

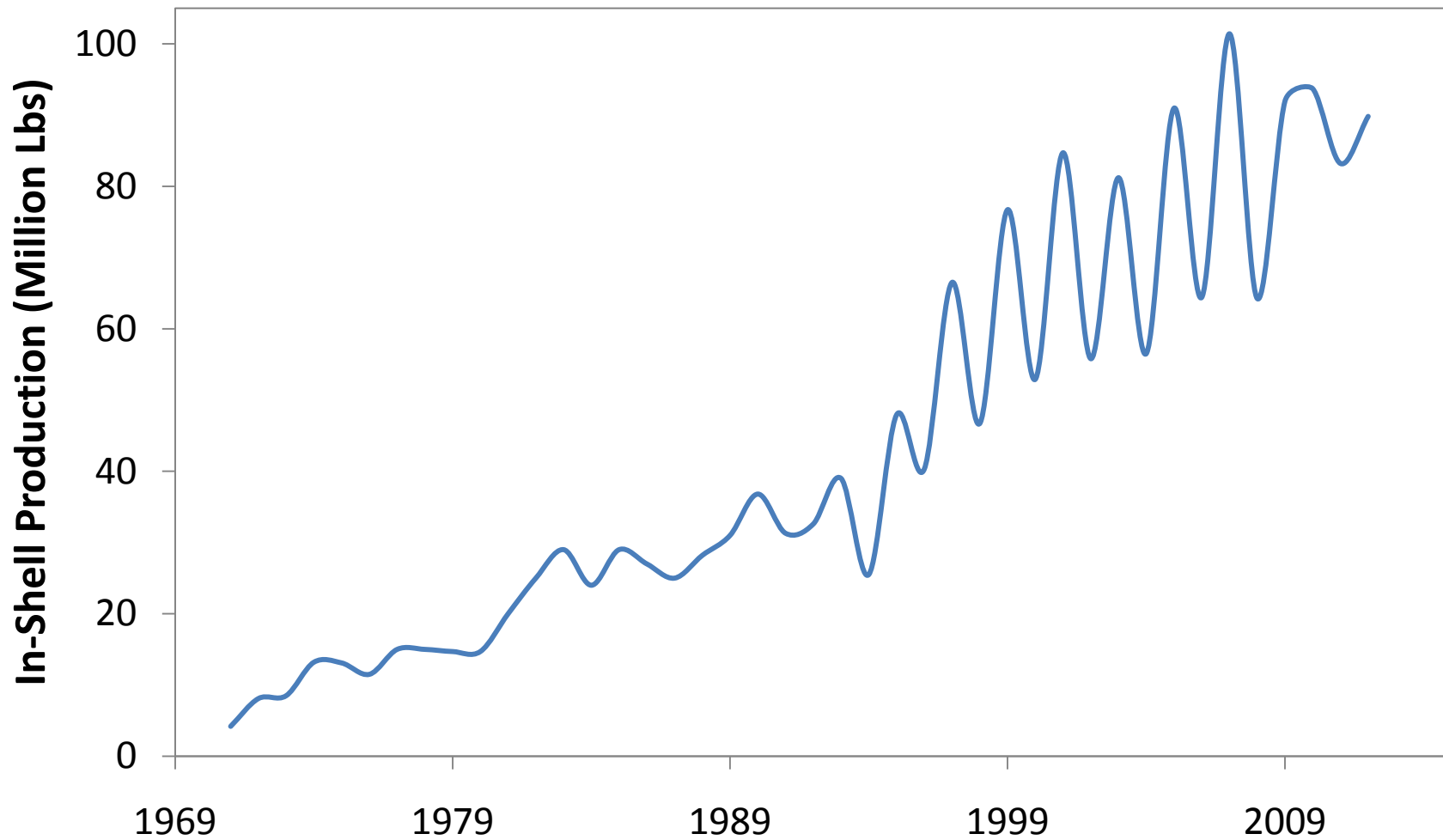
Developments in the Pecan Industry in the West



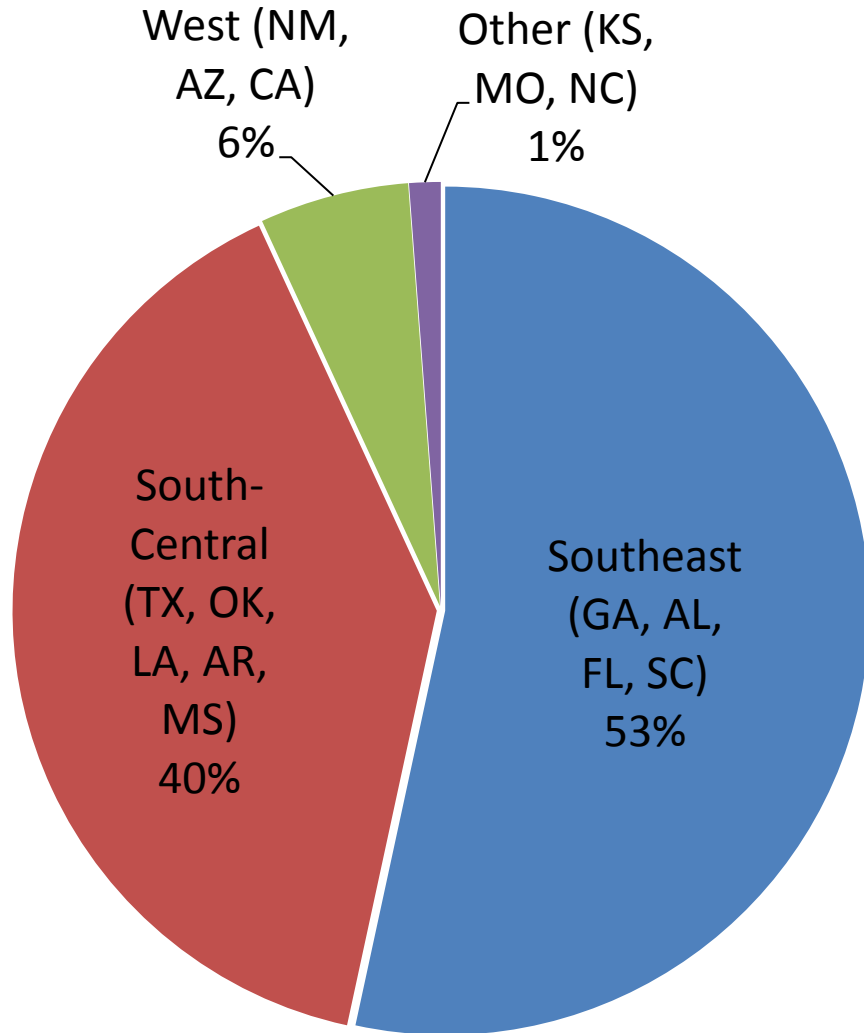
Richard Heerema
Pecan Specialist
New Mexico State University
Las Cruces, NM



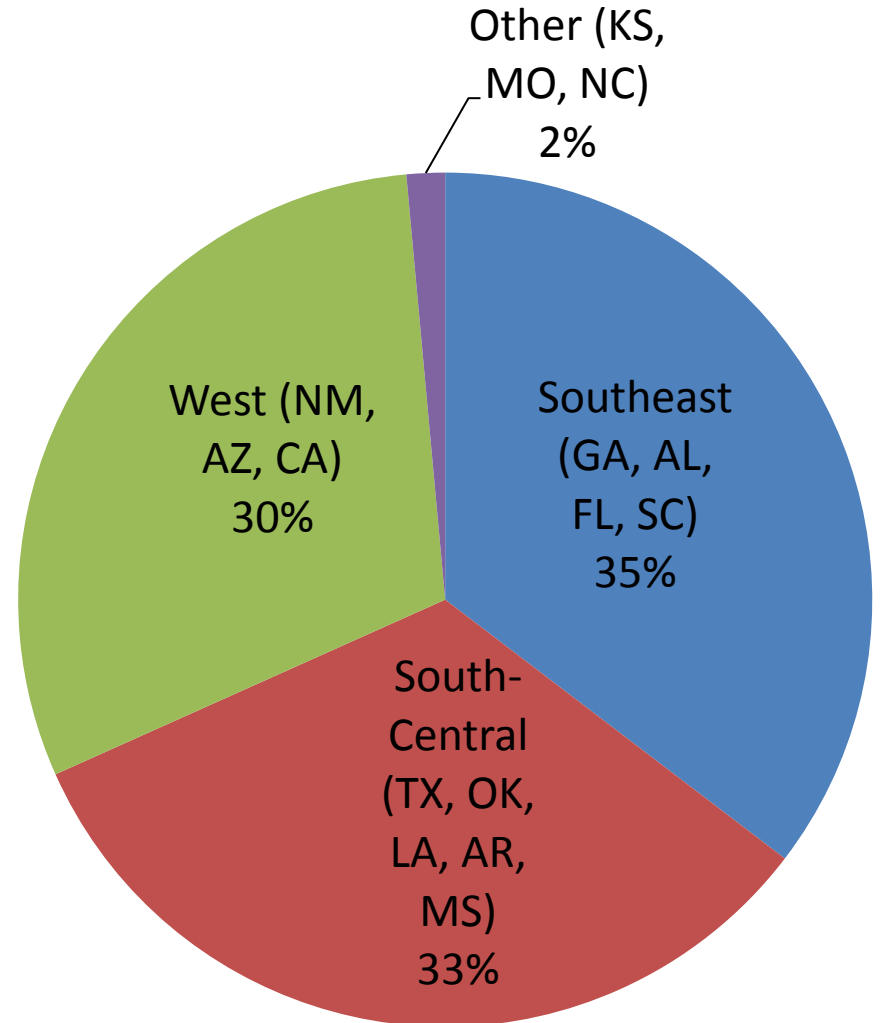
West (NM, AZ, CA)



1971-1980

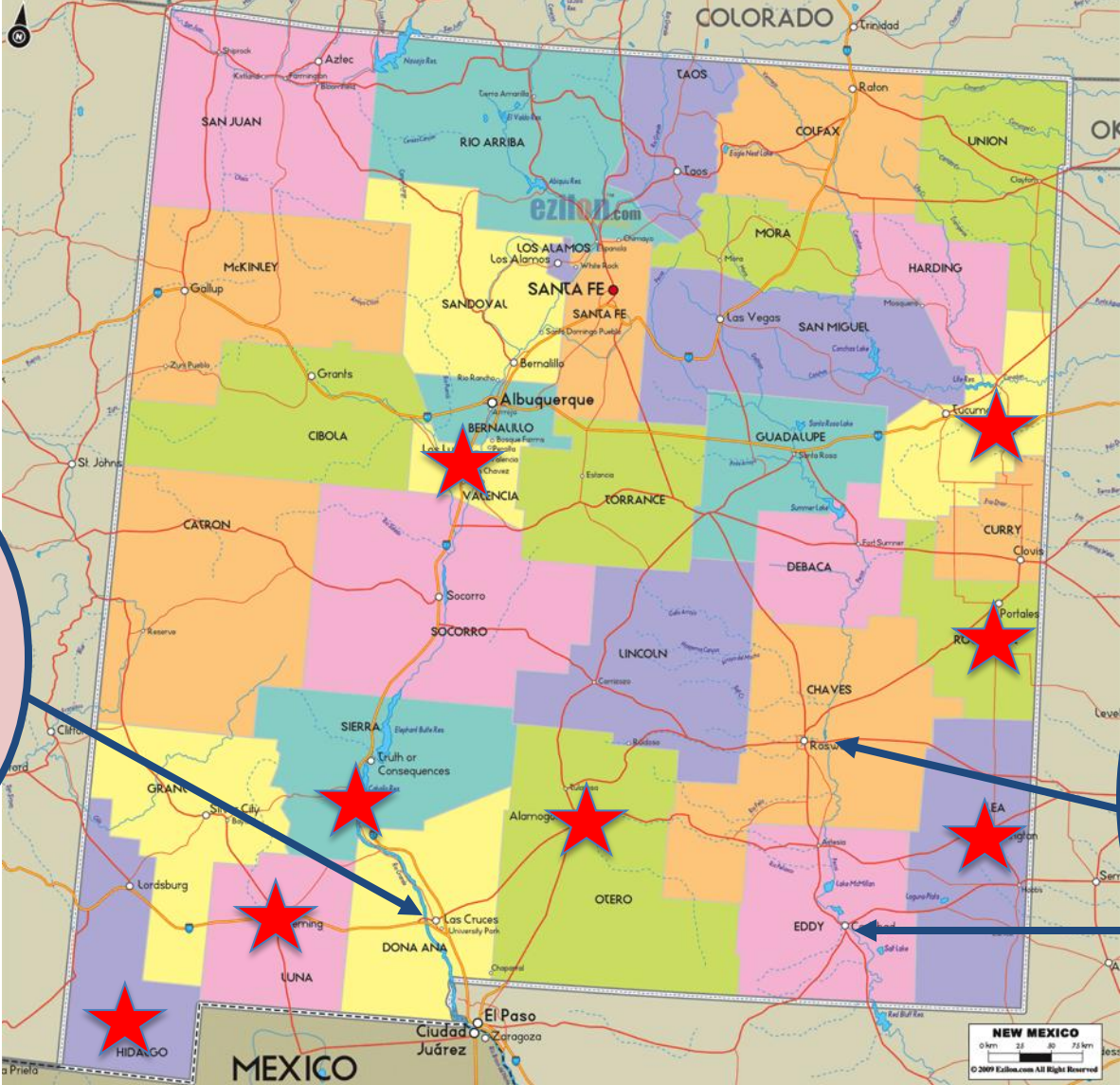


2002-2012



Source: NASS

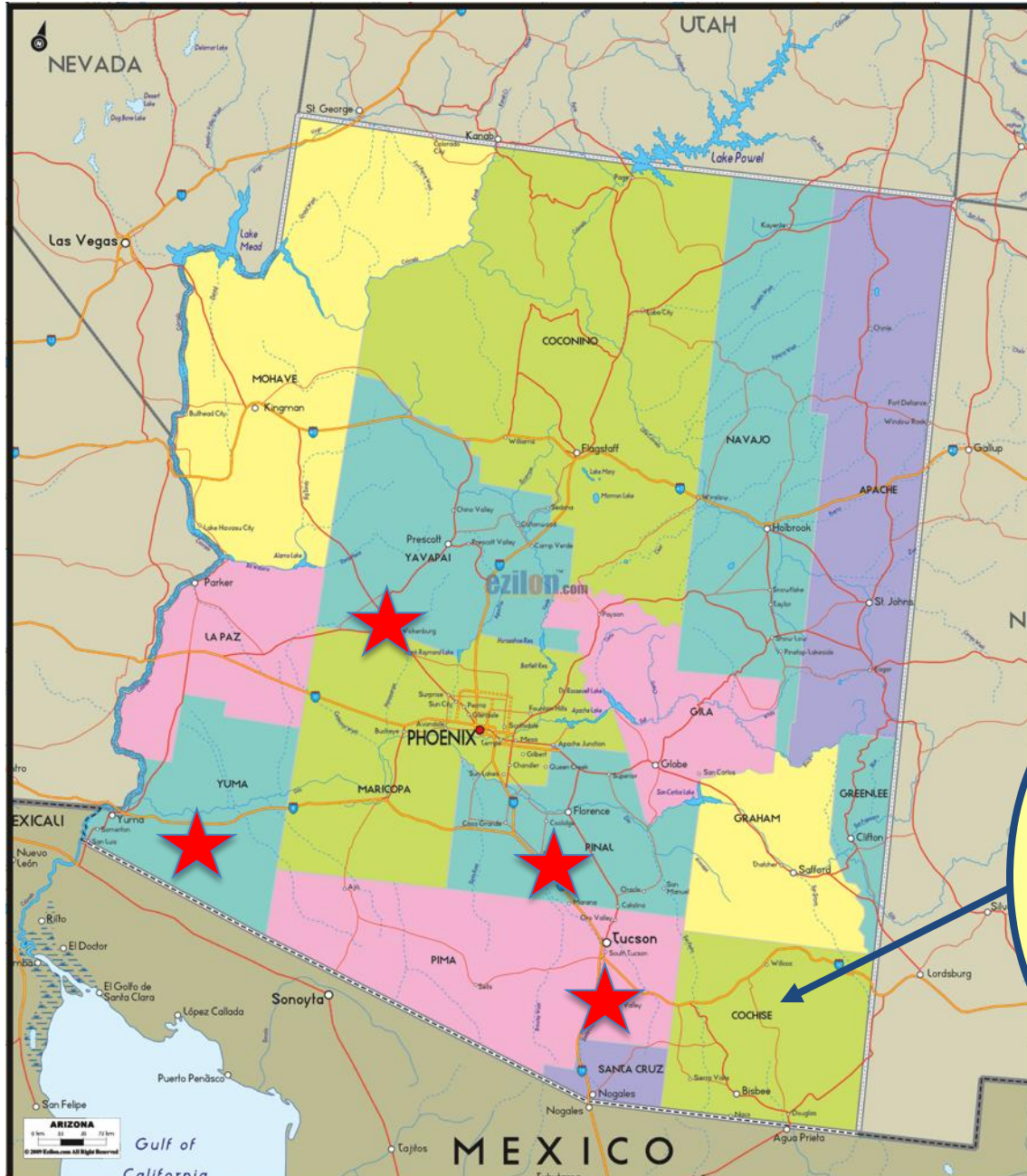
Pecan Production Areas in NM



Doña Ana County
70% of NM Acreage

Eddy and Chaves Counties
20% of NM Acreage

Pecan Production Areas in AZ



**Cochise
County**

**~40% of
AZ
Acreage**

Pecan Production Areas in CA

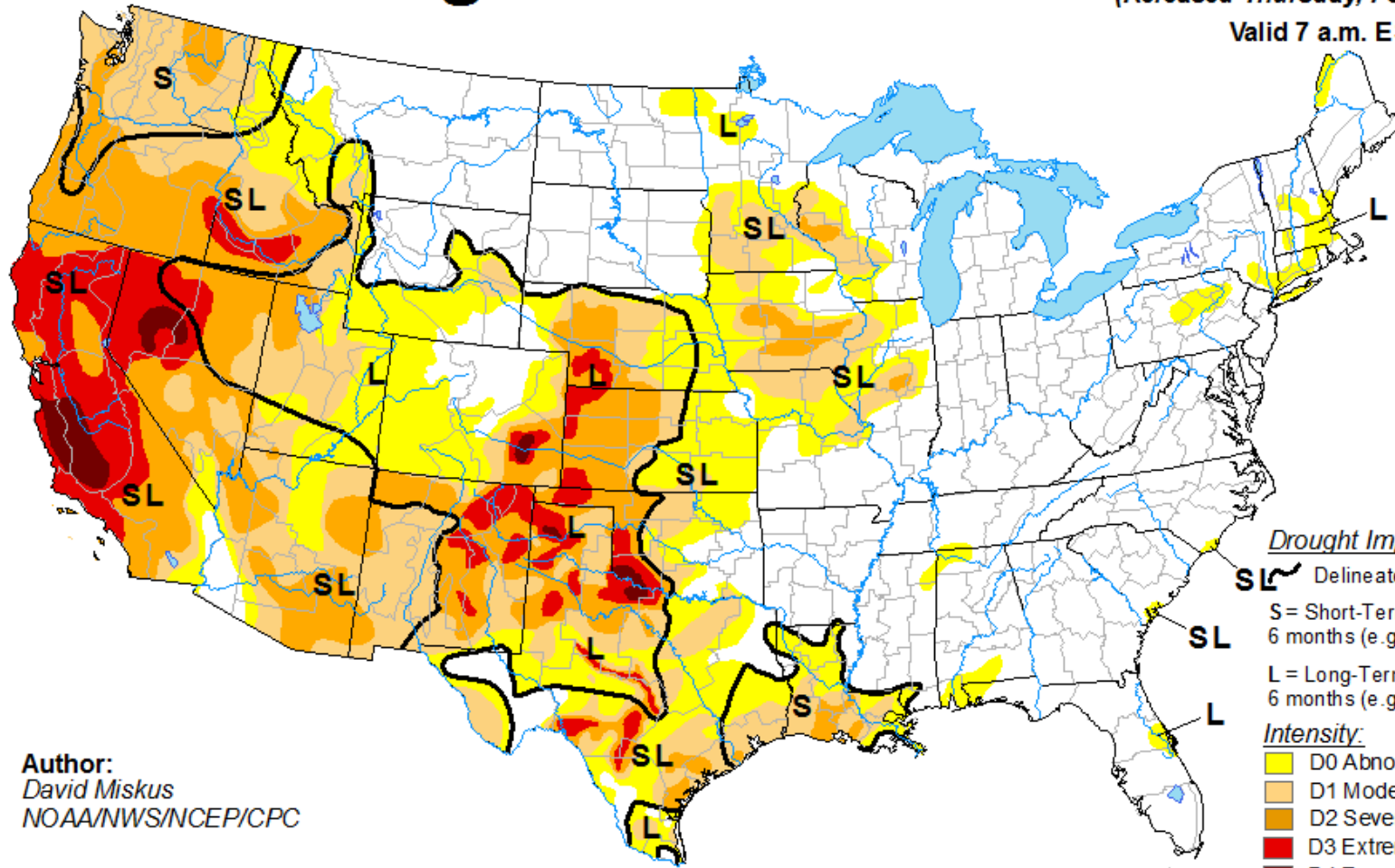
Sacramento Valley

San Joaquin Valley



U.S. Drought Monitor

February 11, 2014
 (Released Thursday, Feb. 13, 2014)
 Valid 7 a.m. EST



Author:
 David Miskus
 NOAA/NWS/NCEP/CPC

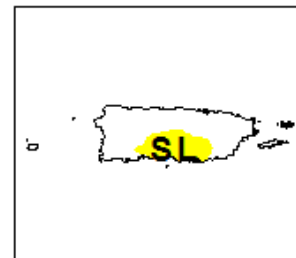
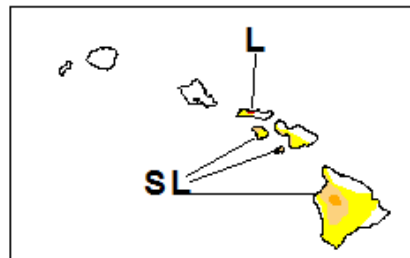
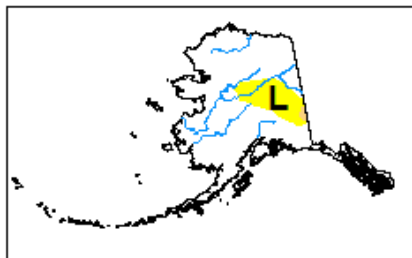
Drought Impact Types:

- SL** Delineates dominant impacts
- S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

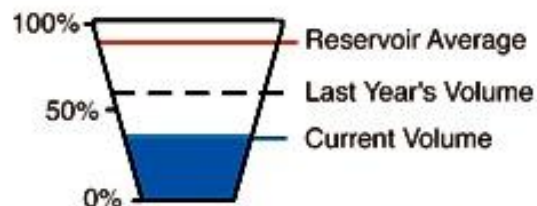
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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



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

Legend



size of cups is
representational of reservoir
size, but not to scale

Reservoir Name	Capacity	Current Storage*	Max Storage*	One-Month Change in Storage*
1. Navajo	57%	965.0	1,696.0	4.7
2. Heron	22%	86.9	400.0	-4.3
3. El Vado	3%	4.8	190.3	-10.8
4. Abiquiu	13%	154.6	1,192.8	10.6
5. Cochiti	9%	46.6	491.0	0.0
6. Bluewater	10%	3.9	38.5	-0.1
7. Elephant Butte	13%	277.7	2,195.0	41.5
8. Caballo	12%	39.7	332.0	0.7
9. Lake Avalon	58%	2.3	4.0	0.3
10. Brantley	3%	31.9	1,008.2	2.9
11. Sumner	36%	37.2	102.0	3.2
12. Santa Rosa	22%	98.6	438.3	-0.4
13. Costilla	19%	3.0	16.0	0.3
14. Conchas	37%	95.0	254.2	-1.0
15. Eagle Nest	26%	20.3	79.0	-0.7

N/A—value not available

* thousands of acre-feet

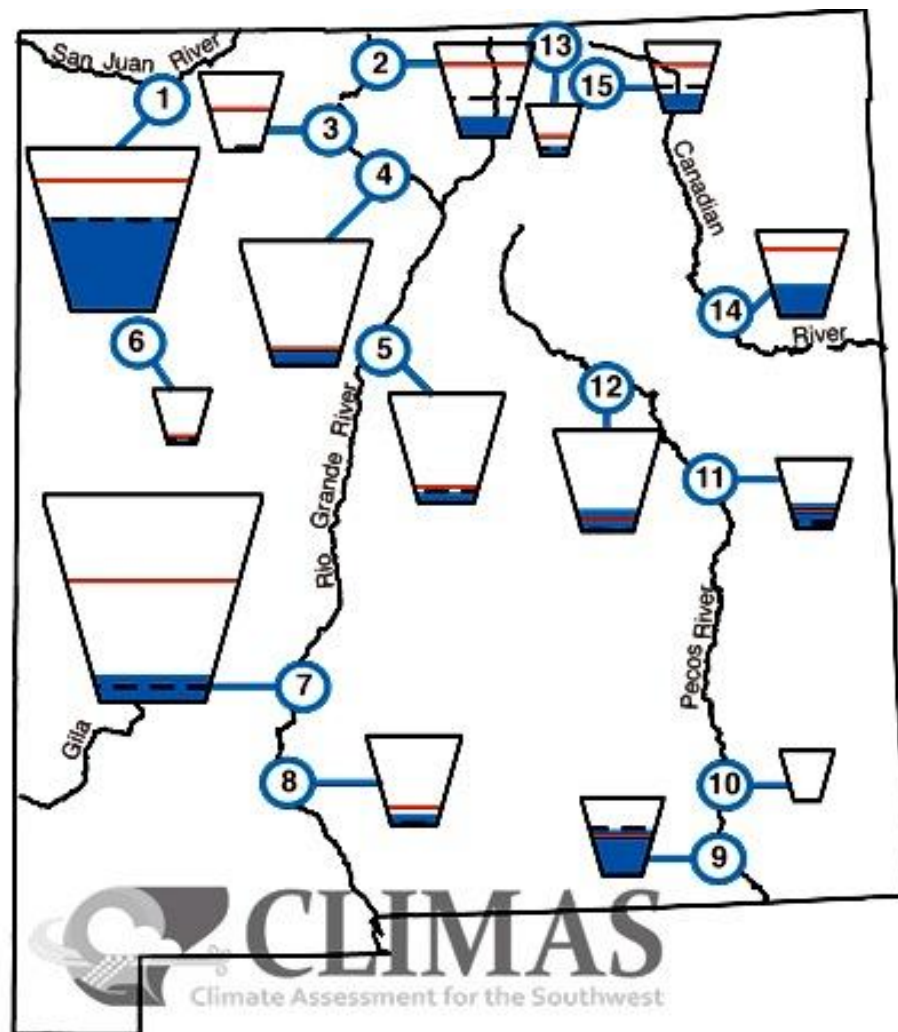
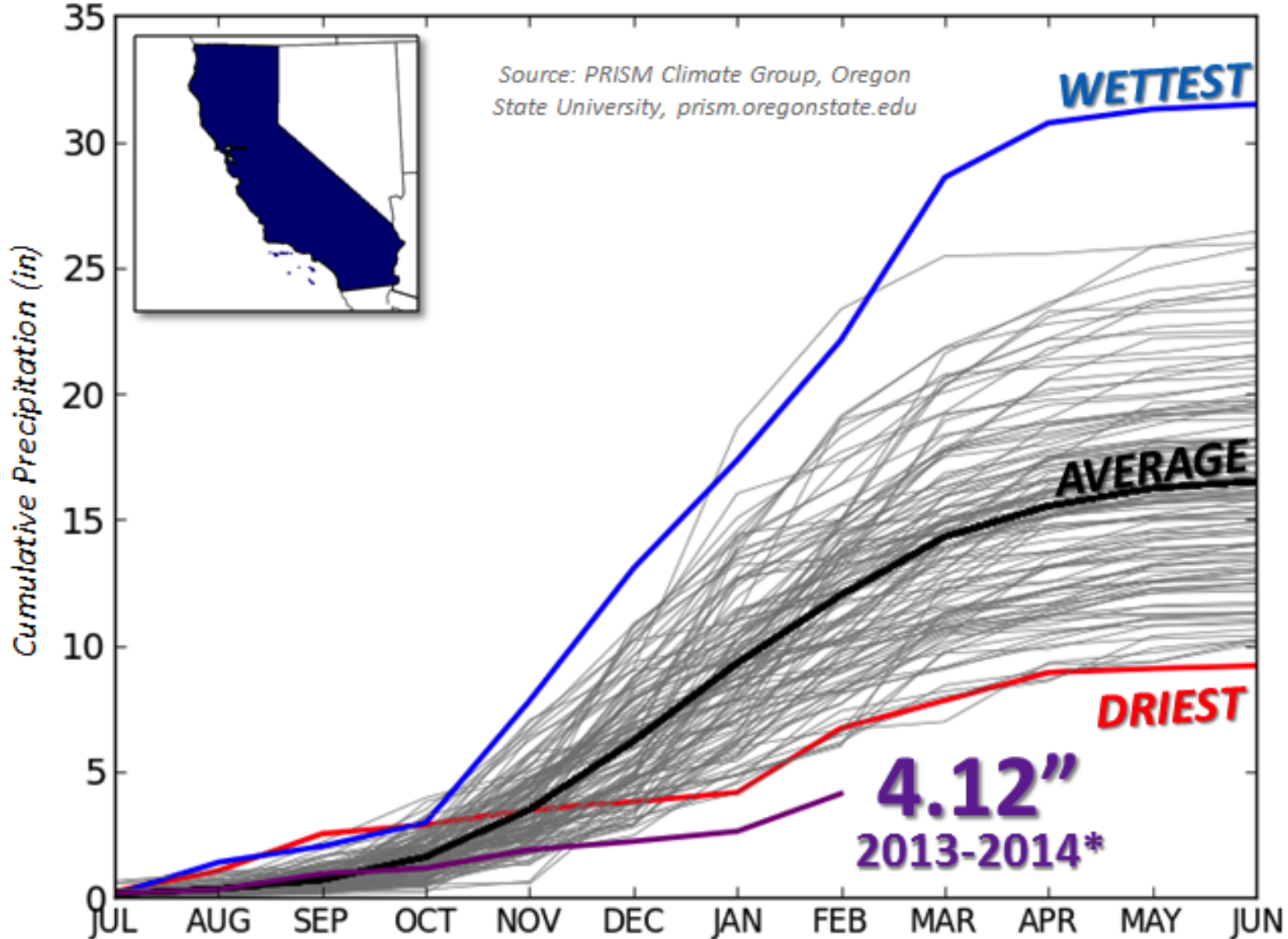


Figure 2. New Mexico reservoir volumes for December as a percent of capacity. The map depicts the average volume and last year's storage for each reservoir. The table also lists current and maximum storage, and change in storage since last month.

Water Year Precipitation in California

1895-96 through 2013-14

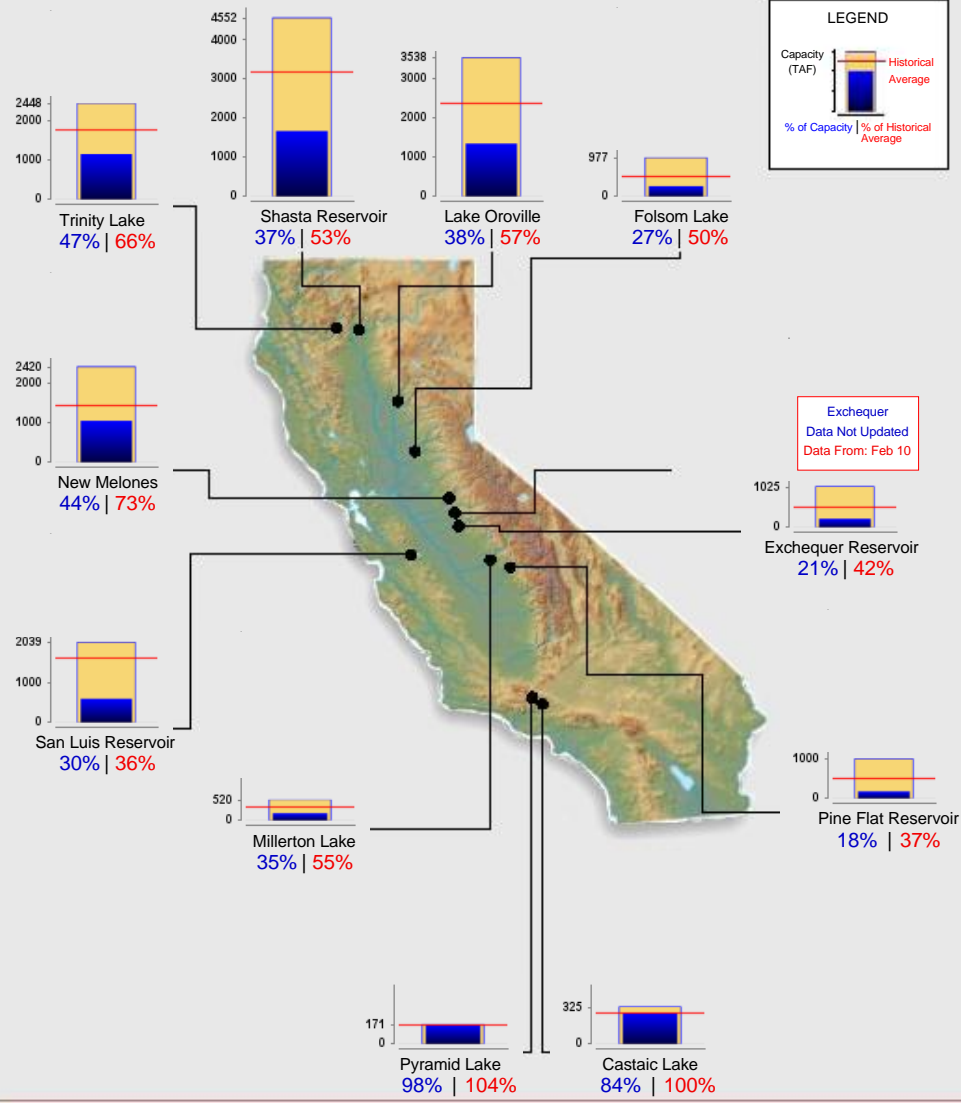




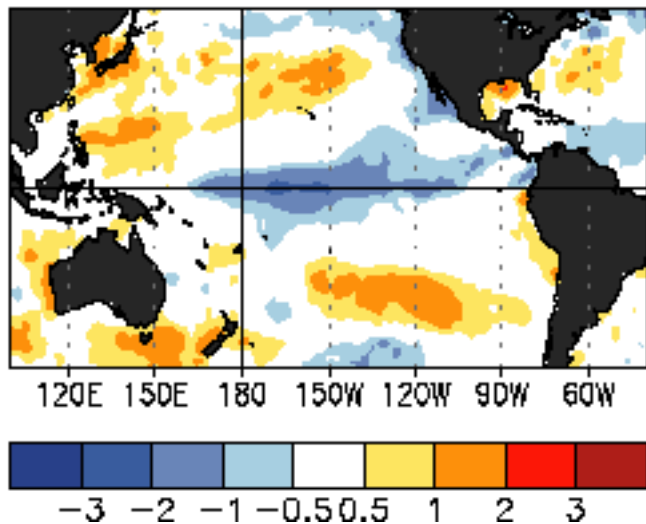
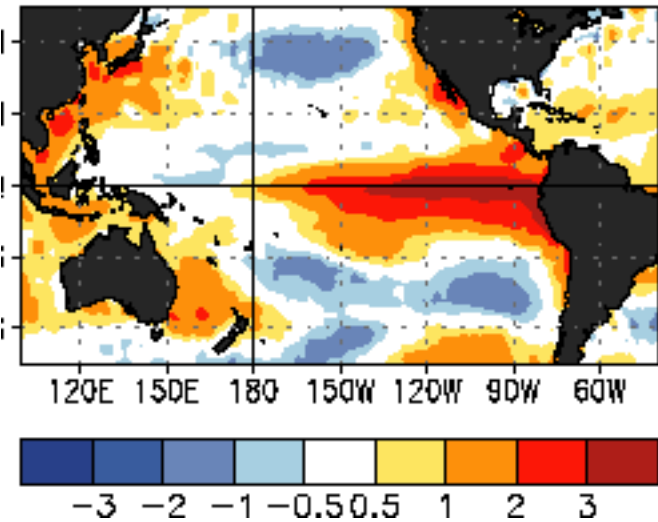
Reservoir Conditions

Ending At Midnight - February 11, 2014

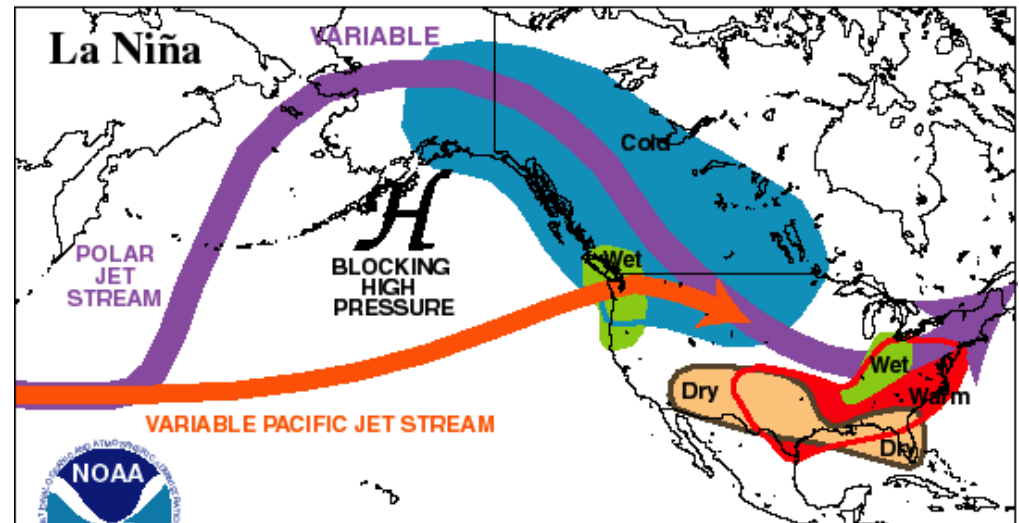
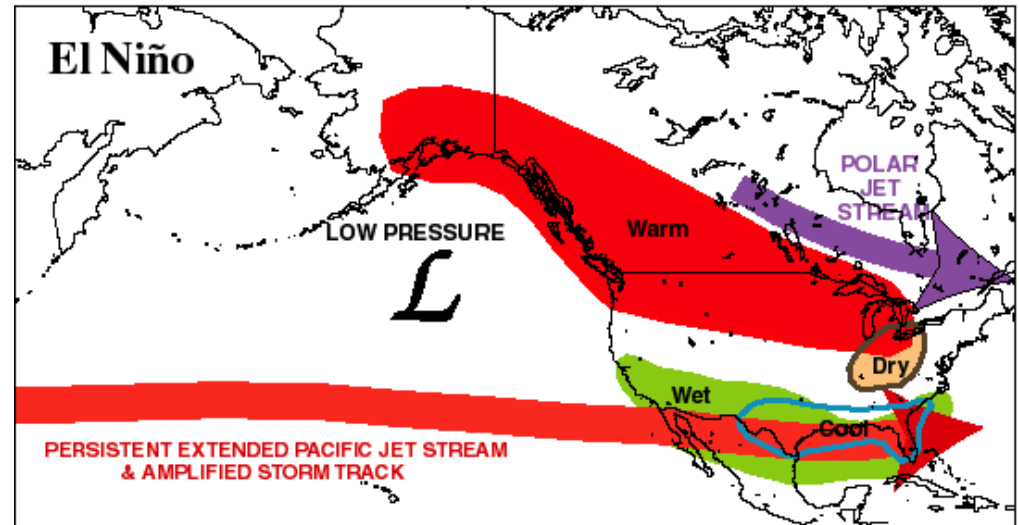
CURRENT RESERVOIR CONDITIONS



Ocean Temperature Departures (Degrees C)

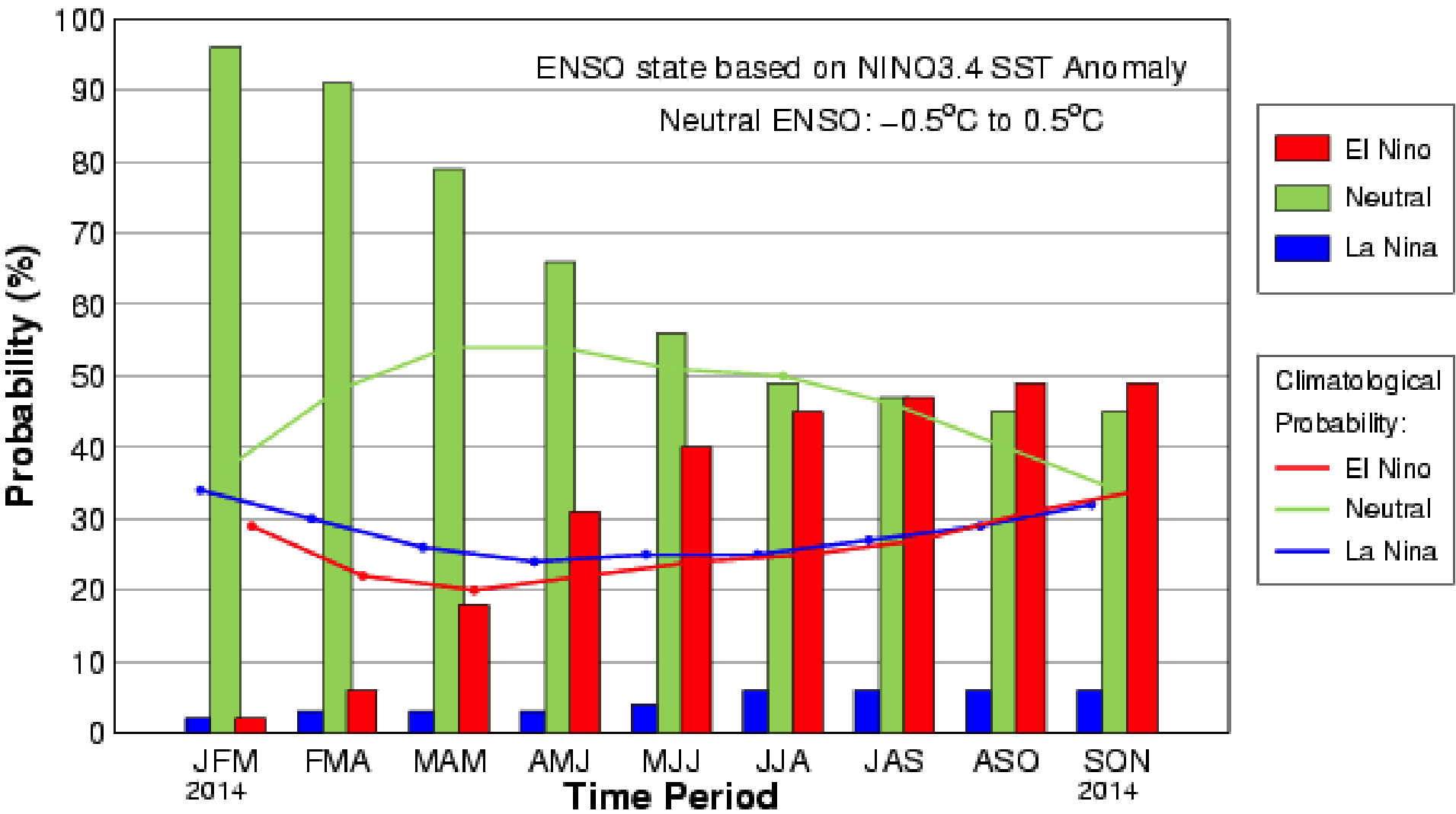


TYPICAL JANUARY-MARCH WEATHER ANOMALIES AND ATMOSPHERIC CIRCULATION DURING MODERATE TO STRONG EL NIÑO & LA NIÑA



Early-Feb CPC/IRI Consensus Probabilistic ENSO Forecast

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5°C to 0.5°C



Salinity



Research: Rethinking foliar zinc applications

With Dr. Jim Walworth at University of Arizona



- Zn EDTA fertigation in calcareous, alkaline soils
 - Treated trees had 25-29 ppm zinc vs. 7-8 ppm for untreated trees.
 - Treatment nearly eliminated visible zinc deficiency symptoms.
 - Treated trees had 17-22% greater trunk diameter in 3rd leaf.
 - Treated trees had about 70% higher photosynthesis rates than untreated in June.



Mechanical Hedge Pruning



In the 9th year of a pruning frequency study.

With Brad Lewis.

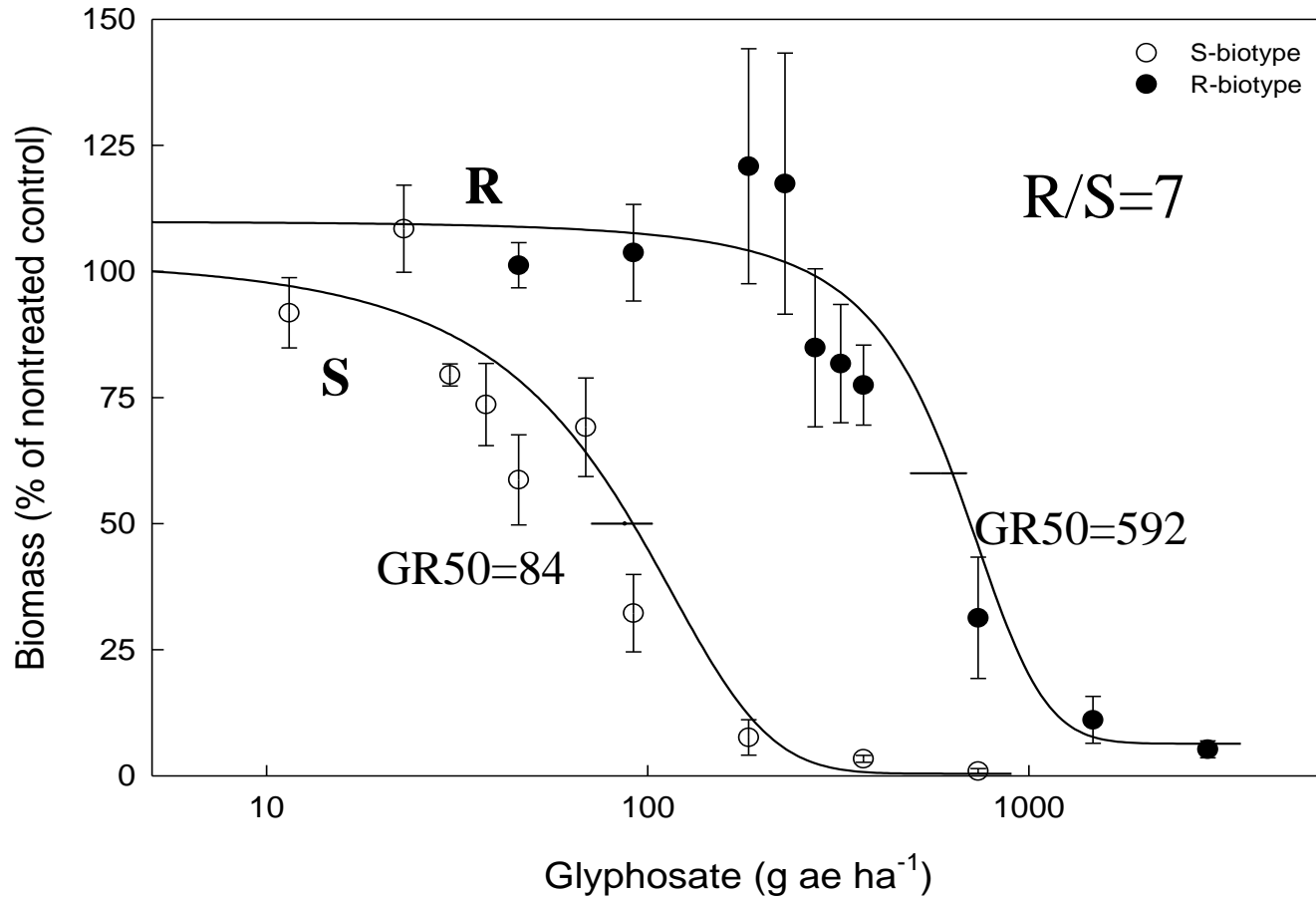


Weed Management Issues

With Dr. Jamshid Ashigh



Weed Management Issues



Experiments were replicated four times and repeated once ($\alpha = 0.05$)

Characteristics of the Vegetative Growth of R and S Populations



Questions?

