

# Drought Monitoring Technical Committee Update

to the

Arizona Interagency Coordinating Group

November 1, 2010

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Arizona State University  
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# Arizona Drought Monitoring Technical Committee



ARIZONA DIVISION OF  
EMERGENCY MANAGEMENT



OFFICE OF THE ARIZONA  
STATE CLIMATOLOGIST



**MTC continues to provide weekly input to the National Drought Monitor to ensure that their weekly map accurately represents conditions in Arizona. The Arizona participants include:**

**NWS, USGS, NRCS, ADWR, CLIMAS, University of Arizona Agricultural Extension, State Climate Office, the Navajo Nation, and local drought impacts groups.**

**Other activities include:**

**Monthly summary of the short-term drought conditions as depicted in the National Drought Monitor**

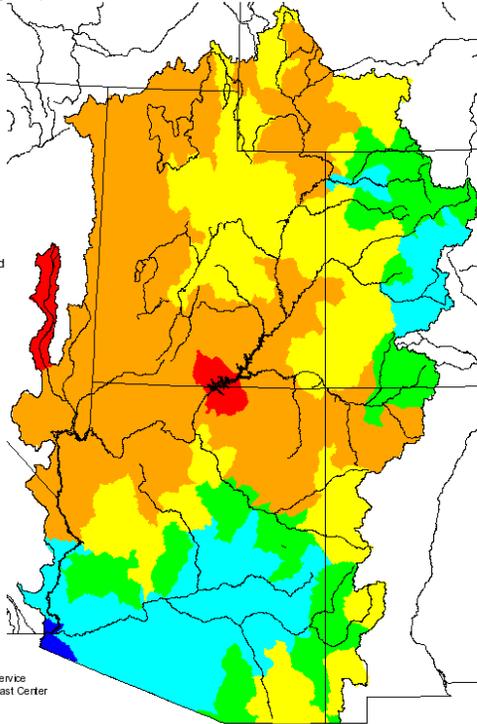
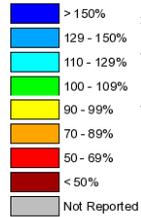
**Quarterly mapping of long-term drought conditions for Arizona watersheds**

# Precipitation Comparison Colorado River Basin

## WY 2008

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

**% Average**

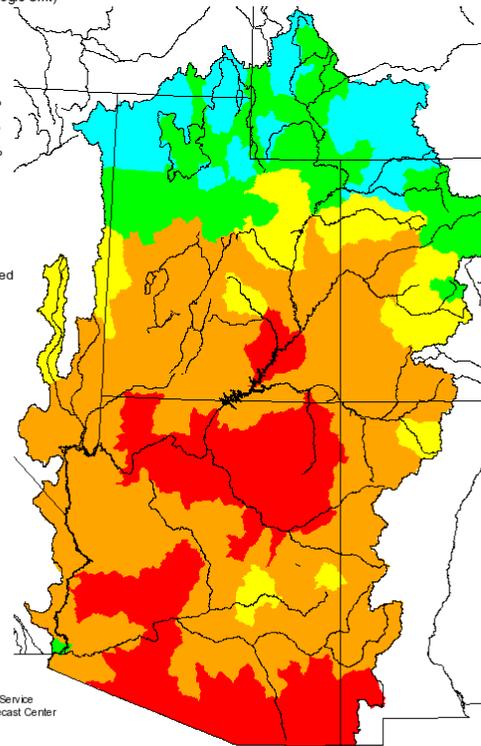
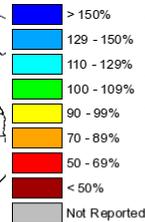


Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
www.cbafc.noaa.gov

## WY 2009

Seasonal Precipitation, October 2008 - September 2009  
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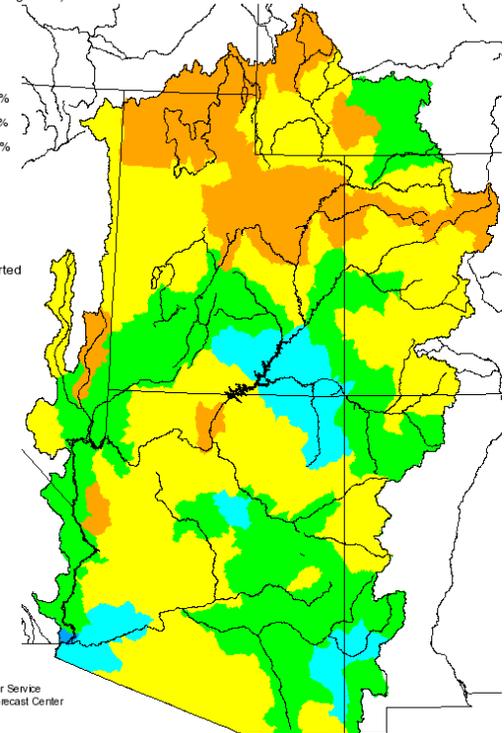
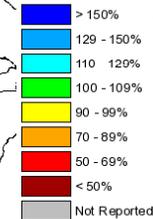


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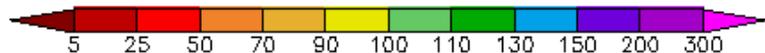
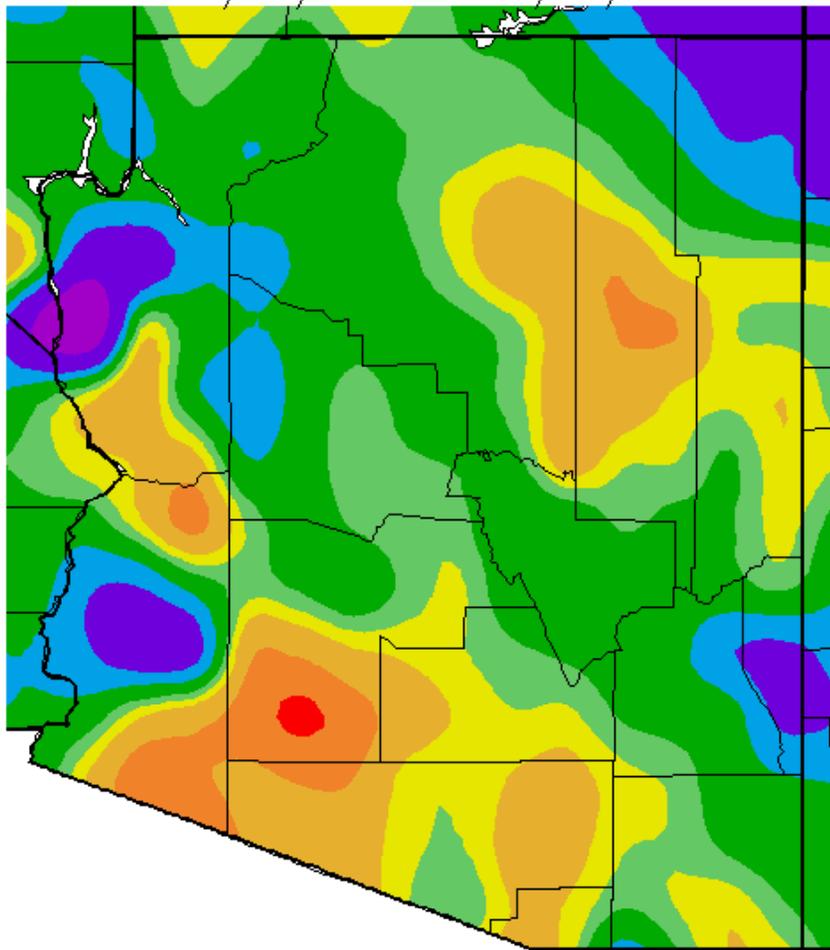


Prepared by  
NOAA, National Weather Service  
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Salt Lake City, Utah  
www.cbafc.noaa.gov

# Precipitation

## Past 12 months

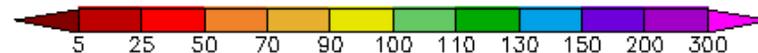
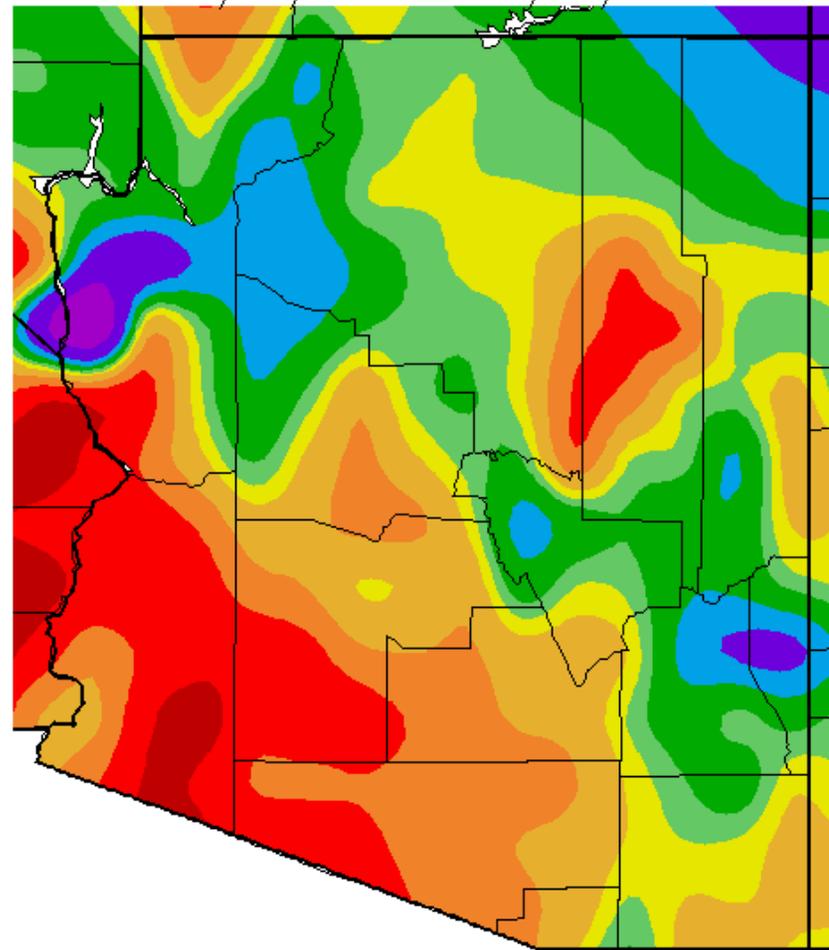
Percent of Average Precipitation (%)  
10/26/2009 – 10/25/2010



Generated 10/26/2010 at WRCC using provisional data.  
NOAA Regional Climate Centers

## Past 6 months

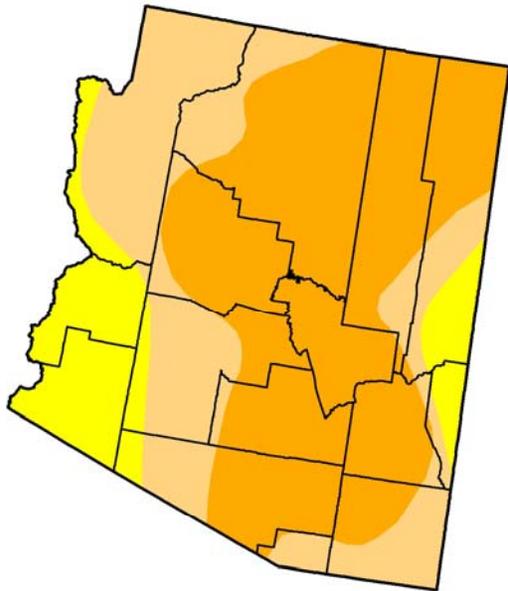
Percent of Average Precipitation (%)  
4/26/2010 – 10/25/2010



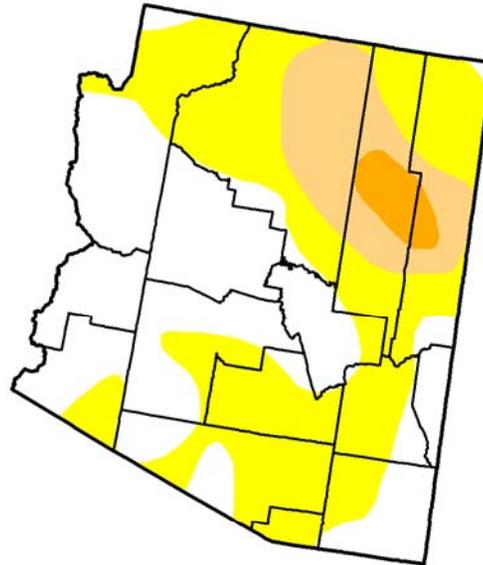
Generated 10/26/2010 at WRCC using provisional data.  
NOAA Regional Climate Centers

# National Drought Monitor Comparison (Short-Term)

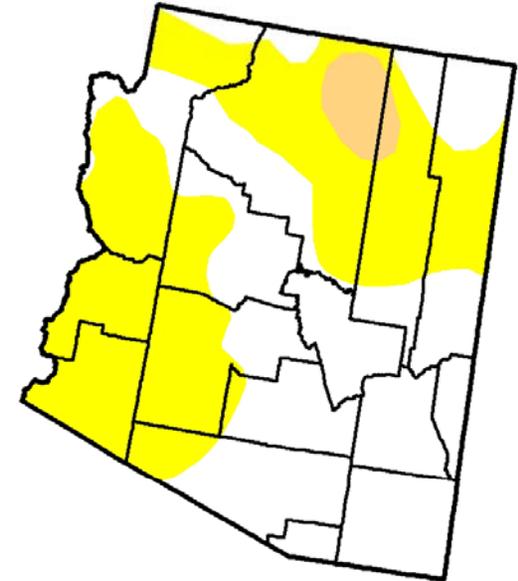
Oct 29, 2009



Apr 27, 2010



Oct 26, 2010

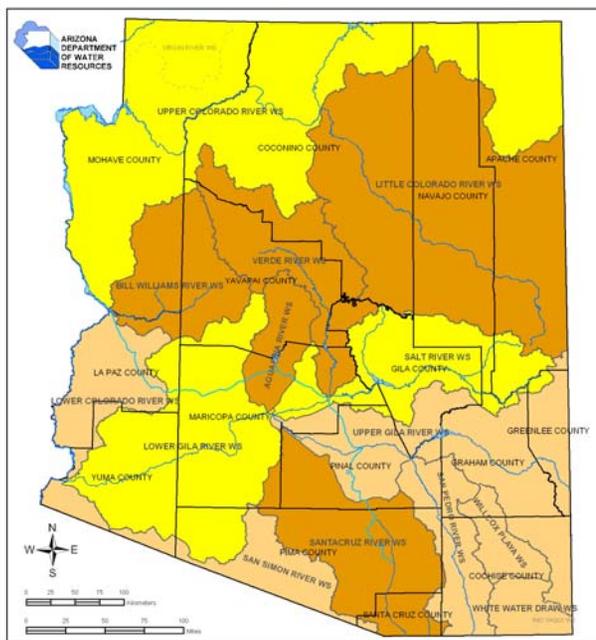


# Long Term Drought Status Comparison

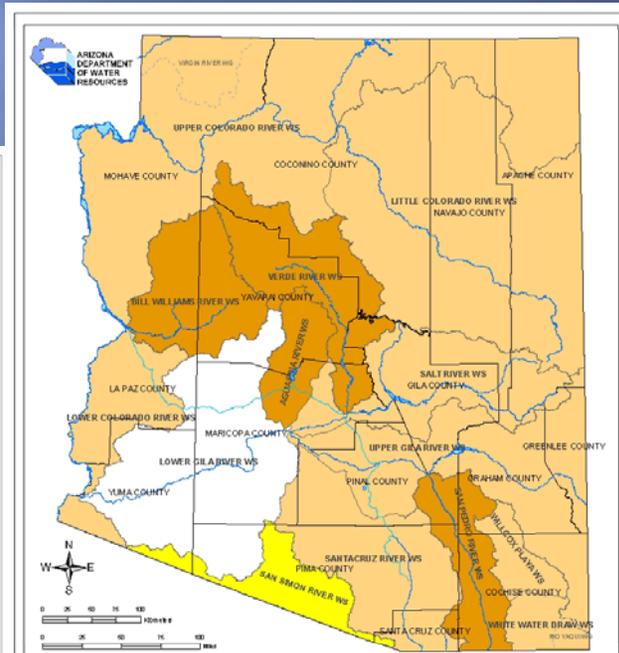
Oct 2010

Apr 2010

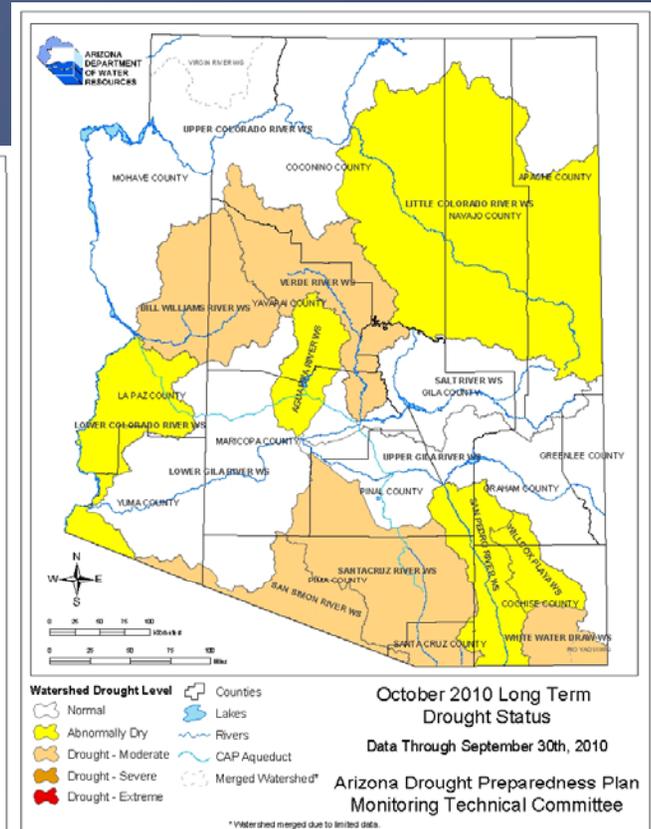
Oct 2009



**October 2009 Long Term Drought Status**  
 Data Through September 30th, 2009  
 Arizona Drought Preparedness Plan  
 Monitoring Technical Committee  
\* Watershed merged due to limited data.



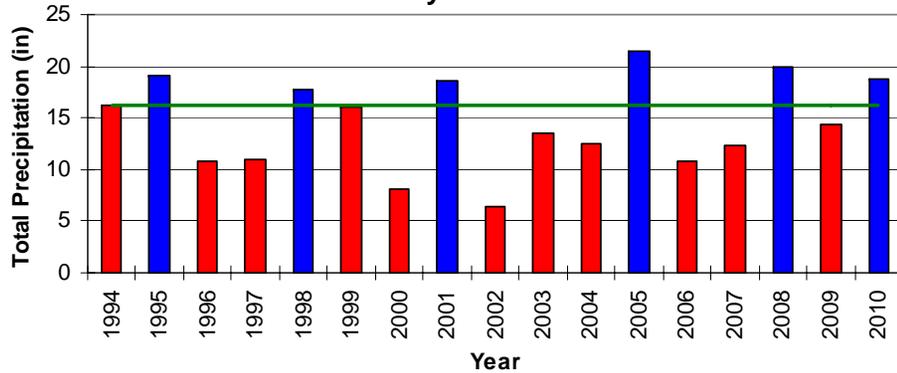
**April 2010 Long Term Drought Status**  
 Data Through March 31st, 2010  
 Arizona Drought Preparedness Plan  
 Monitoring Technical Committee  
\* Watershed merged due to limited data.



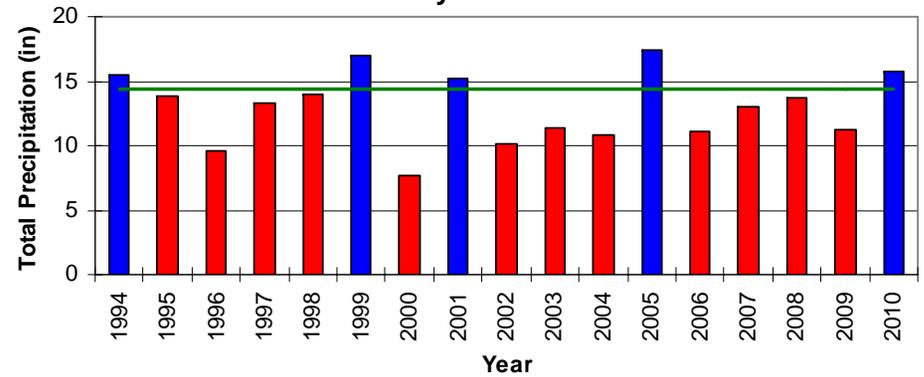
**October 2010 Long Term Drought Status**  
 Data Through September 30th, 2010  
 Arizona Drought Preparedness Plan  
 Monitoring Technical Committee  
\* Watershed merged due to limited data.

# Precipitation in Selected Watersheds for Past 17 Years

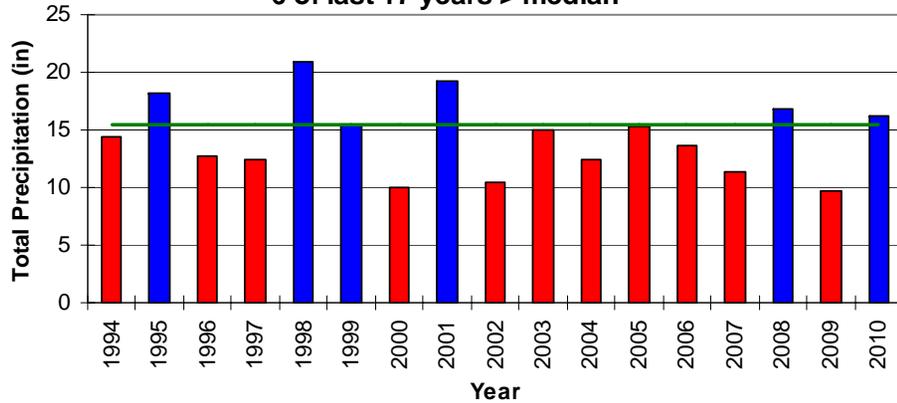
**Salt Watershed 12-month Precipitation  
(Oct-Sep) Median 16.28"  
6 of last 17 years > median**



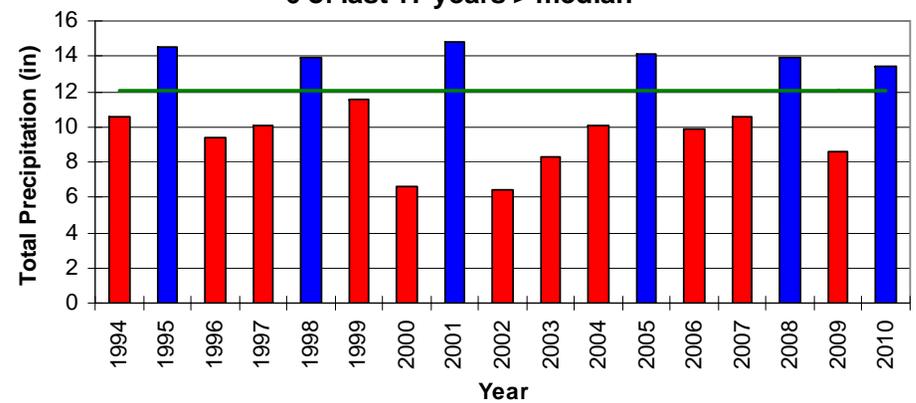
**Little Colorado Watershed 12-month Precipitation  
(Oct-Sep) Median 14.42"  
5 of last 17 years > median**



**Santa Cruz Watershed 12-month Precipitation  
(Oct-Sep) Median 15.42"  
6 of last 17 years > median**



**Upper Gila Watershed 12-month Precipitation  
(Oct-Sep) Median 12.03"  
6 of last 17 years > median**



**Thank you !**

**Questions ?**

**Nancy J. Selover  
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Arizona State University**

**480-965-0580  
[selover@asu.edu](mailto:selover@asu.edu)**

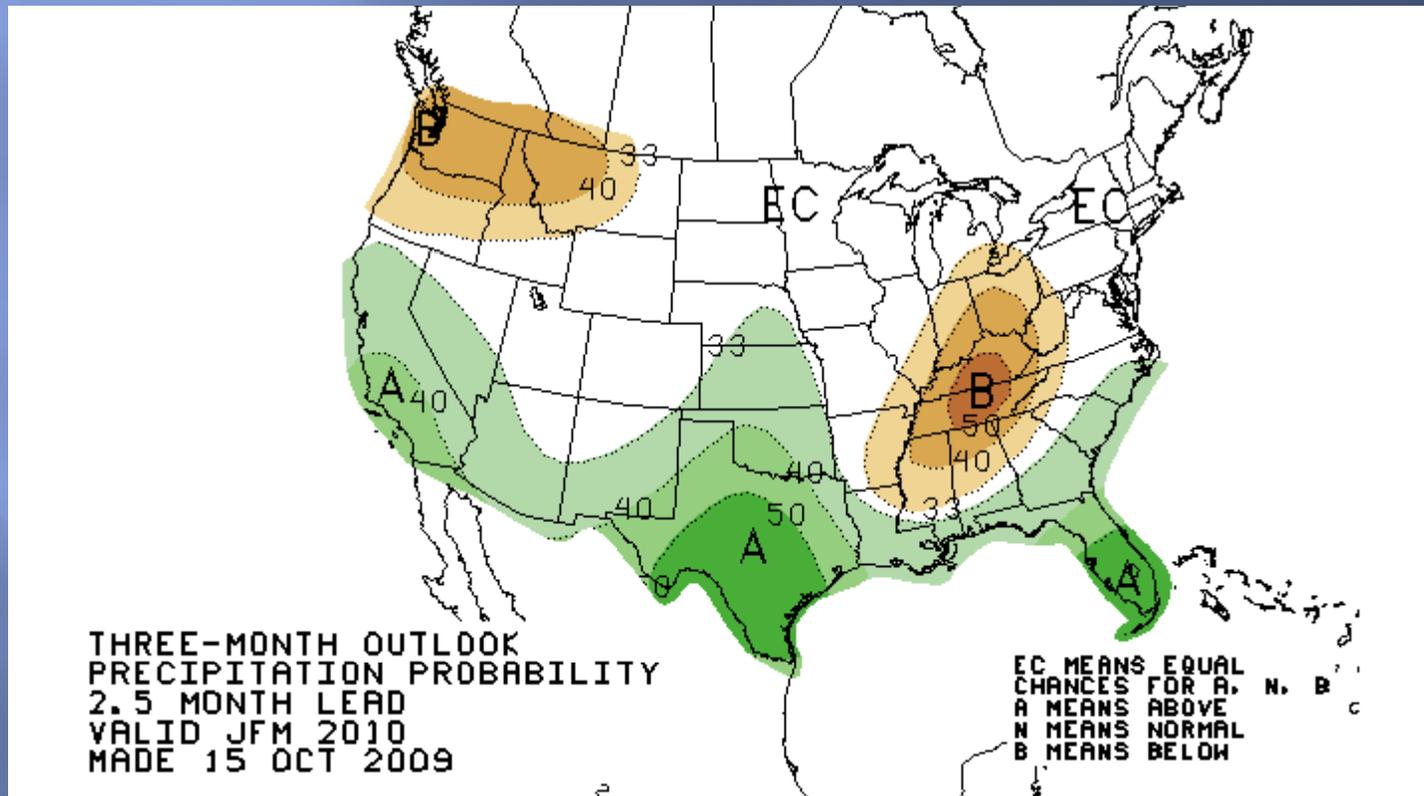
**<http://azclimate.asu.edu>**

# WINTER 2010-2011 OUTLOOK

Gary Woodall  
NOAA/National Weather Service  
Phoenix, AZ  
[www.weather.gov/phoenix](http://www.weather.gov/phoenix)

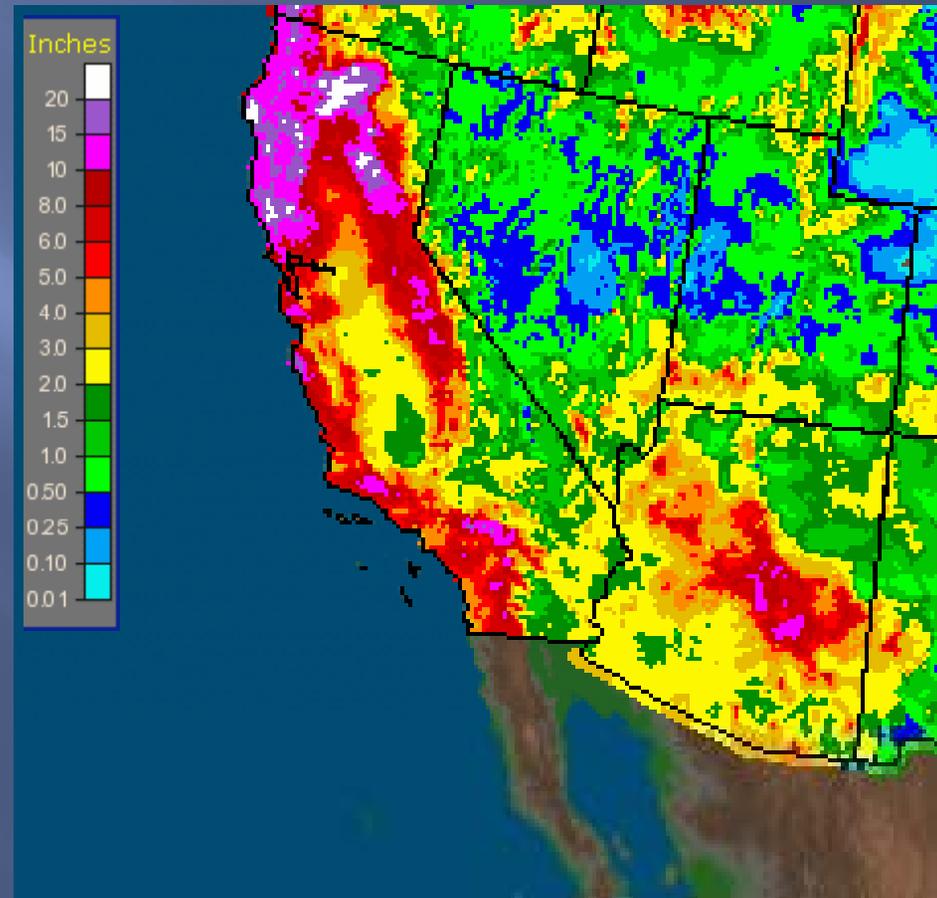


# Winter 2009-10 in Review



# Winter/Spring 2010 Summary

- ❑ Wet winter
- ❑ Widespread flooding in January
- ❑ AZ Reservoirs filled
- ❑ Overall drought situation eased (except NE AZ)
- ❑ Substantial early spring green-up



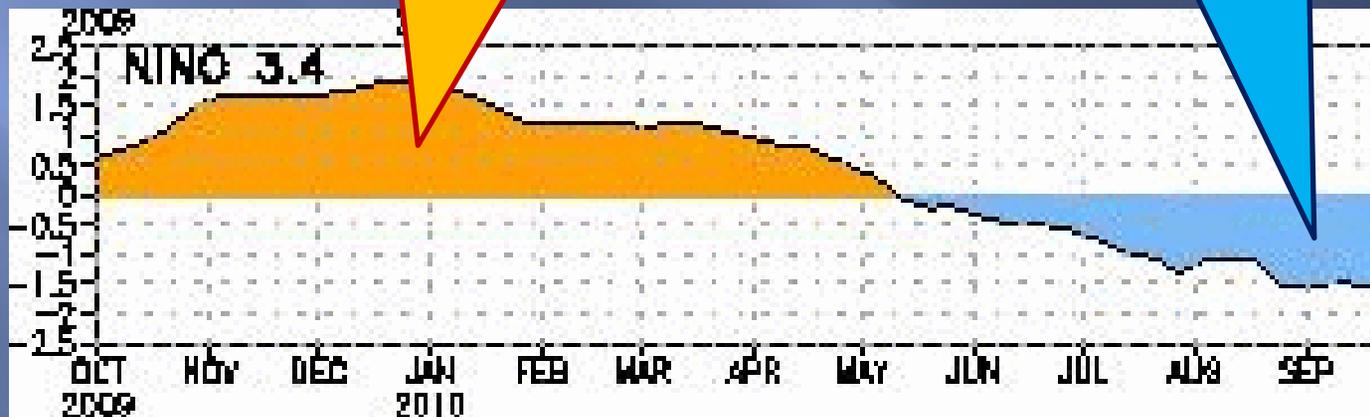
Total Precipitation January 2010

# Sea Surface Temps

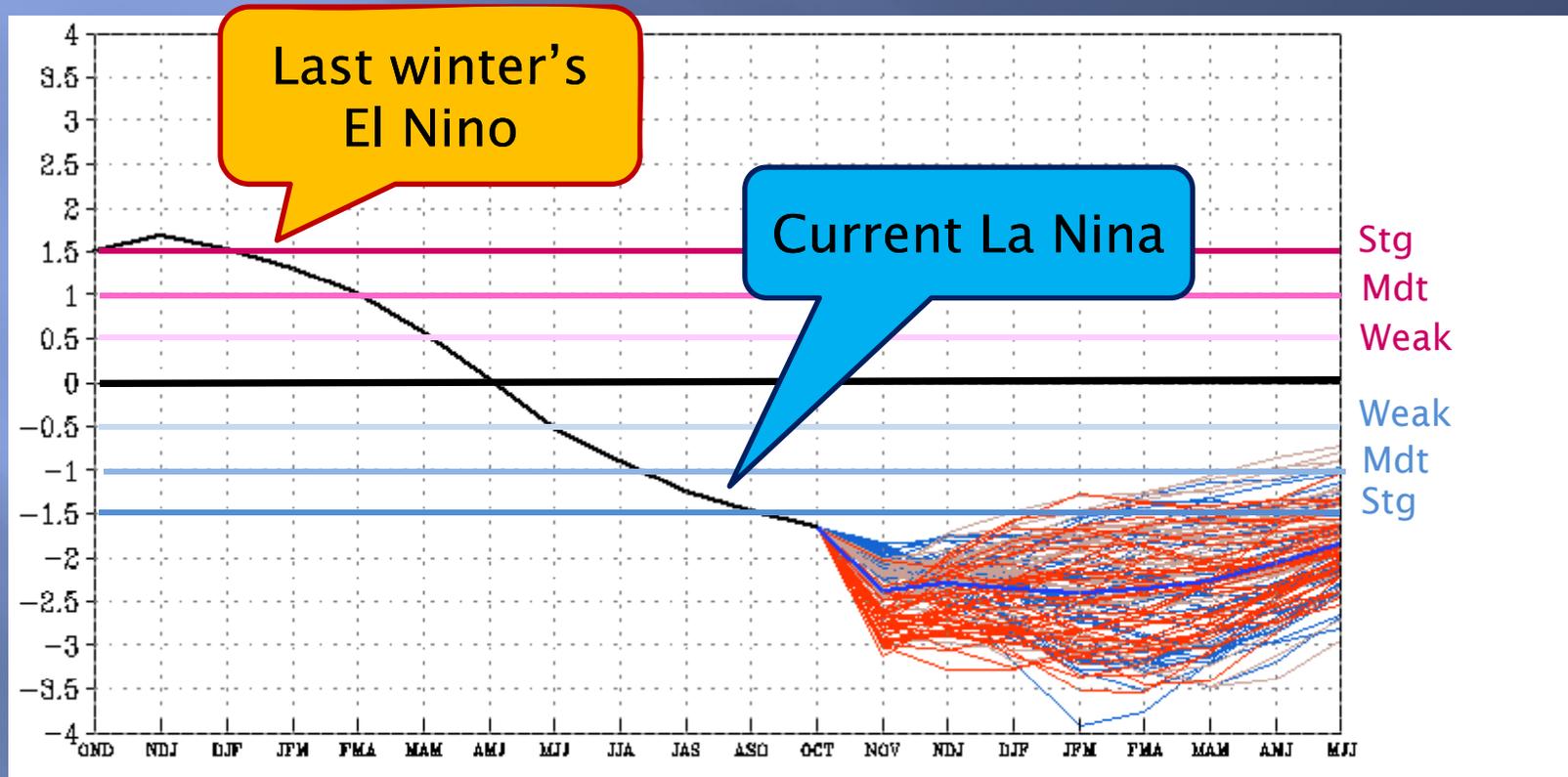
Equatorial Pacific, ~ 150 West Longitude

Strong El Nino  
last winter

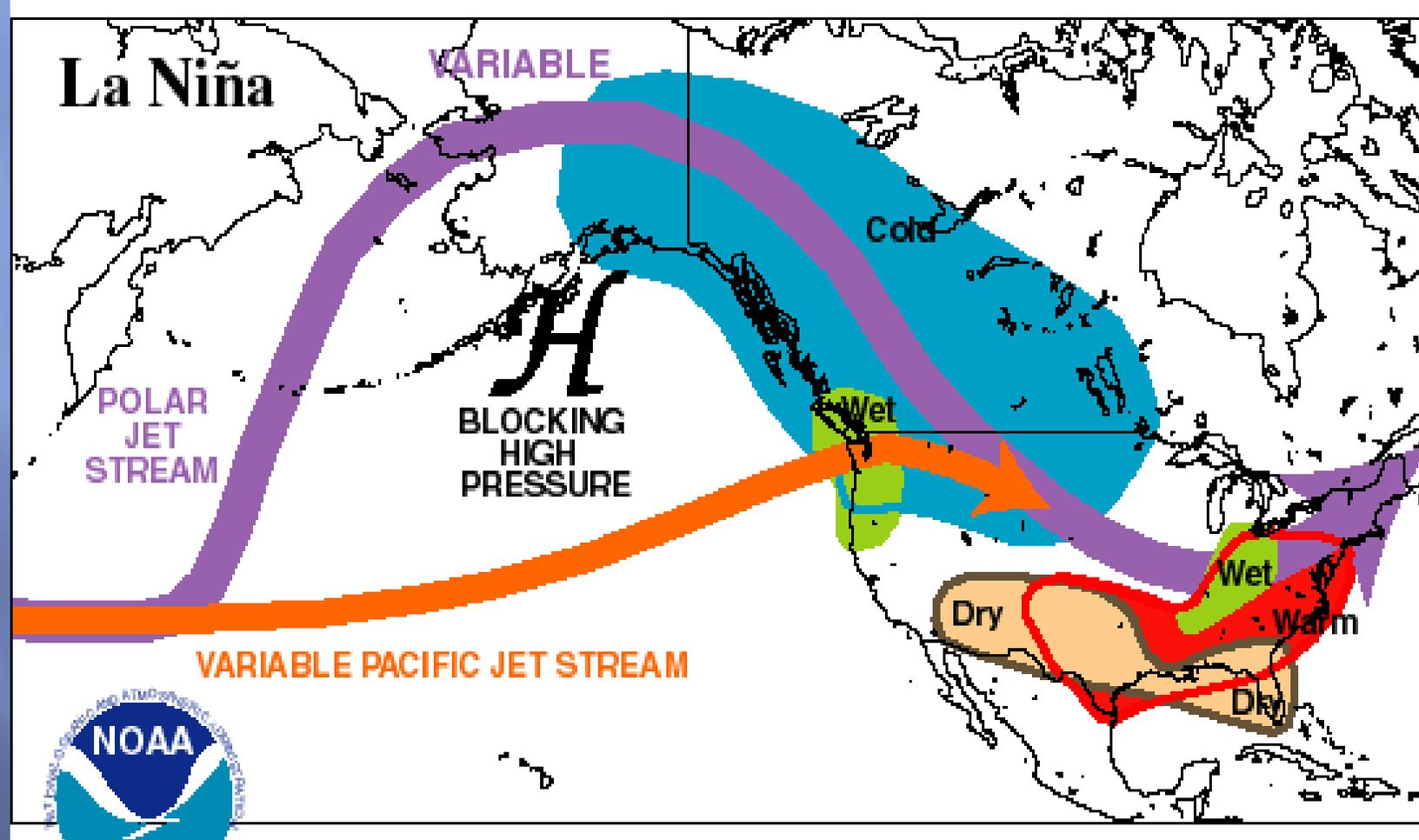
Strong La Nina  
now



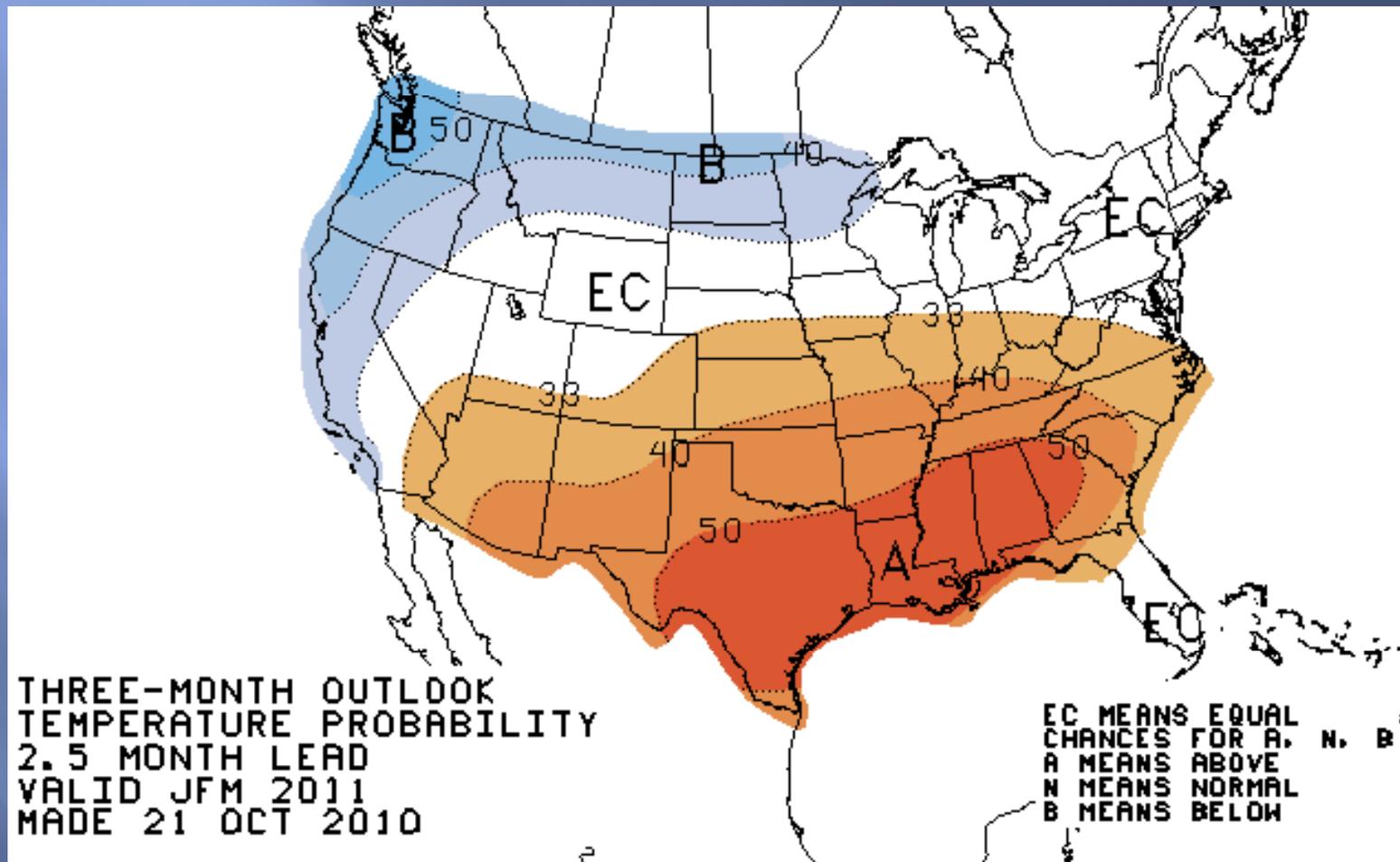
# Sea Surface Computer Forecast



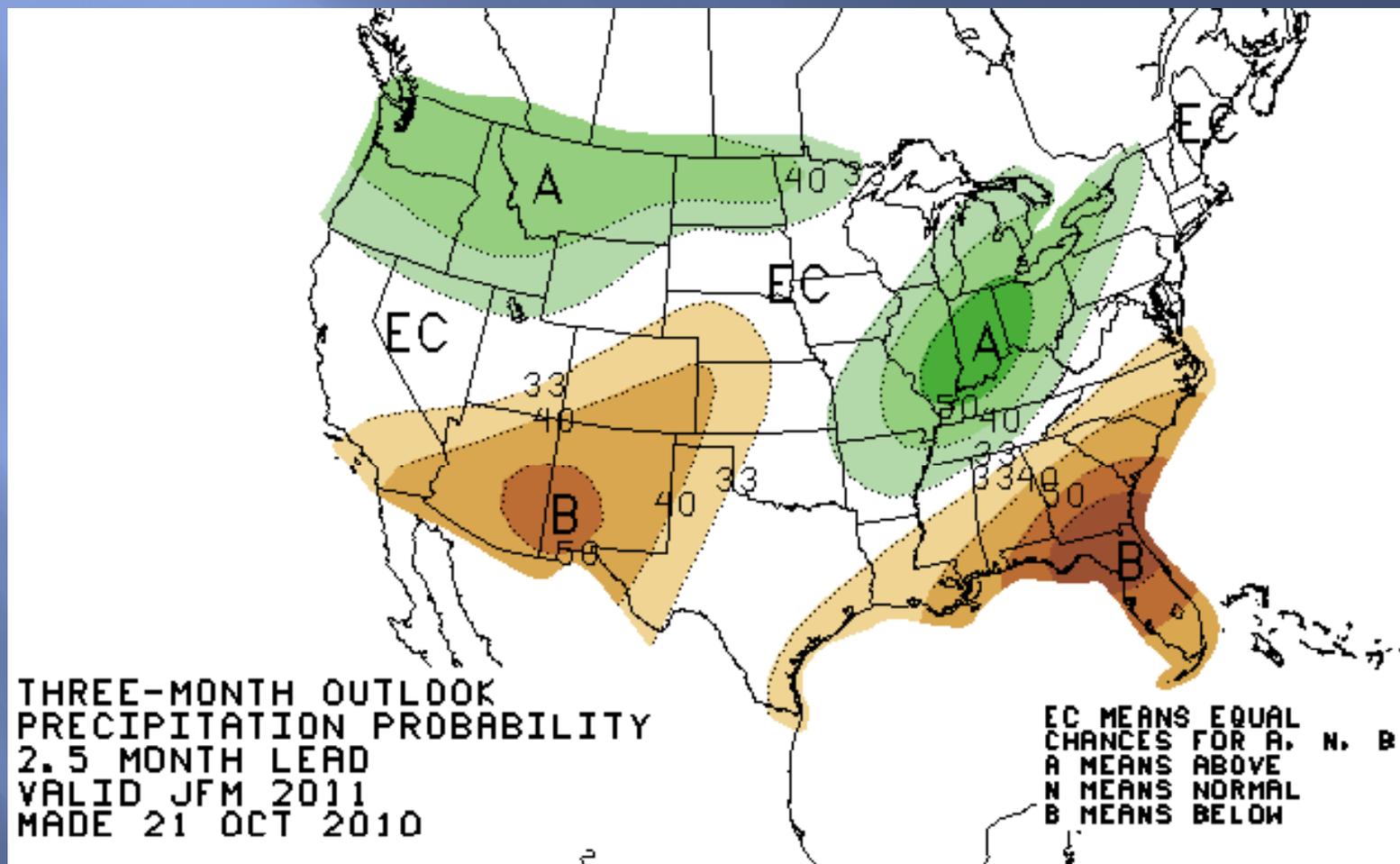
# La Niña Winter Impacts



# Temp Outlook - JFM 2011



# Precip Outlook - JFM 2011



# Summary

- ▣ La Nina should result in increased probabilities for above-normal temperature and below-normal precipitation.
- ▣ Pattern could persist well into Spring 2011.
- ▣ Fire weather concerns – leftover vegetation from winter 2010 and favorable weather conditions.
- ▣ Smaller-scale features, individual storm tracks will modulate overall seasonal signal.

# Questions? Contact Us

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