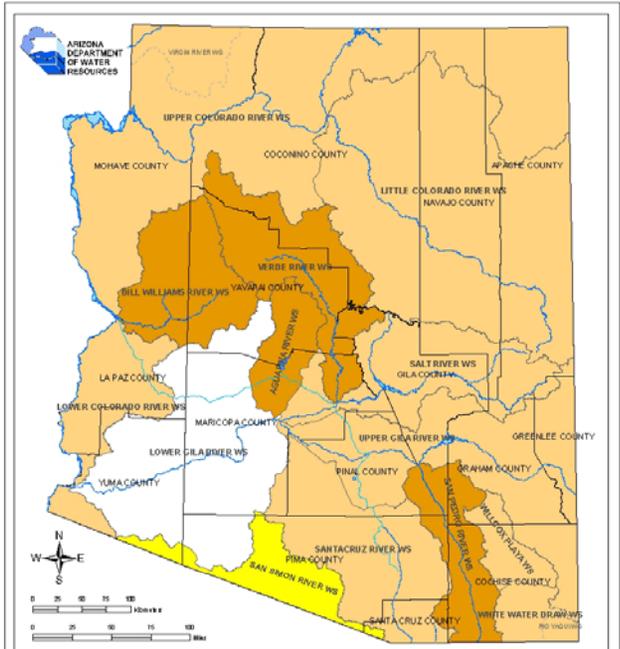
* Watershed merged due to limited data.



January 2010 Long Term Drought Status
Data Through December 31st, 2009

Arizona Drought Preparedness Plan
Monitoring Technical Committee

* Watershed merged due to limited data.



April 2010 Long Term Drought Status
Data Through March 31st, 2010

Arizona Drought Preparedness Plan
Monitoring Technical Committee

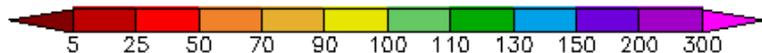
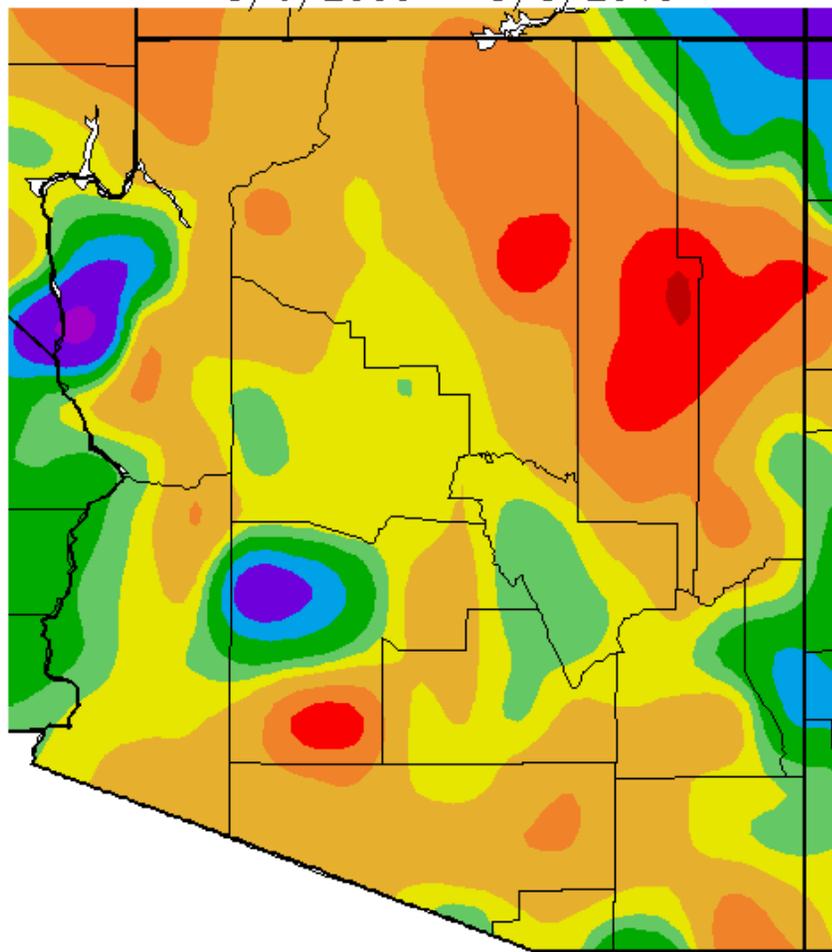
* Watershed merged due to limited data.



Precipitation

Past 12 months

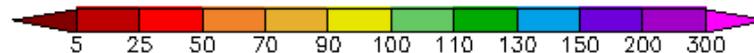
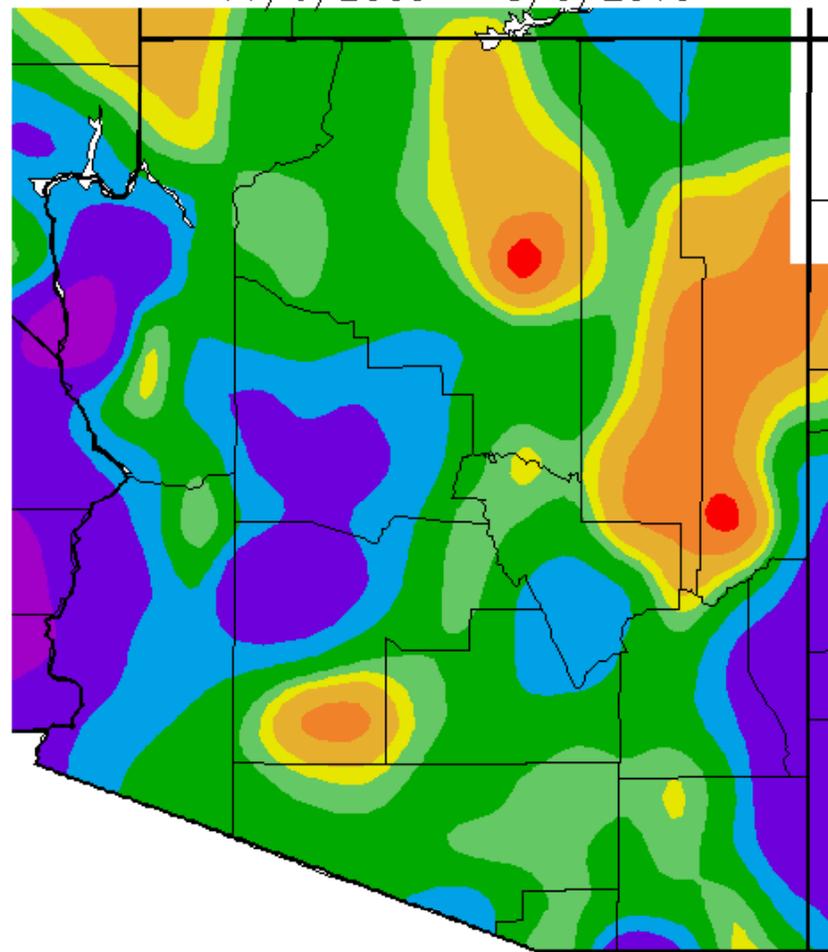
Percent of Average Precipitation (%)
5/6/2009 – 5/5/2010



Generated 5/06/2010 at WRCC using provisional data.
NOAA Regional Climate Centers

Past 6 months

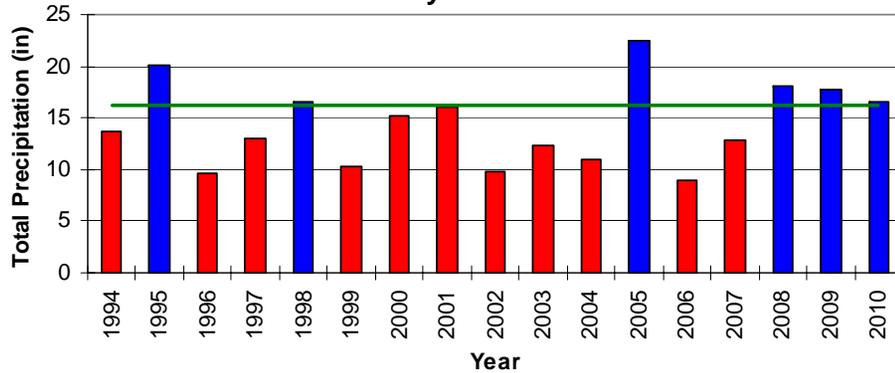
Percent of Average Precipitation (%)
11/6/2009 – 5/5/2010



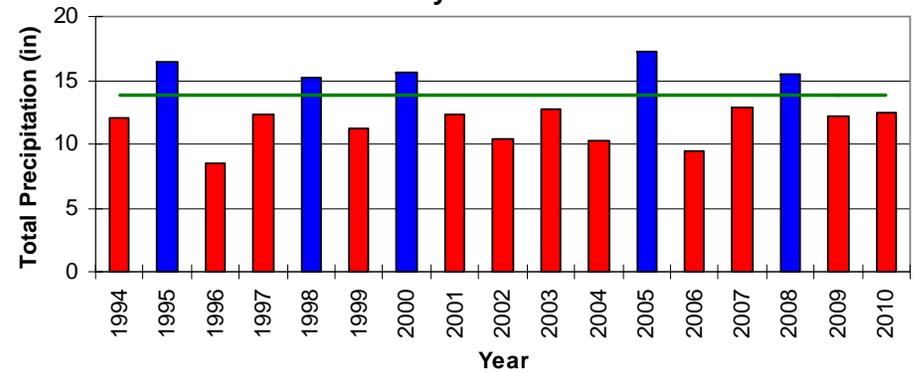
Generated 5/06/2010 at WRCC using provisional data.
NOAA Regional Climate Centers

Precipitation in Selected Watersheds for Past 17 Years

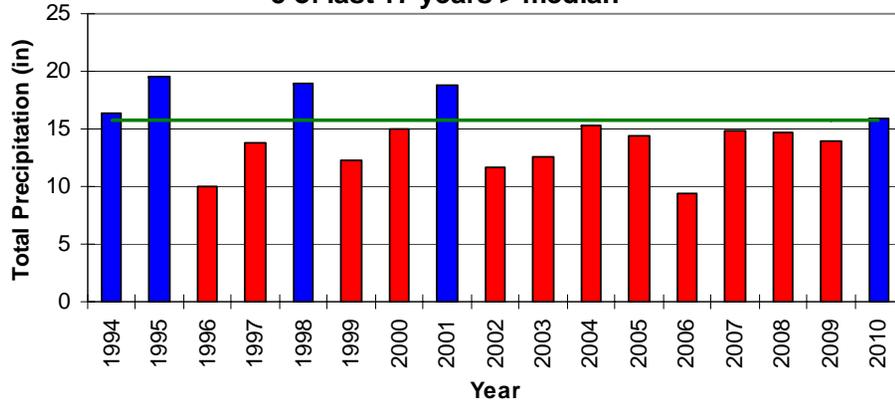
**Salt Watershed 12-month Precipitation
(Apr-Mar) Median 16.15"
6 of last 17 years > median**



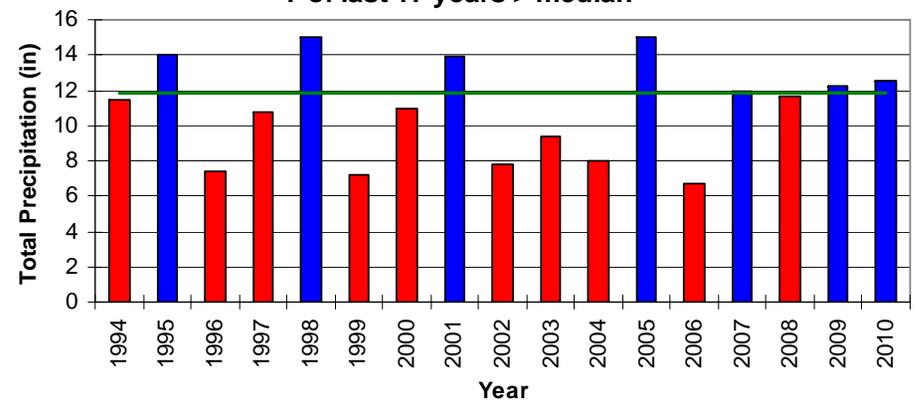
**Little Colorado Watershed 12-month Precipitation
(Apr-Mar) Median 13.87"
5 of last 17 years > median**



**Santa Cruz Watershed 12-month Precipitation
(Apr-Mar) Median 15.71"
5 of last 17 years > median**



**Upper Gila Watershed 12-month Precipitation
(Apr-Mar) Median 11.89"
7 of last 17 years > median**



Thank you !

Questions ?

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SUMMER 2010 OUTLOOK

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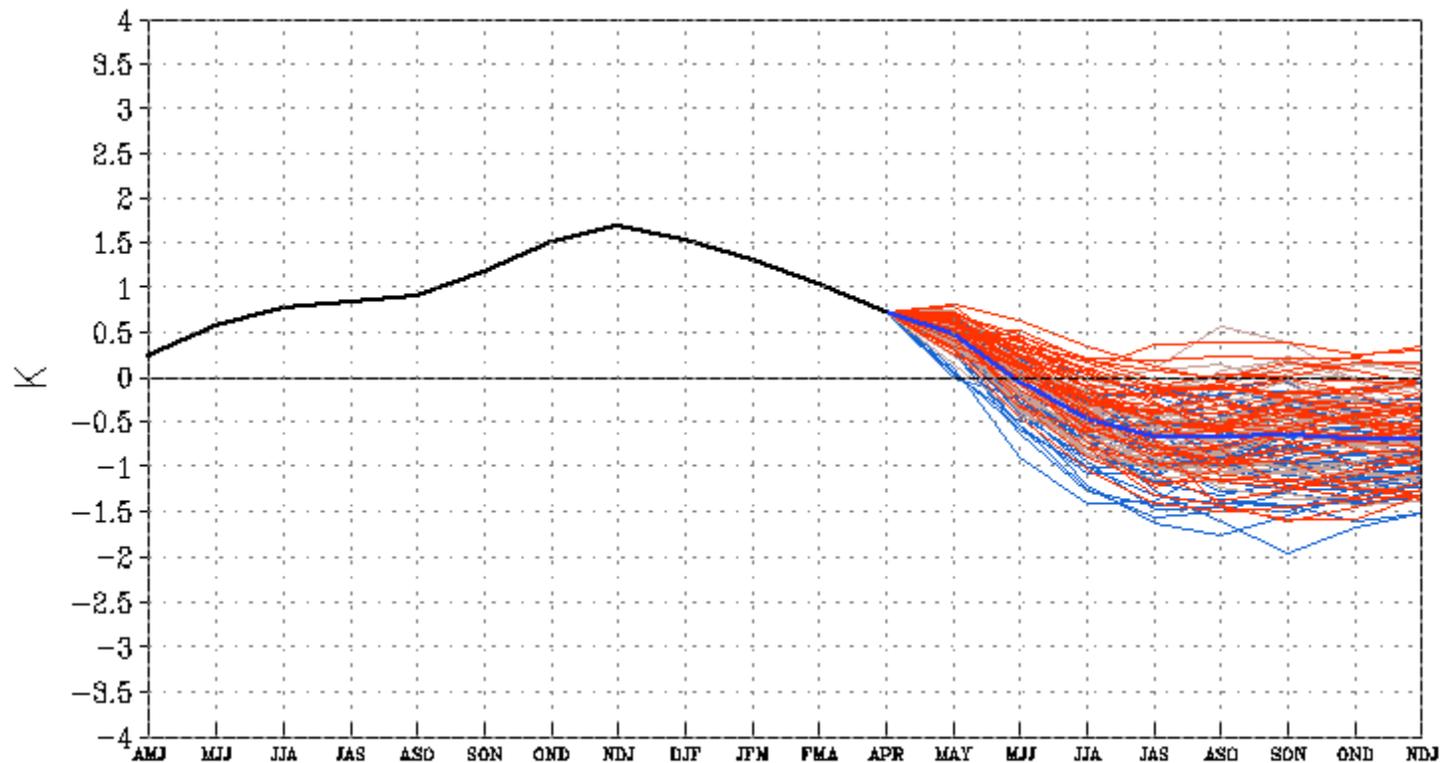
CFS Guidance



NWS/NCEP

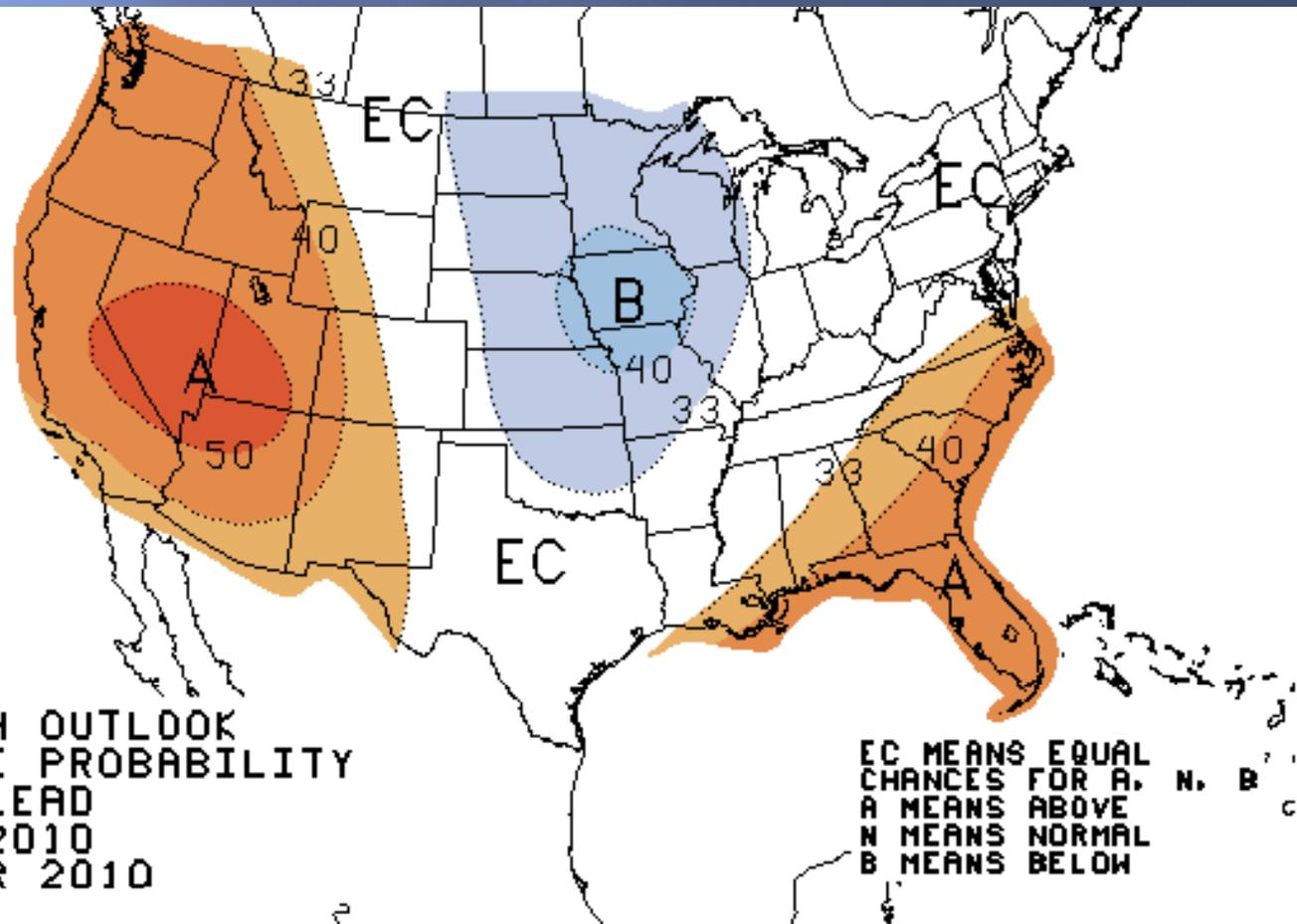
Last update: Fri Apr 30 2010
Initial conditions: 30Mar2010–28Apr2010

Forecast *Nino3.4* SST anomalies from CFS

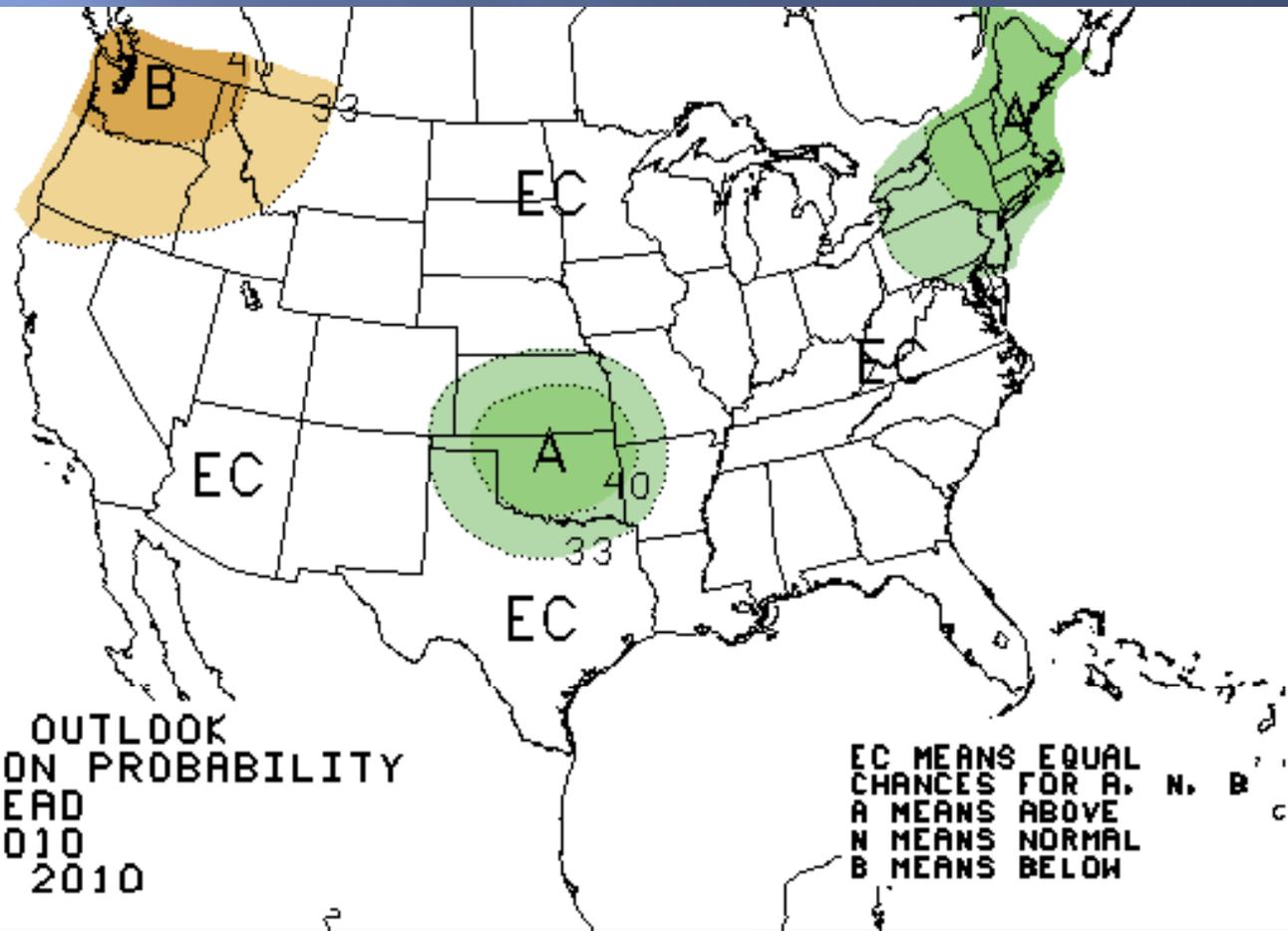


- Latest 40 forecast members
- Earliest 40 forecast members
- Other forecast members
- Forecast ensemble mean
- Olv2 observation

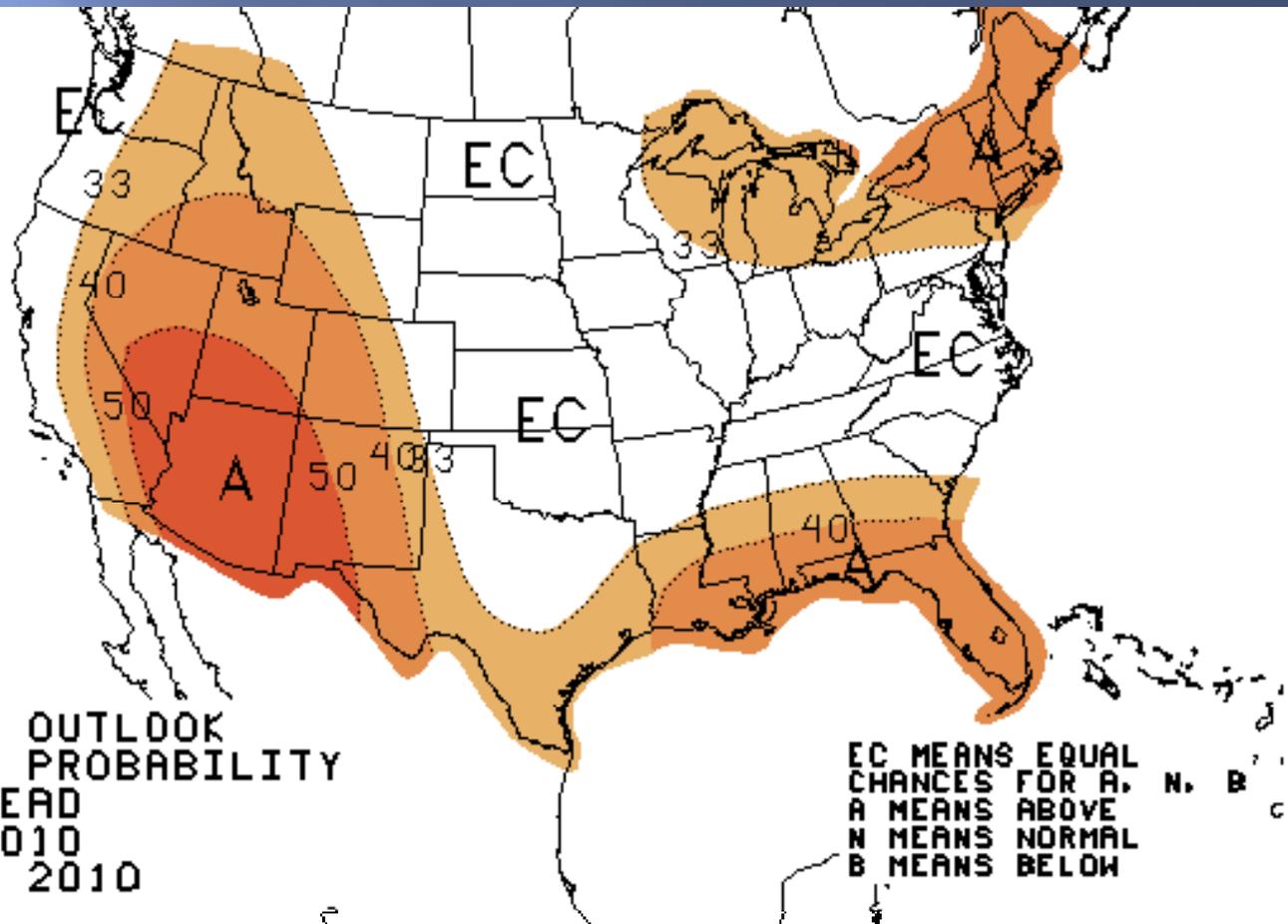
Temp Outlook - JJA 2010



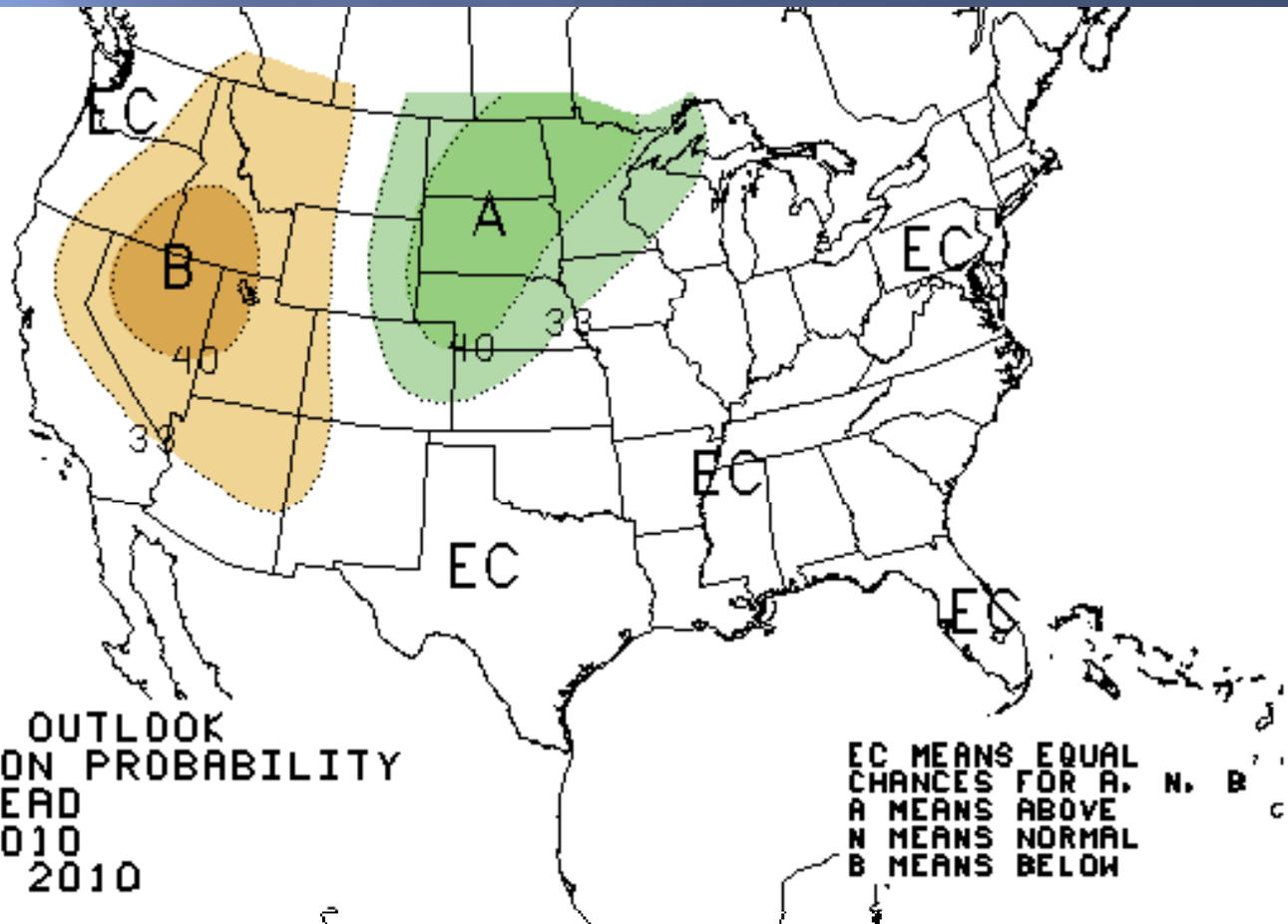
Precip Outlook - JJA 2010



Temp Outlook - ASO 2010



Precip Outlook - ASO 2010



Summary

- ▣ El Nino/La Nina typically have less impact during the warm season.
- ▣ Smaller-scale features may play a more important role.
- ▣ If the CPC outlooks verify, we may lose some of the ground we gained over the winter.
- ▣ We still need to prepare for whatever the monsoon season has in store.

Questions? Contact Us

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