

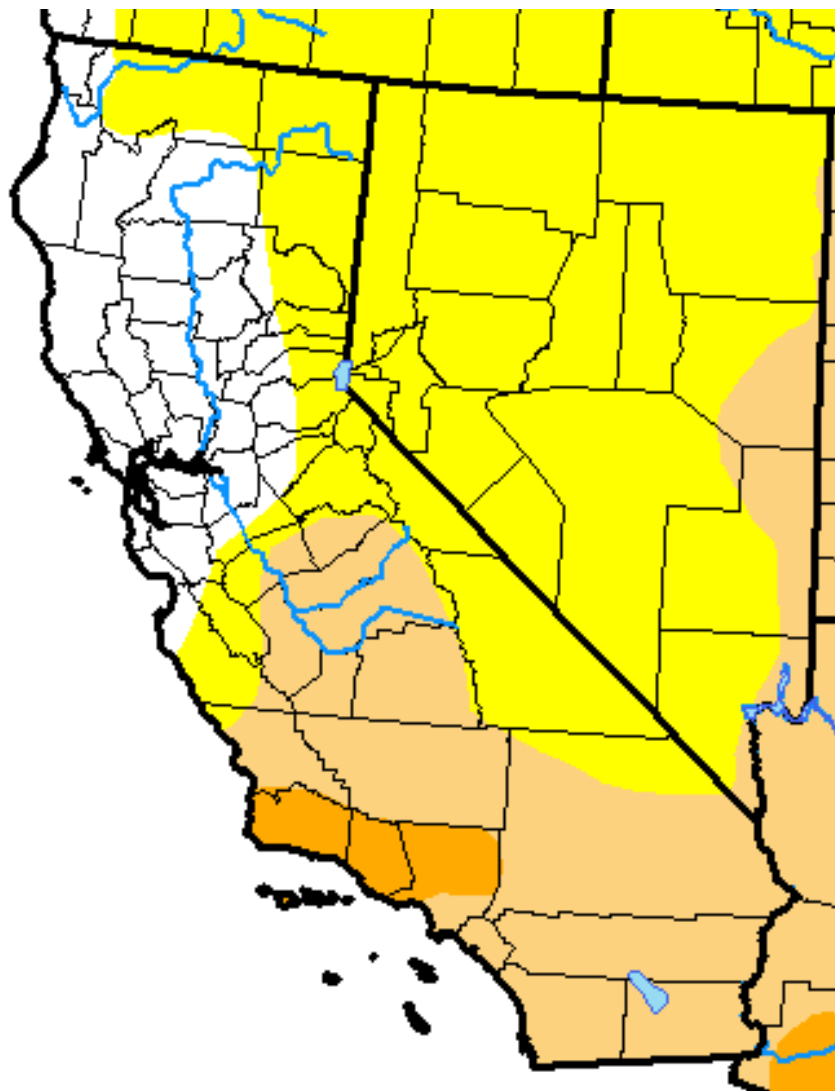
Climate and Drought Update

Julie Kalansky
Scripps Institution of Oceanography, UCSD

San Diego, NIDIS Meeting
February 7, 2018

Drought Monitor

Feb. 1, 2018



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.

Author:

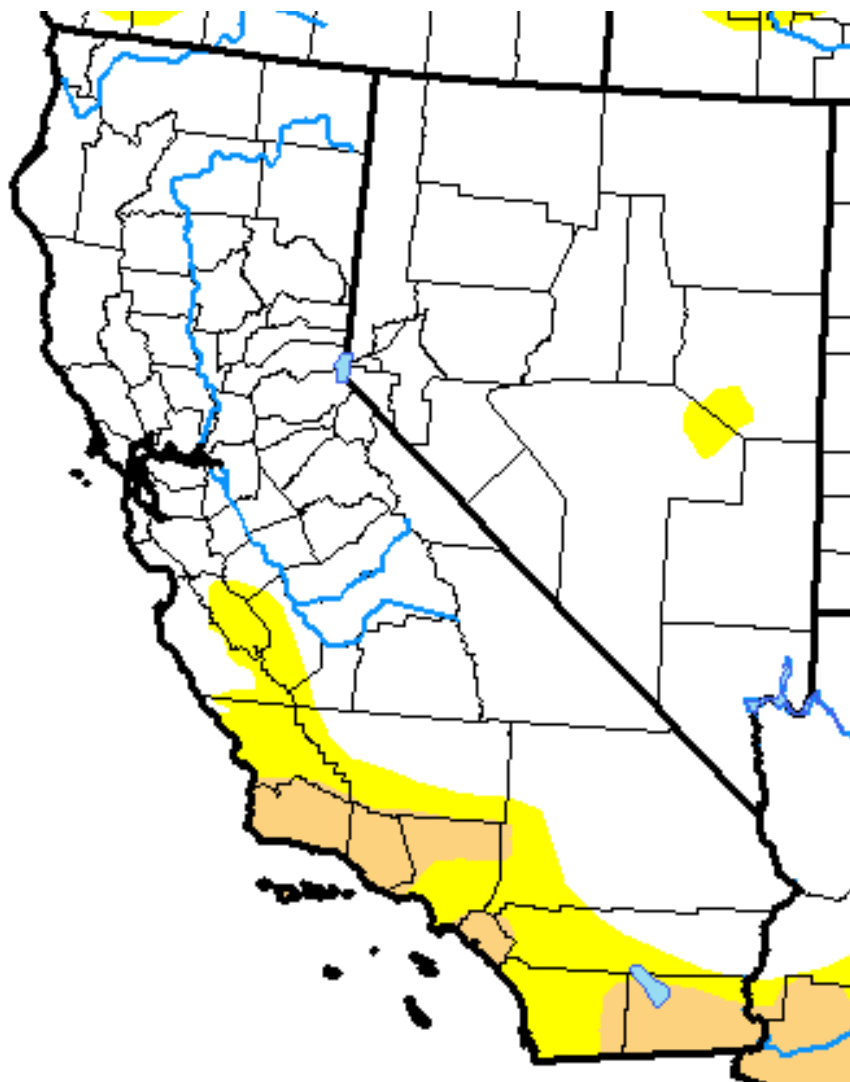
Brian Fuchs
National Drought Mitigation Center






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

Drought Monitor

Oct. 3, 2017



Intensity:

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-  D1 Moderate Drought
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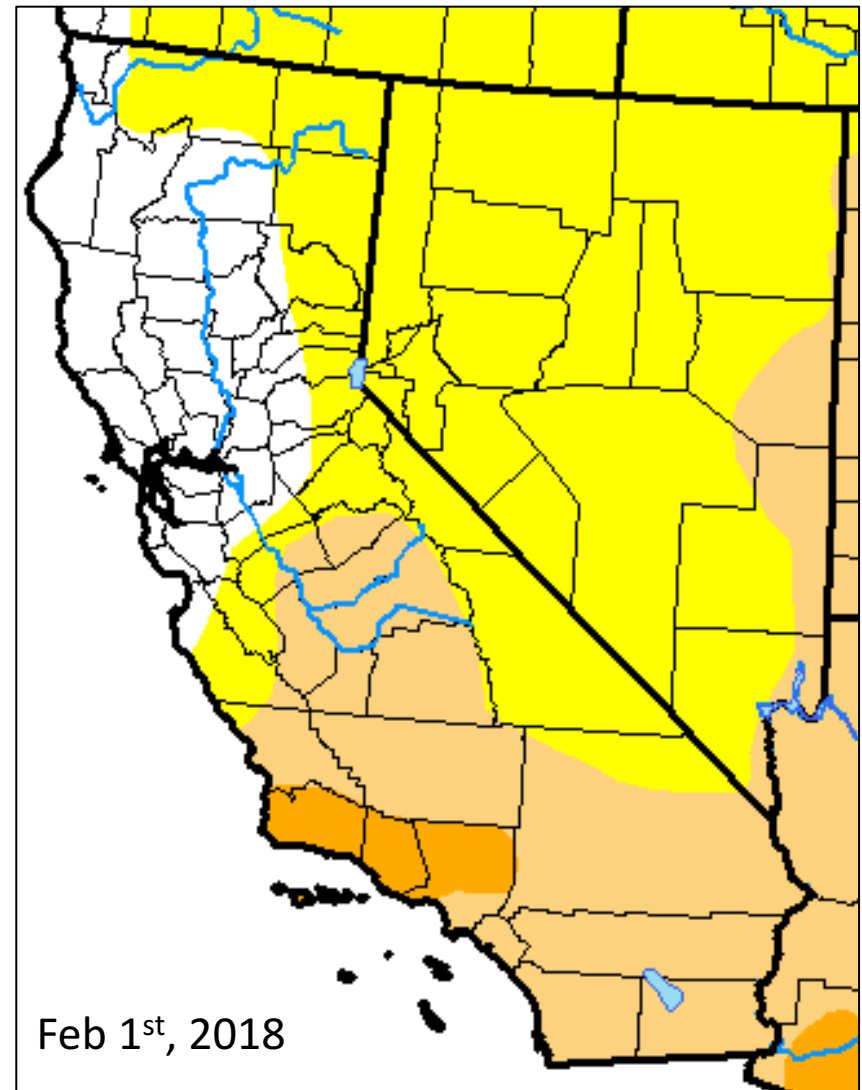
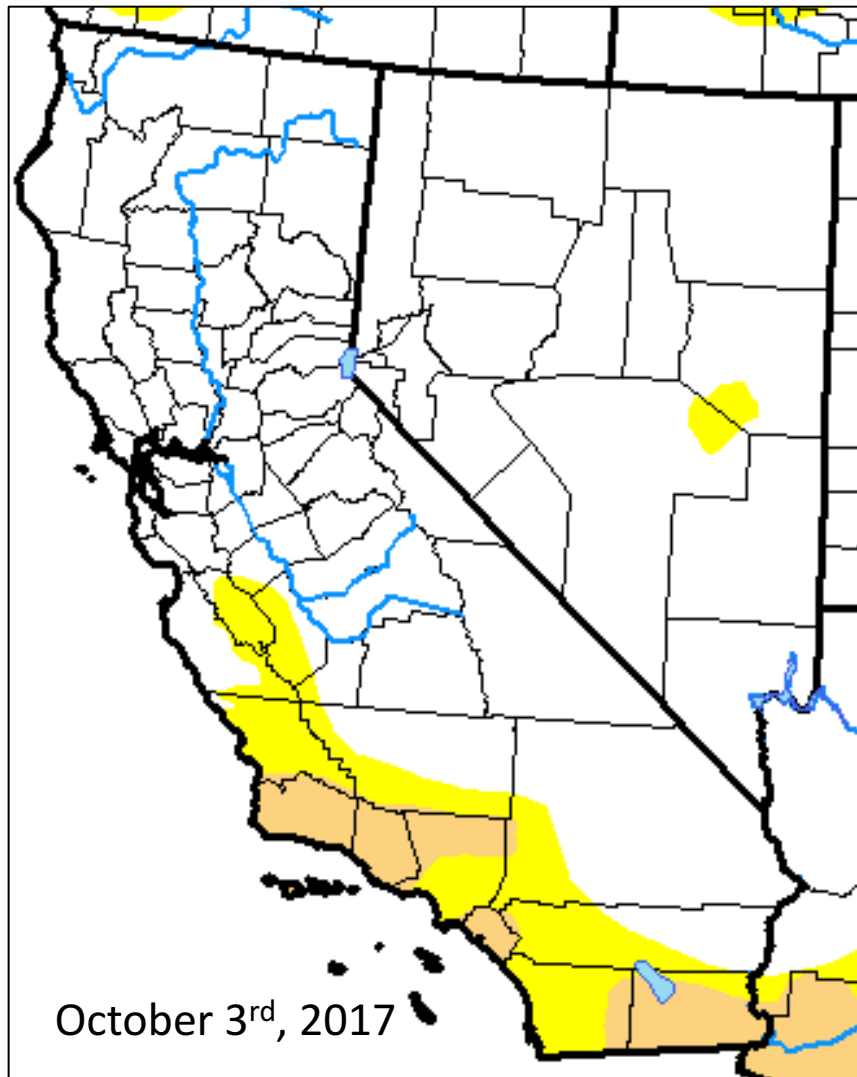
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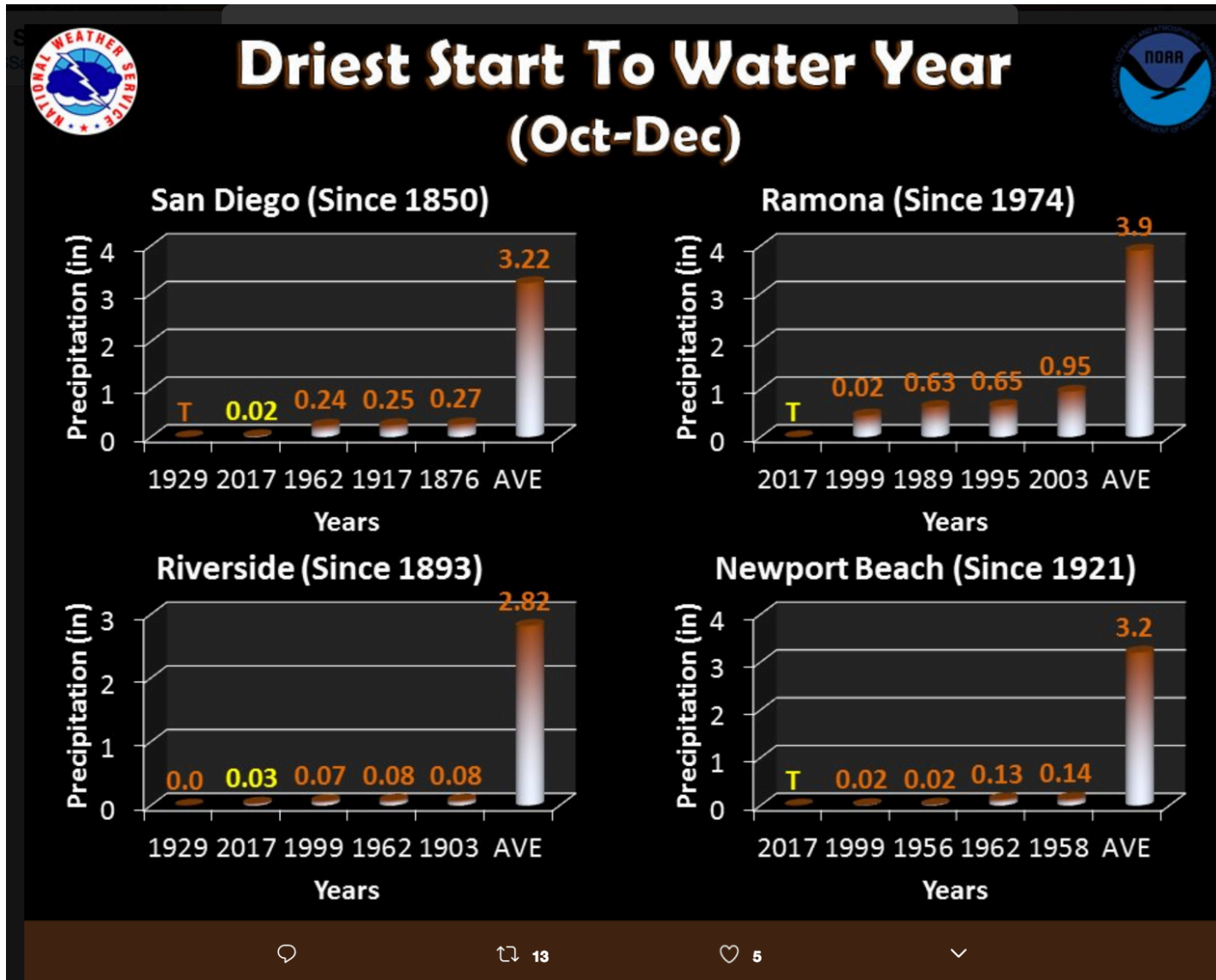


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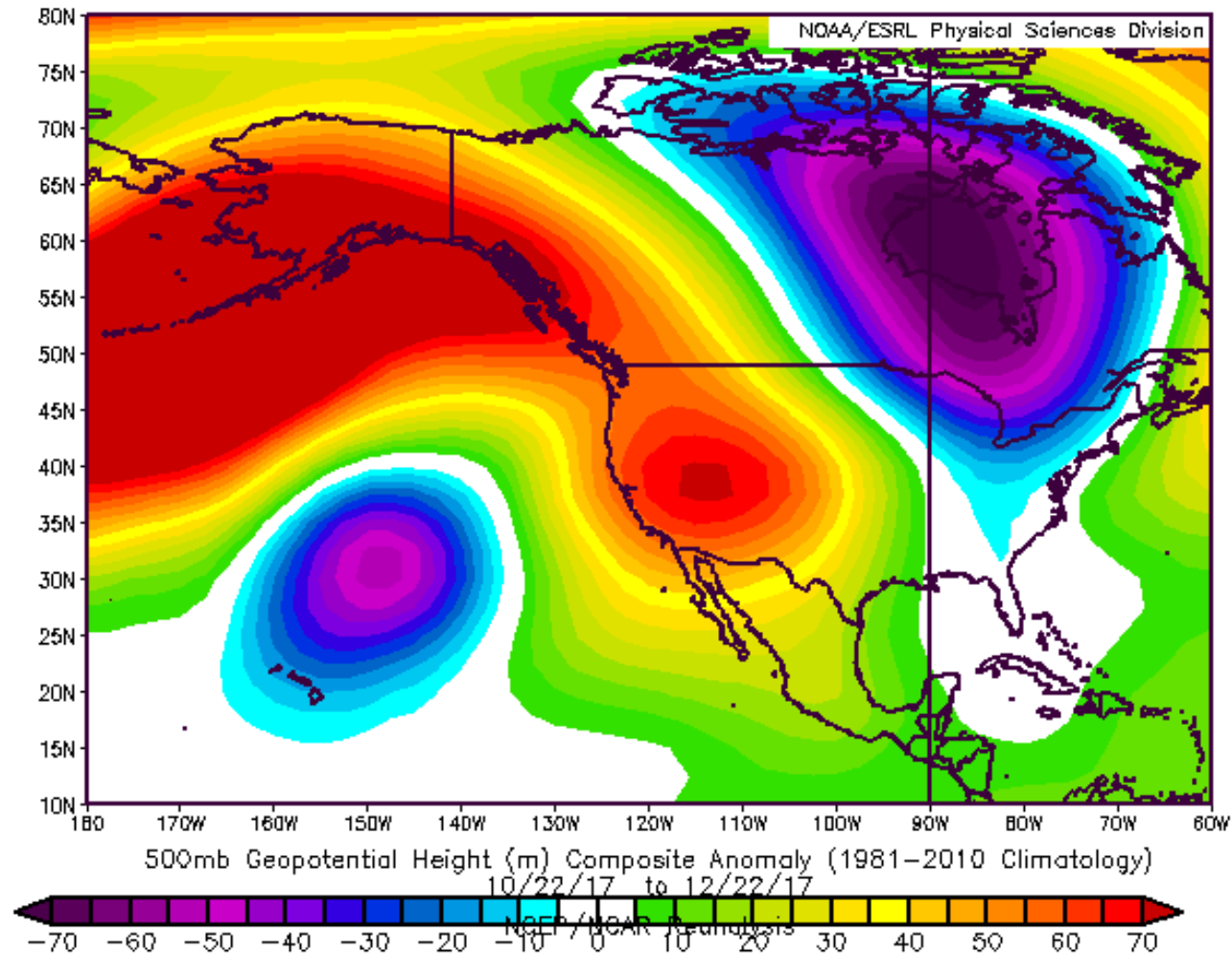
What happened?



Precipitation – DRY Start

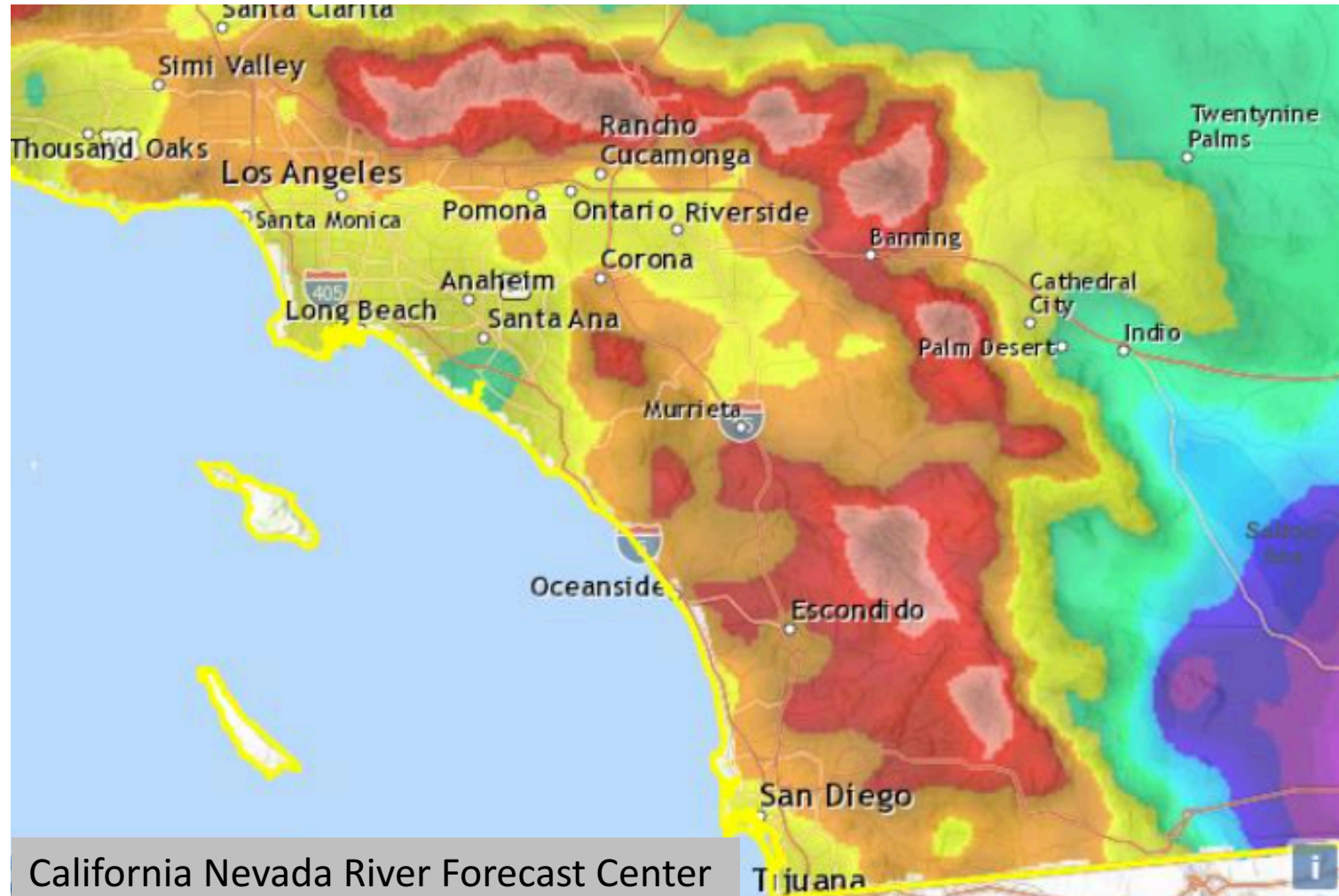


Why So Dry?



Southern CA's One and Only

Jan 8th-10th

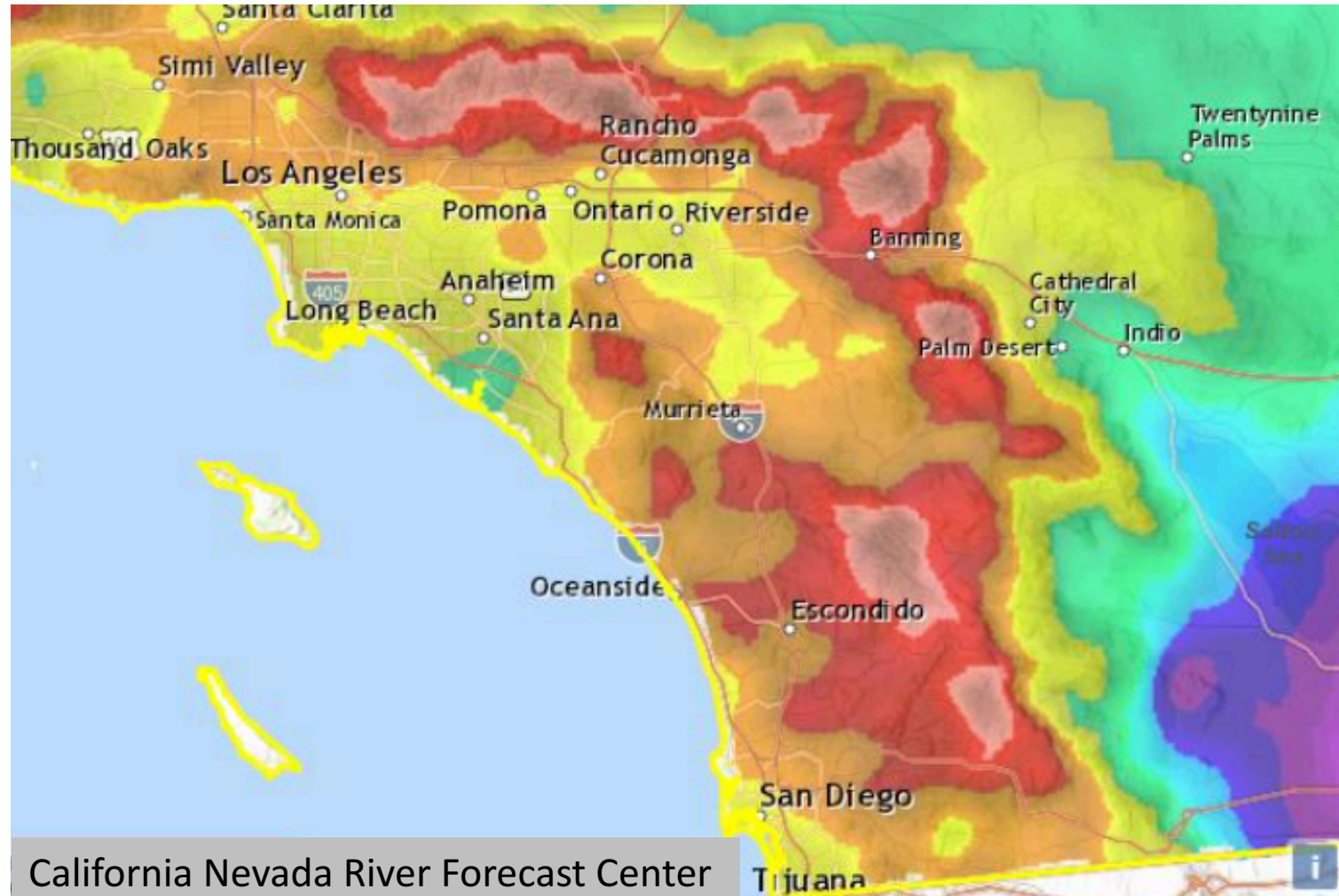


Precipitation (inches)



Southern CA's One and Only

Jan 8th-10th

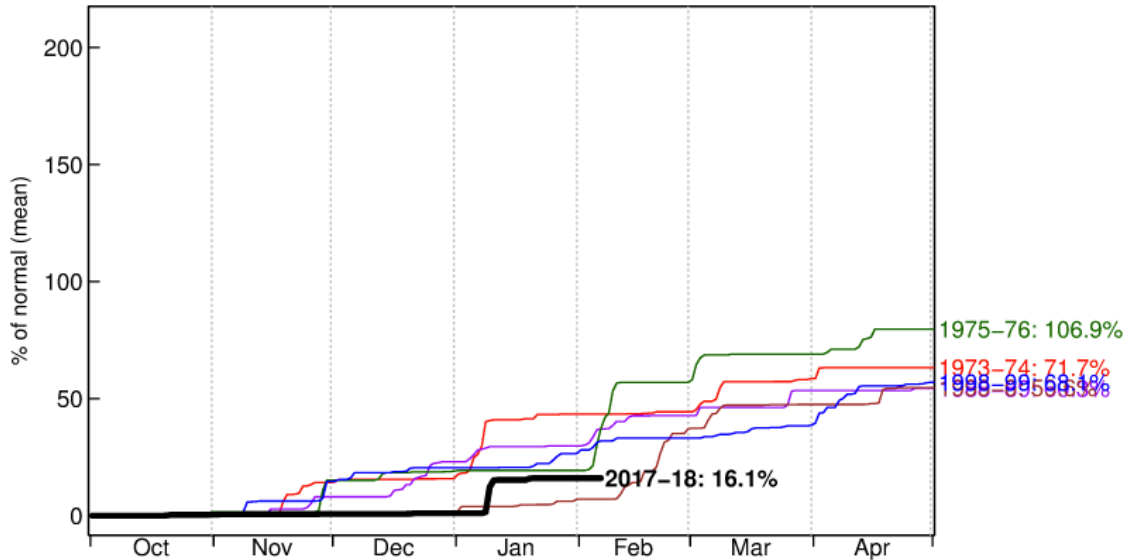


Precipitation (inches)



Where are we now?

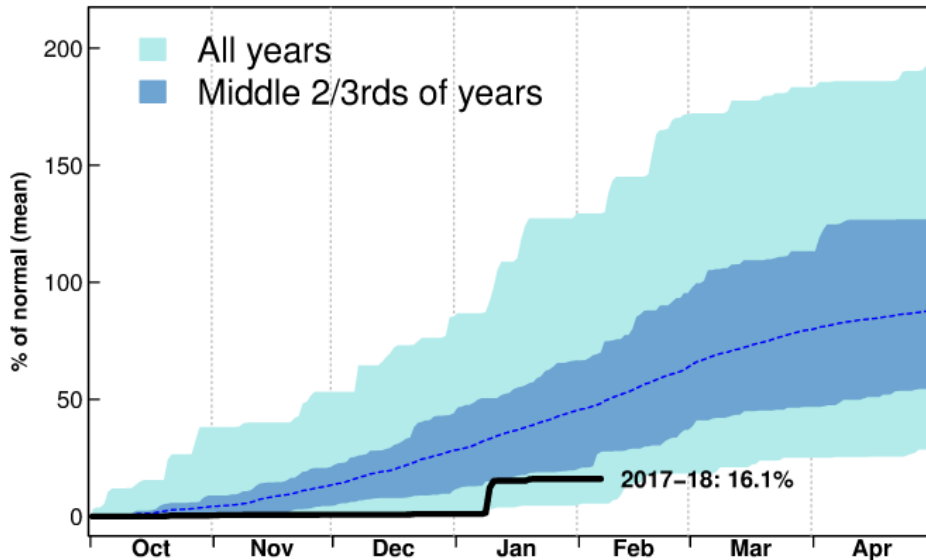
SD_county precip vs. 5 strongest La Ninas, data through 2018/02/06



Current:	16.1%

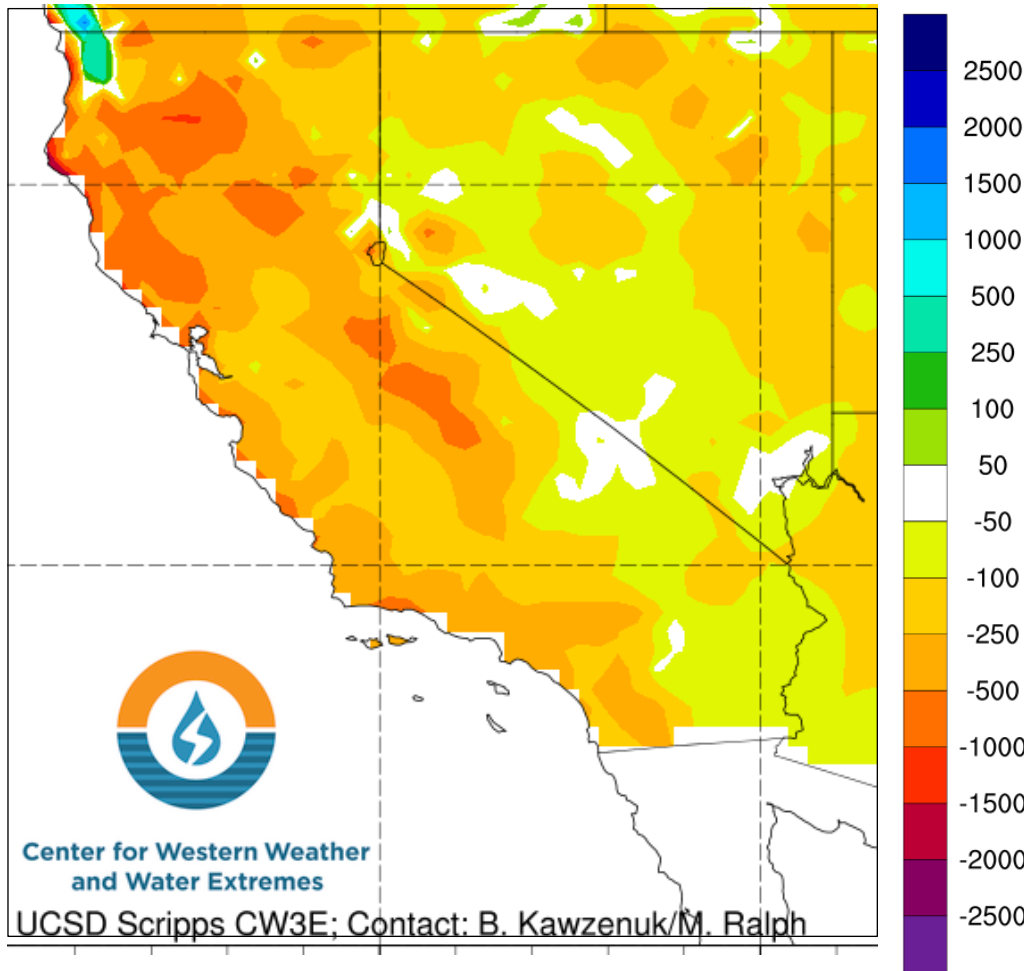
	(1963/02/06)
Rec_low:	5.6%
Typ_low:	27.6%
Mean:	48.3%
Typ_high:	70.0%
Rec_high:	129.4%
	(1993/02/06)

SD_county precip for all years, data through 2018/02/06

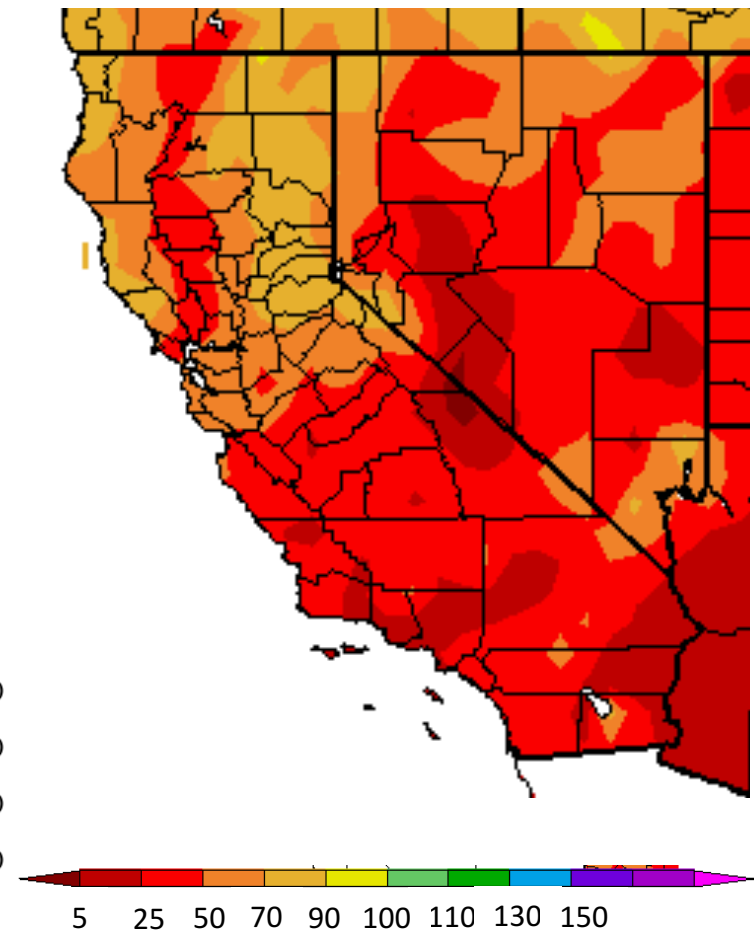


What about the rest of the state?

WY to Date Departure from Normal (mm)

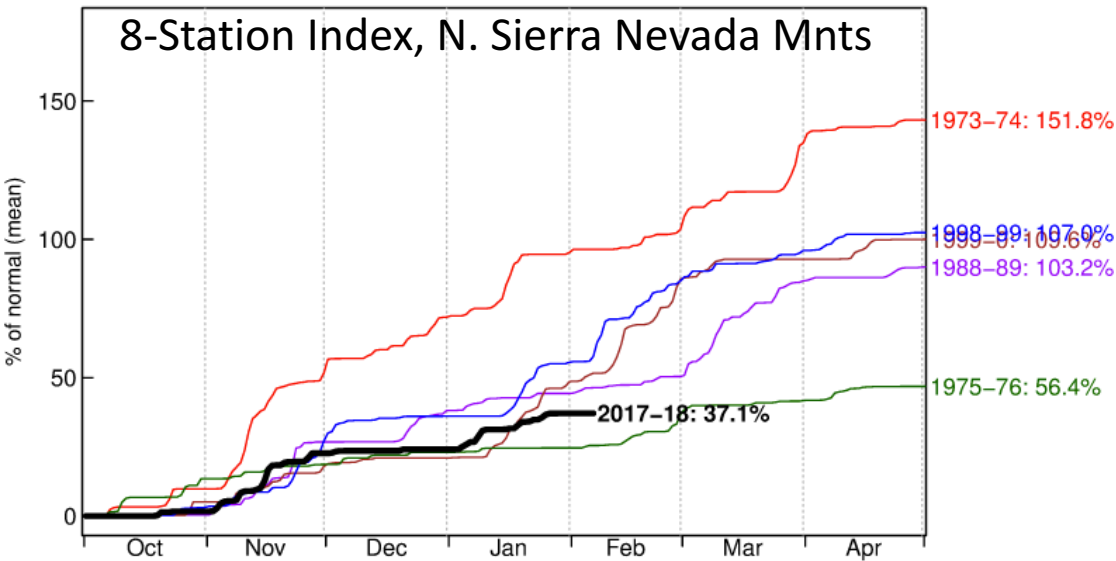


WY to Percent of Normal (%)



Where are we now?

8_sta_index precip vs. 5 strongest La Ninas, data through 2018/02/06



Current: 37.1%

(2014/02/06)

Rec_low: 8.8%

Typ_low: 32.9%

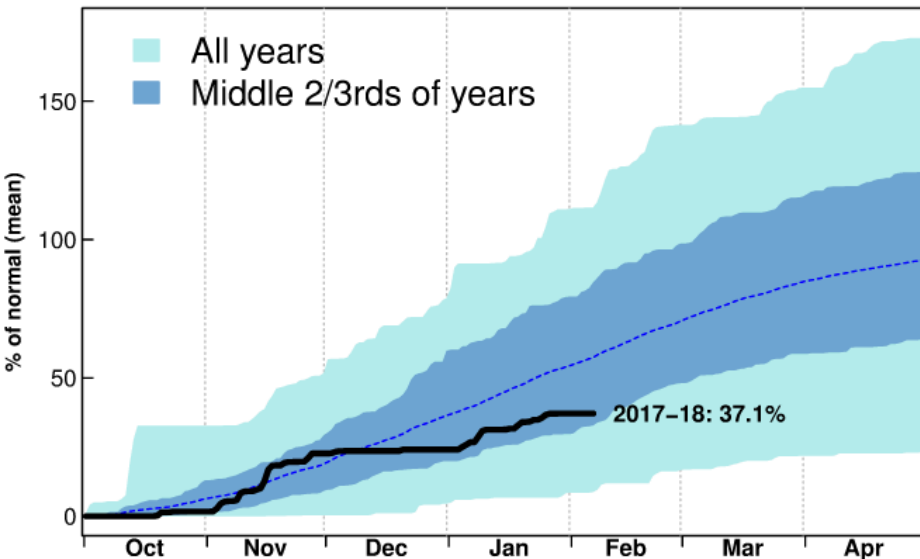
Mean: 57.4%

Typ_high: 84.5%

Rec_high: 111.6%

(1997/02/06)

8_sta_index precip for all years, data through 2018/02/06

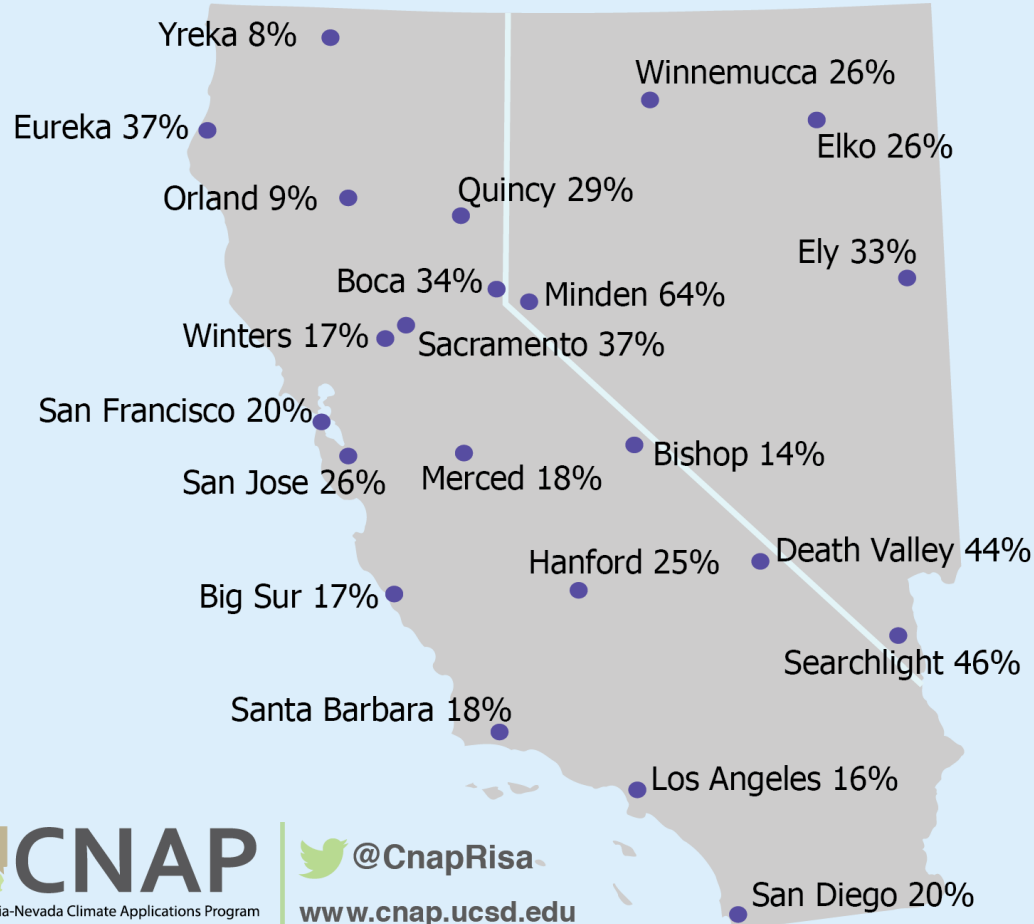


What are our chances of reaching normal?


Likelihood of reaching median Water Year (Oct 1-Sep 30) precipitation total as of February 1, 2018

based on historic station record (not a forecast)

each station begins the Water Year with 50% chance of reaching median



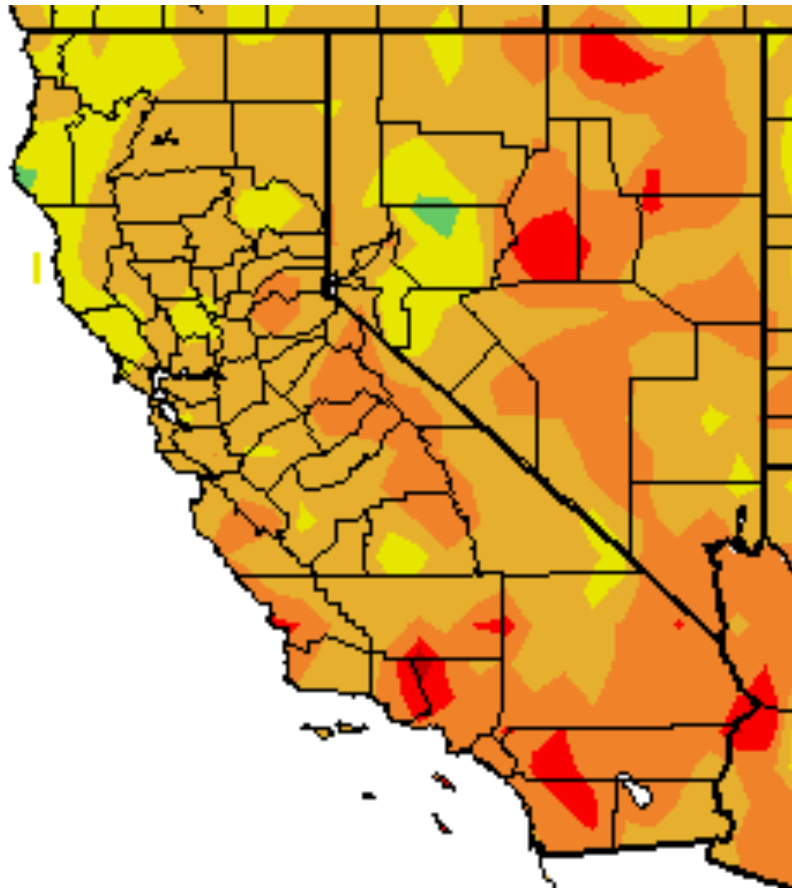
CNAP
California-Nevada Climate Applications Program
A NOAA RISA team

 @CnapRisa
www.cnapp.ucsd.edu

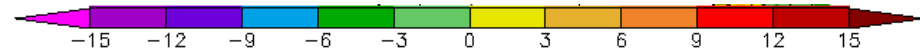
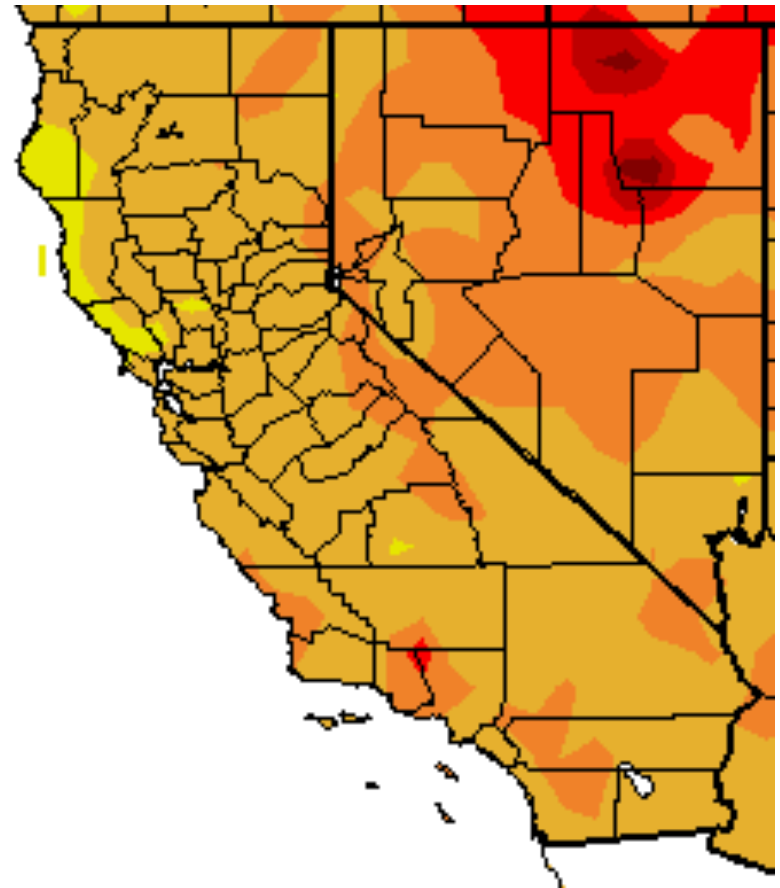
For more information visit wrcc.dri.edu/col/
Station selection based on record length and completeness

Temperature

WY Temperature Anomaly (°F)



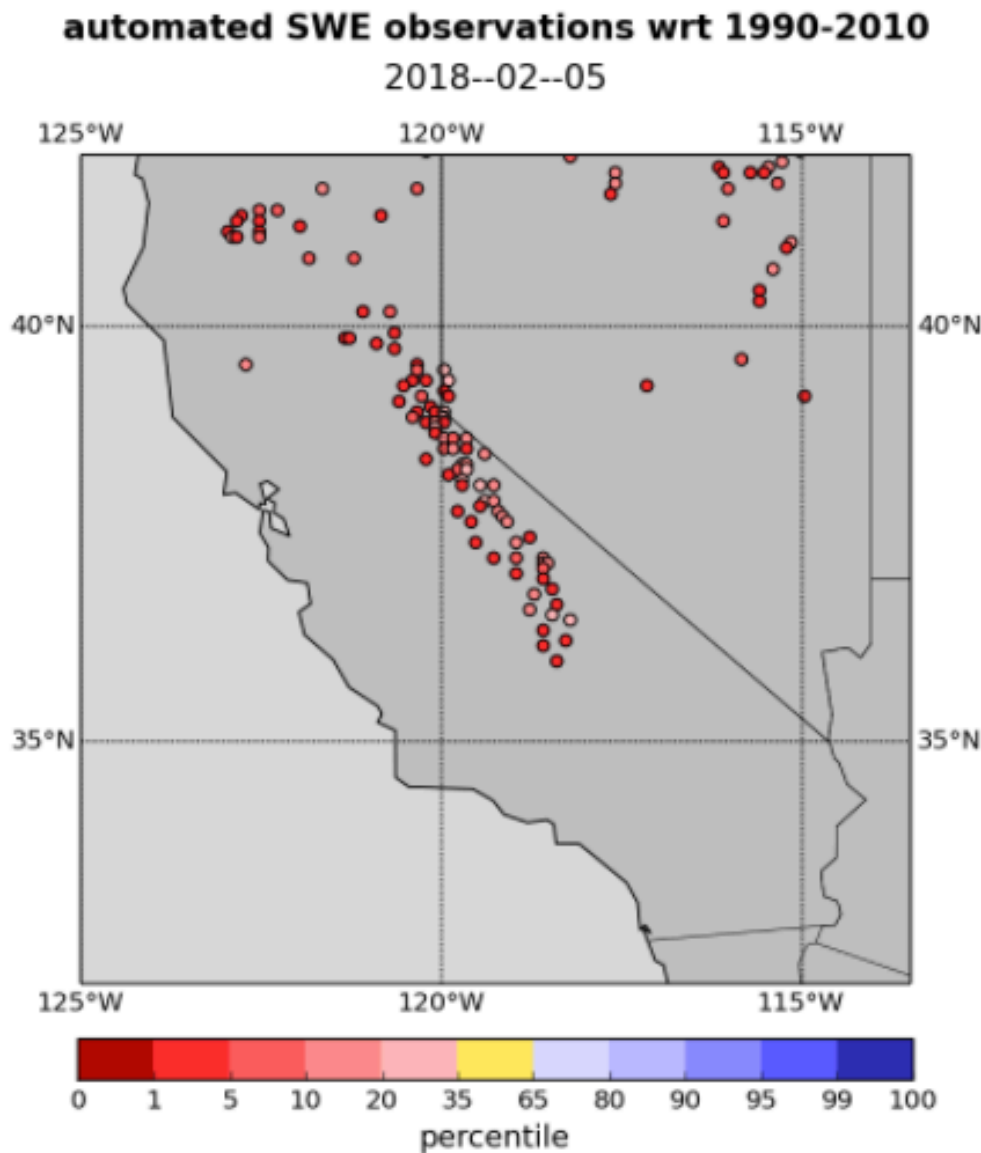
30-Day Temperature Anomaly (°F)



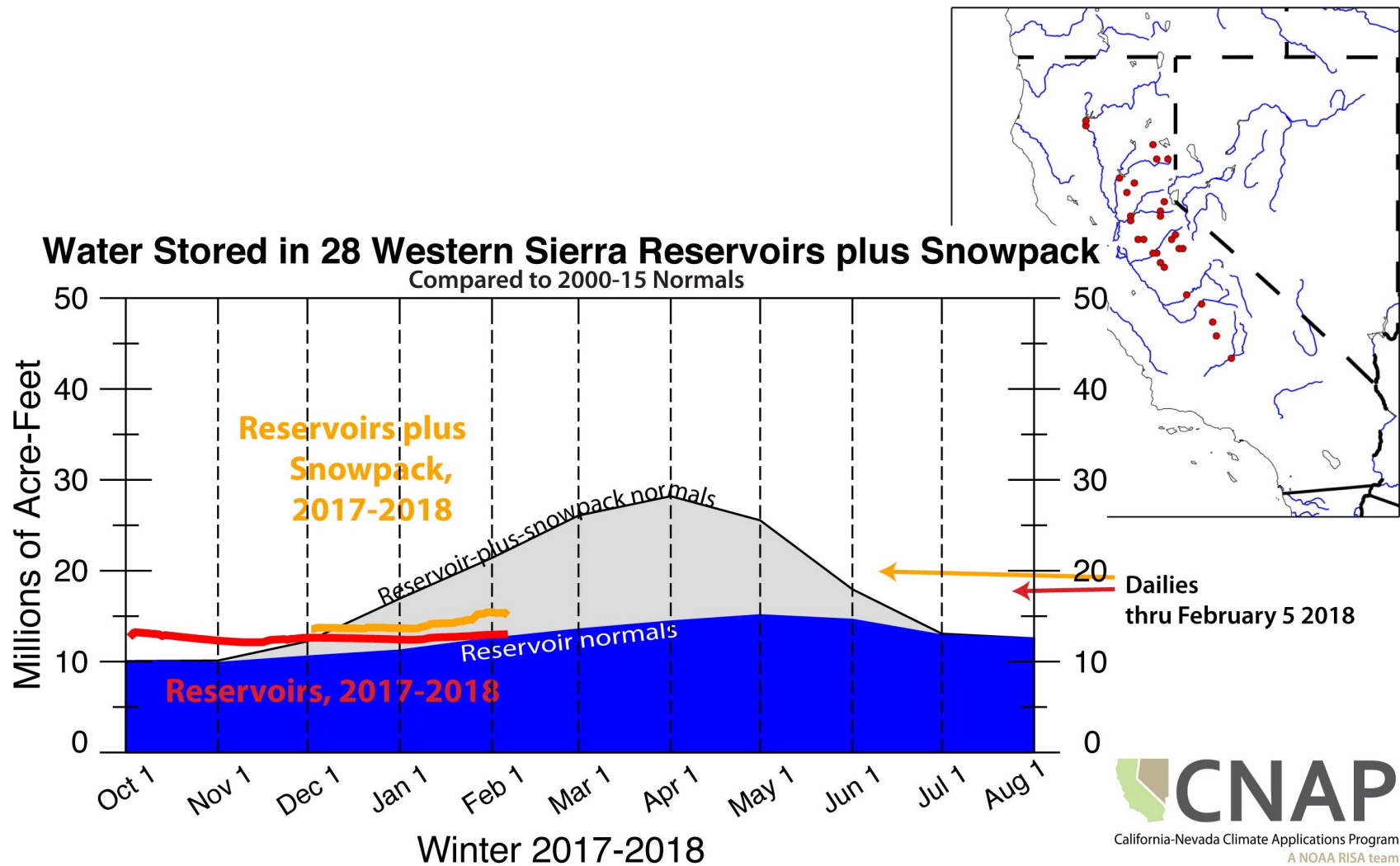
<http://www.gbdash.dri.edu/>

Snow Pack

Location	SWE (in)	% of Normal
Northern Sierra	4.6	27%
Central Sierra	5.8	30%
Southern Sierra	3.8	25%



Reservoirs in CA



For info: mddettin@usgs.gov

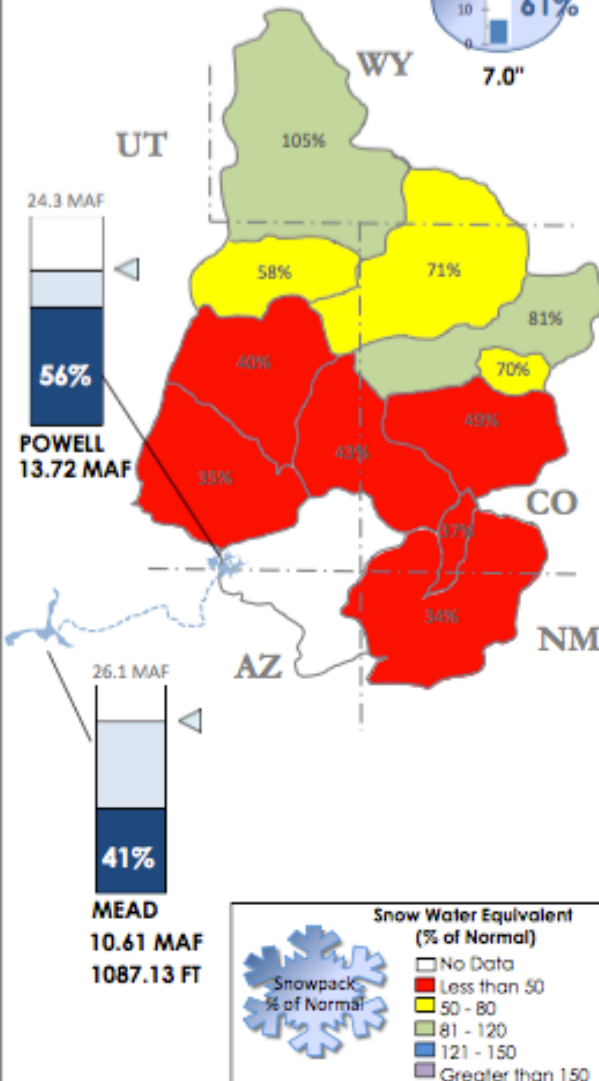
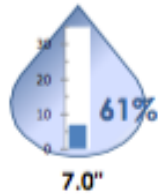
CO River Basin

2018 Colorado River

860,097 AF

69% of full CRA

Does not include storage
withdrawals



Lake Powell Storage

Capacity: 24.3 MAF

2.32 MAF more in
storage than this
time last year



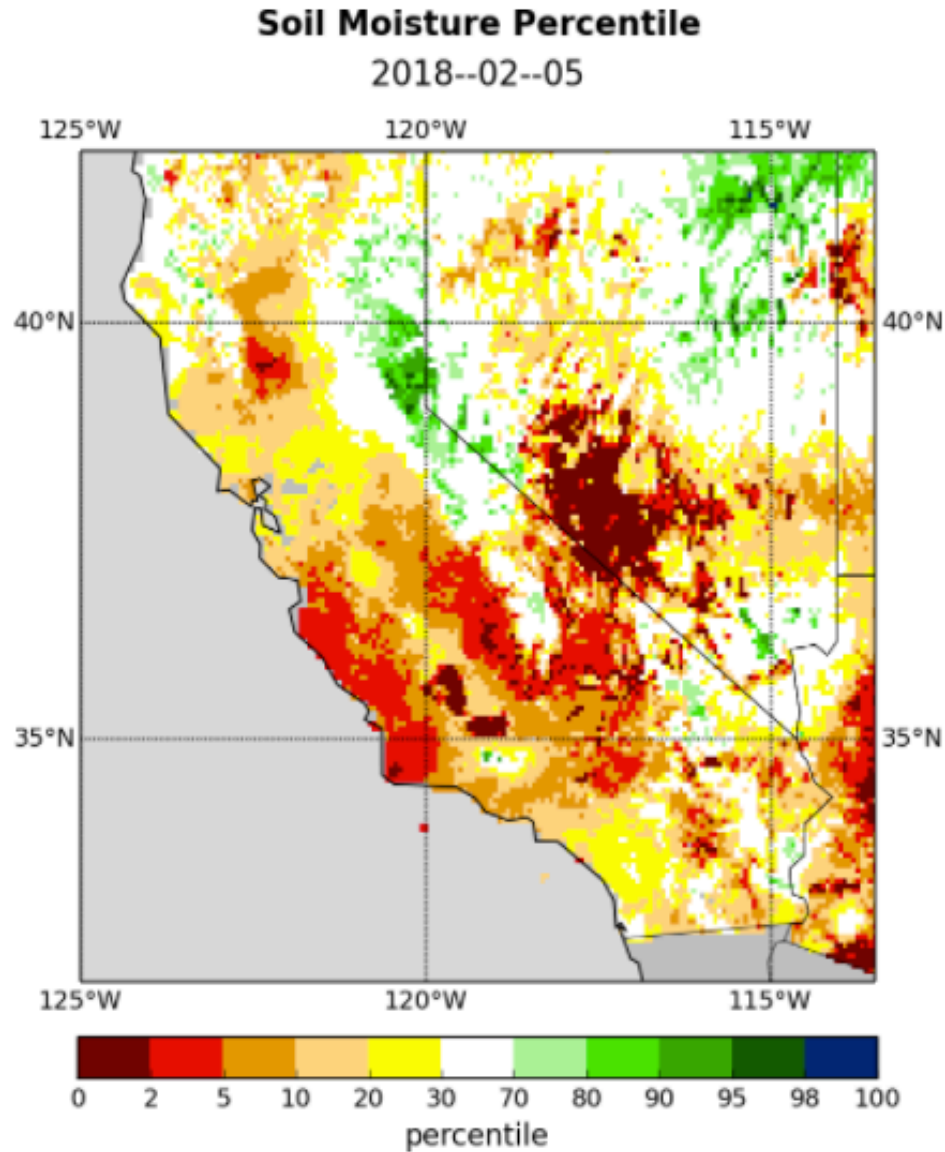
Lake Mead Storage

Capacity: 26.1 MAF

169 TAF more in
storage than this
time last year



Soil Moisture



http://www.hydro.ucla.edu/monitor_ca/index.html

Summary

- Dry Start to the WY, overall still ~15-35% of normal
- Probability of reaching normal ~20-30%
- Warmer than normal by ~4-6°F
- SWE 25-30% of normal, 1st-10th percentile range
- Reservoirs in CA are about normal – snow pack is LOW
- CO is at 65% of normal