

Berkeley, CA rainfall July 1,2015 to February 2, 2016

February 3, 2016 UC Berkeley weather update

2015-16 Rain Year Berkeley and Richmond (all number are inches of rainfall)								
Date	Berkeley daily	Berkeley YTD	Last 30 days total	Last 7 days total	Richmond daily	Richmond YTD	Last 30 days total	Last 7 days total
7/1-10/31/15	0.05	0.05			0.15	0.15		
11/1/2015	0.56	0.61			0.63	0.78		
11/9/2015	0.46	1.07			0.56	1.34		
11/15/2015	0.26	1.33			0.45	1.79		
11/24-25/15	0.09	1.42			0.19	1.98		
12/2/2015	0.36	1.78			0.45	2.43		
12/6-7/2015	0.04	1.82			0.09	2.52		
12/10-11/2015	0.39	2.21			0.88	3.4		
12/13/2015	0.79	3			1	4.4		
12/18-21/15	1.96	4.96			2.13	6.53		
12/21 -22/15	0.62	5.58			0.5	7.03		
12/22/2015	0.09	5.67			0.02	7.05		
12/23-24/15	0.12	5.79			0.29	7.36		
12/28/2015	0.05	5.84			0.02	7.38		
12/30/2015	0.01	5.85	4.07		0.03	7.41	4.98	
1/4/2016	0.13	5.98			0.1	7.51		
1/5/2016	1	6.98			1.41	8.82		
1/6-7/2016	1.45	8.43	6.61		2.1	10.92	8.48	
1/9/2016	0.06	8.49			0.12	11.04		
1/13/2016	0.47	8.96	6.75		0.69	11.81	8.41	
1/14/2016	0.16	9.12	6.12	2.14	0.42	12.23	7.83	
1/15/2016	0.2	9.32	6.32	0.89	0.23	12.46	8.06	
1/16/2016	0.26	9.58	6.58	1.15	0.31	12.77	5.74	
1/17/2016	1.1	10.68	7.68	2.19	1.15	13.92	9.52	
1/18/2016	0.44	11.12	8.12	2.63	0.57	14.49	10.09	
1/19/2016	1.19	12.31	7.35	3.35	1.34	15.83	9.3	4.02
1/22/2016	0.45	12.76	7.18	3.64	0.43	16.26	9.23	4.03
1/23/2016	0.02	12.78	7.11	3.46	0.09	16.35	9.3	3.89
1/27/2016	0	12.78	6.99	0.47	0	16.35	9.01	0.52
1/29/2016	0.42	13.2	7.36	0.44	0.49	16.84	9.48	0.58
2/2/2016	0.06	13.26	7.41	0.48	0.07	16.91	9.52	0.56
QPF to 2/6/16	0.05	13.31	6.33	0.11	0.06	16.97	8.07	0.13

* QPF = NWS Quantitative Precipitation Forecast through Saturday noon



Flood Forecasting

CONDITIONS TO LOOK FOR

- Compare the rainfall for the year and 24-hour forecast with the following criteria.
 - 7" of rain for the season starting on July 1 (year).
 - 5" of rain in the last 30 days (month).
 - 3" of rain in the last 7 days (week).
 - 2" of rainfall is forecast in the next 24 hours (day).

7 Year
5 Month
3 Week
2 Day

- If these conditions are met, flooding may occur sometime in the next 24 hours. Warnings on TV and radio should be monitored. Your [Personal Evacuation Plan](#) should be implemented if you sense flooding may occur. For information on an evacuation plan, check out the American Red Cross website.

Current critical antecedent conditions status for UC Berkeley and BGC:
Both Berkeley campus and BGC are **not fully primed** for flooding- seven day total is < 3" and no significant storm (2" in the next 24 hours is forecast by NWS). Also, 30 day totals are dropping toward 5 and may do so by the end of next week if dry conditions persist as expected.

Current National Weather Service forecast February 3, 2016 morning

Detailed Forecast

Today	A 30 percent chance of rain after 4pm. Partly sunny, with a high near 56. East wind around 6 mph becoming light and variable in the afternoon. New precipitation amounts of less than a tenth of an inch possible.
Tonight	A 50 percent chance of rain, mainly before 10pm. Mostly cloudy, with a low around 46. East southeast wind 3 to 7 mph. New precipitation amounts of less than a tenth of an inch possible.
Thursday	Partly sunny, with a high near 61. East northeast wind 8 to 16 mph, with gusts as high as 21 mph.
Thursday Night	Partly cloudy, with a low around 46. East northeast wind 7 to 10 mph.
Friday	Mostly sunny, with a high near 62. East northeast wind 6 to 8 mph.
Friday Night	Mostly clear, with a low around 48.
Saturday	Sunny, with a high near 65.
Saturday Night	Mostly clear, with a low around 49.
Sunday	Sunny, with a high near 68.
Sunday Night	Clear, with a low around 50.
Monday	Sunny, with a high near 71.
Monday Night	Clear, with a low around 50.
Tuesday	Sunny, with a high near 69.

Forecast synopsis (Wednesday 2/3/16)

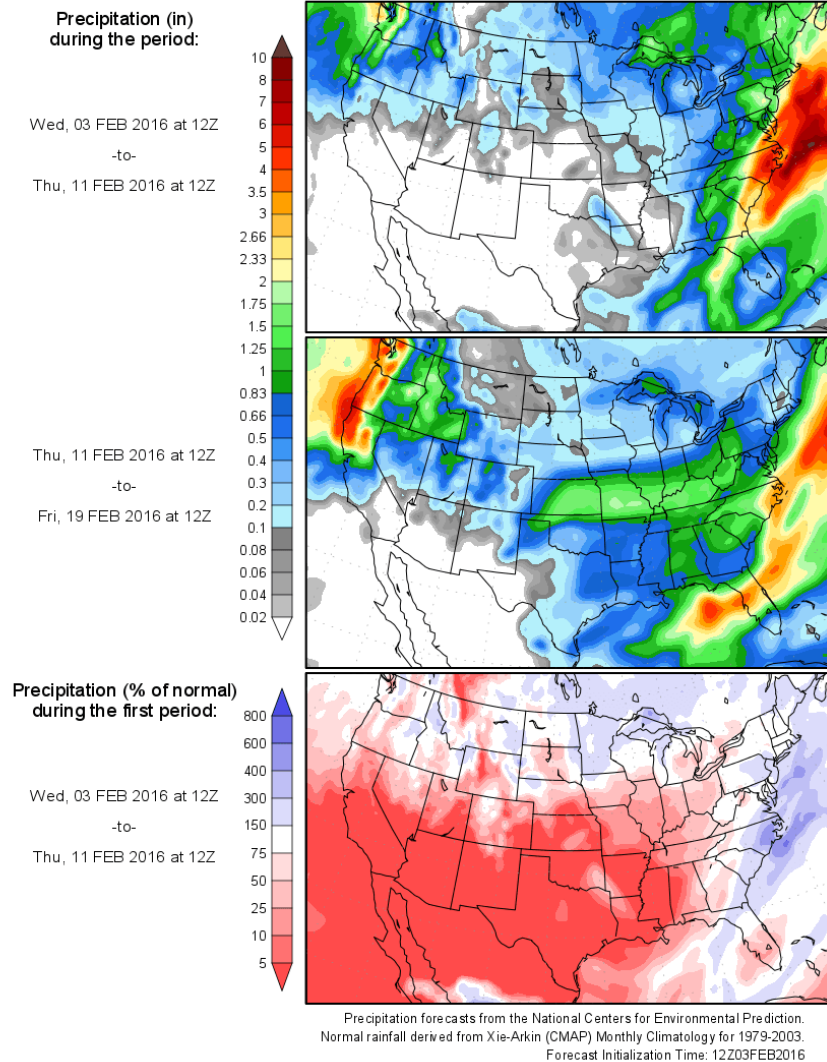
A weak weather system is expected to deliver no more than a tenth of an inch of rain to the SF Bay area this afternoon.

Afterwards, a strong ridge of high pressure builds over the West Coast pushing the storm track to the north and bringing unseasonably warm weather to the Bay Area for Super Bowl weekend and into Tuesday. Some record high temperatures may be broken early next week.

Current extended forecasts call for below normal precipitation through mid month. This morning's computer model runs bring rain chances back to the Berkeley area mid-month, beginning around Friday February 12 with unsettled weather beyond.

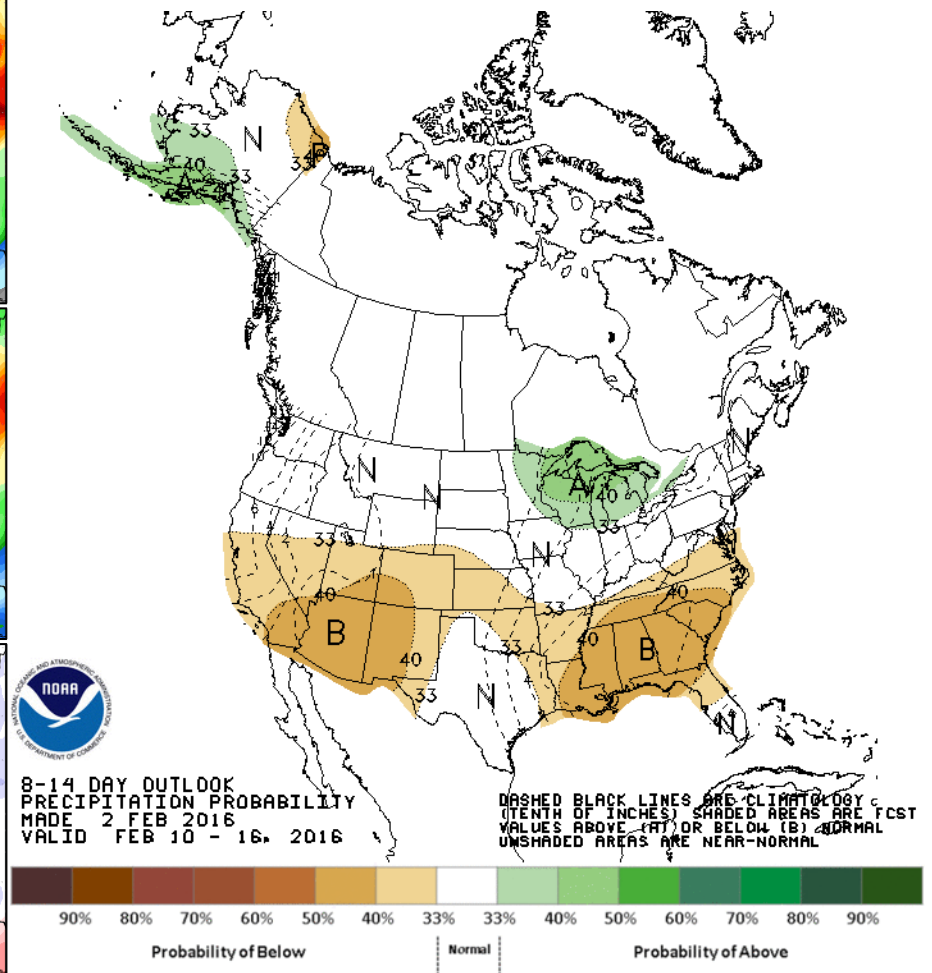
In the longer range, NWS suggests that the jet stream will shift to a more southerly track with above normal precipitation in So Cal through 2/26/16.

Precipitation Forecasts



GrADS: IGES/COLA

NCEP 6 – 10 day precipitation forecast
(February 3- 11, 2016)

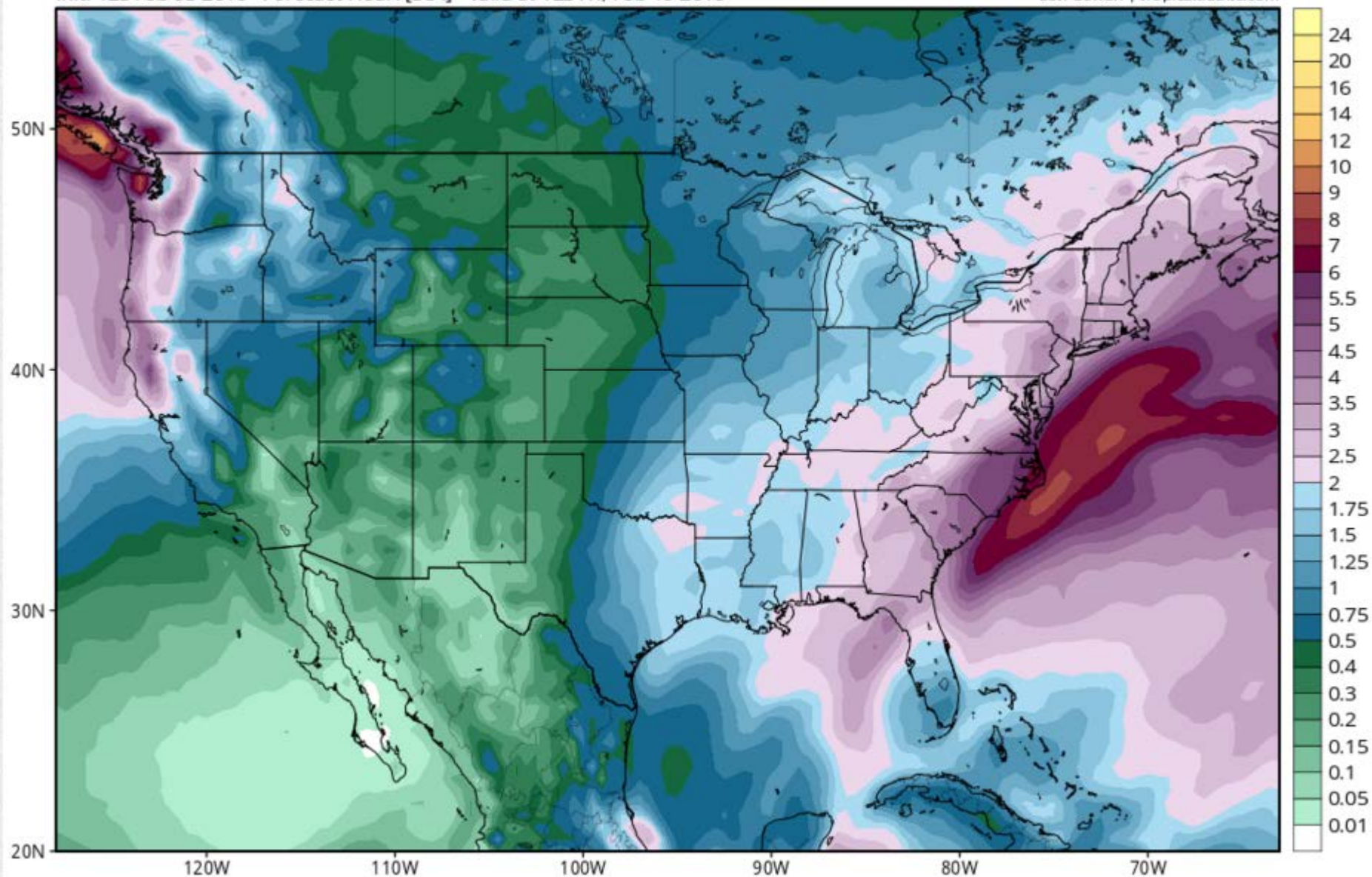


NCEP 8 – 14 day precipitation probability
(Made 2/2/16 for February 10- 16)

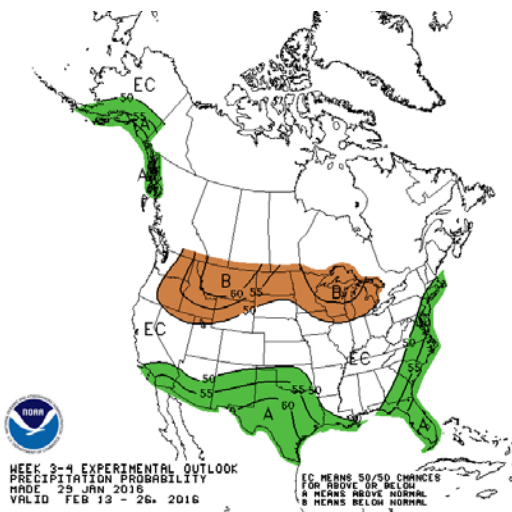
GEFS Total Accumulated Precipitation (inches) from 12z03Feb2016 to 12z19Feb2016

Init: 12z Feb 03 2016 Forecast Hour: [384] valid at 12z Fri, Feb 19 2016

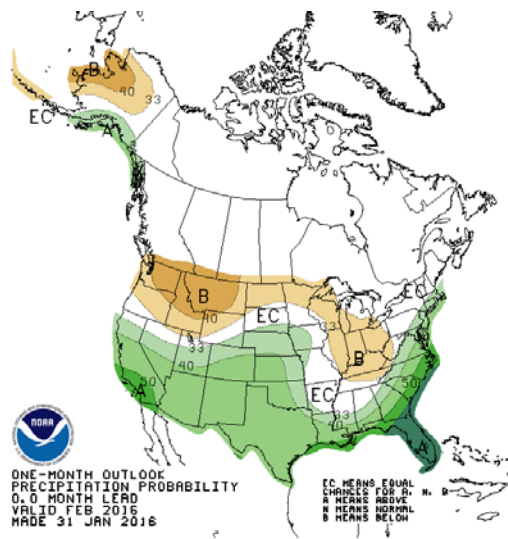
Levi Cowan | tropicaltidbits.com



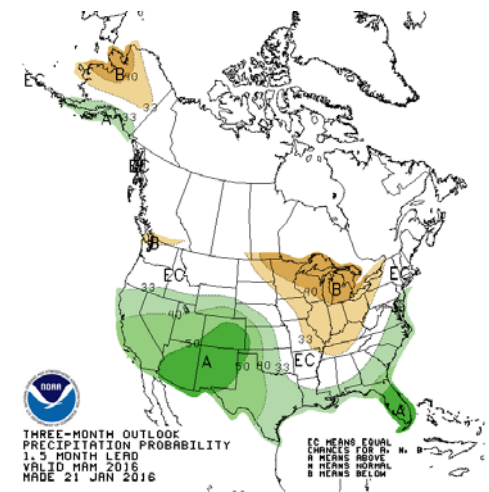
NOAA GEFS Total Cumulative Precipitation February 3, 2016 through February 19, 2016



3-4 week outlook 2/13- 2/26



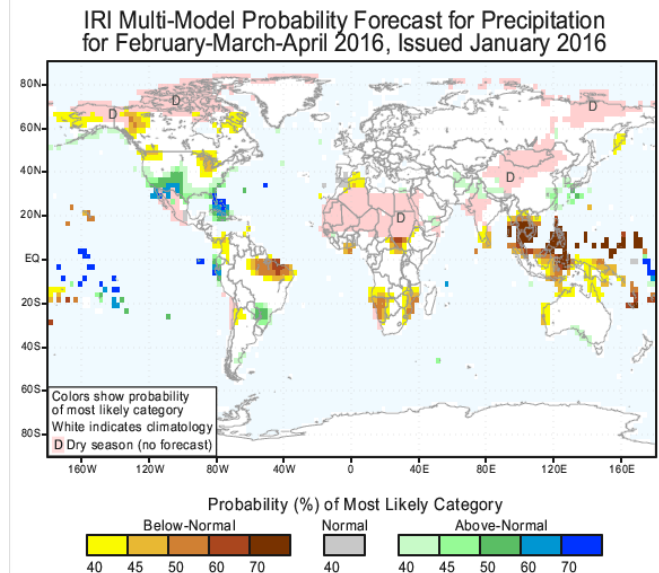
One month outlook February



March-April-May outlook

Mid to long-range forecasts suggest a return of rainfall to central and southern California beginning in mid- to late- February and above normal precipitation through April, particularly in the Southland.

Columbia University's International Research Institute for Climate and Society 3- month forecast for February- April 2016
(<http://iri.columbia.edu/our-expertise/climate/forecasts/seasonal-climate-forecasts/>)

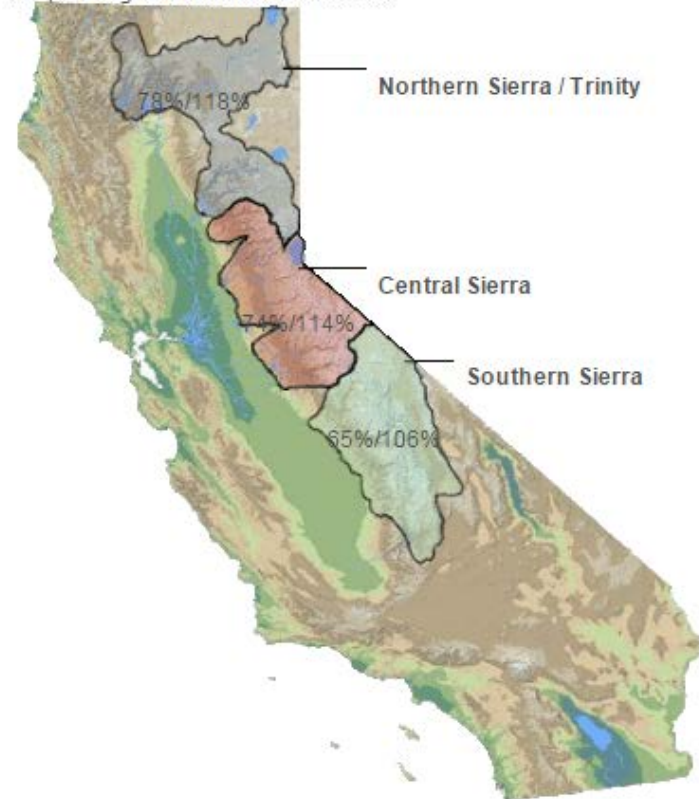


➔ Snow Water Equivalents (inches)

Provided by the California Cooperative Snow Surveys

Data For: 03-Feb-2016

% Apr 1 Avg. / % Normal for this Date



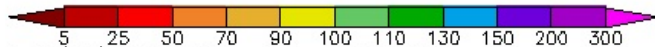
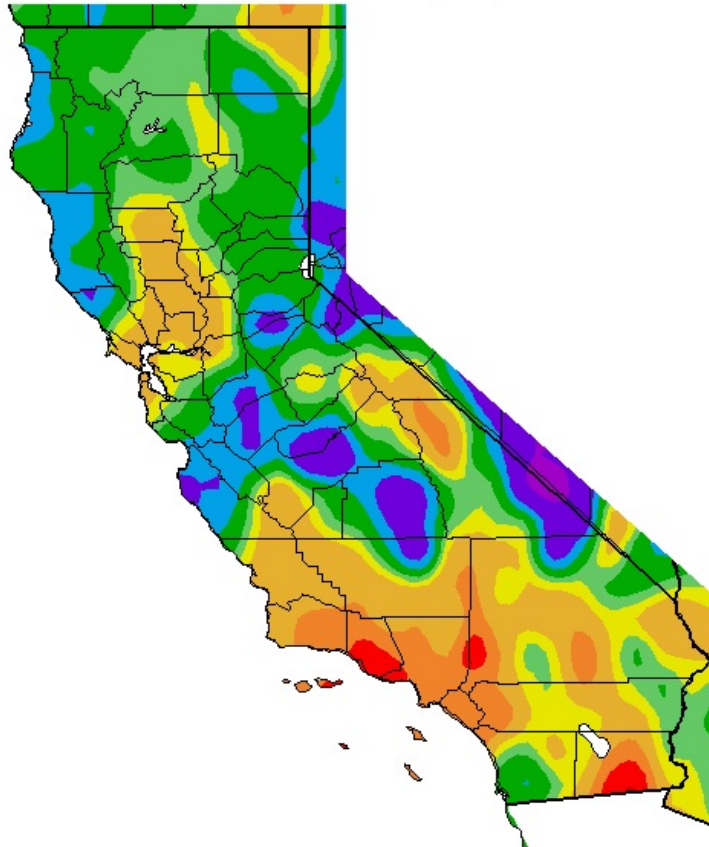
Change Date :



03-Feb-2016

Refresh Data

Percent of Average Precipitation (%)
10/1/2015 – 1/31/2016



Generated 2/01/2016 at WRCC using provisional data.
NOAA Regional Climate Centers

Rainfall this season is running above historical seasonal averages for most of the state (the south is running below average). Reservoirs are slowly rebounding and the Sierra snow cover continues to be above normal.

Northern California Reservoirs

Conditions as of February 1, 2016

Follow us:
NWS Sacramento

Percent of Normal (for this time of year)

Trinity Lake	40%
Shasta Lake	76%
Lake Oroville	66%
Folsom Lake	104%
New Melones	28%
Don Pedro	59%
Exchequer	28%

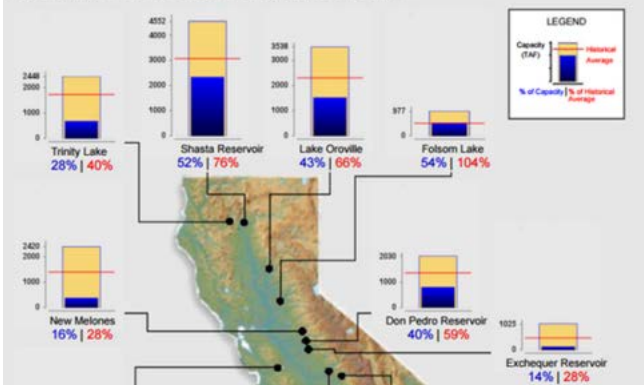
NWS Sacramento @NWSSacramento · 39m
Folsom Lake is 104% of normal for this time of year! Recent rain has helped, but not eliminated the drought! #cawx



Photo: Rob Elvington

Ending At Midnight - January 31, 2016

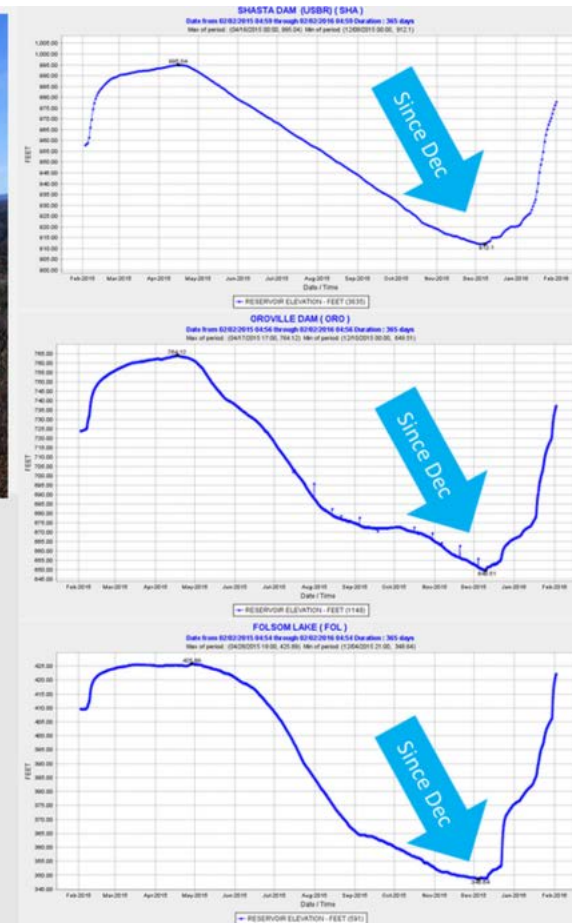
CURRENT RESERVOIR CONDITIONS



NWS Sacramento @NWSSacramento · 5h
Nice rises in #NorCal reservoir levels since December. #CAwx

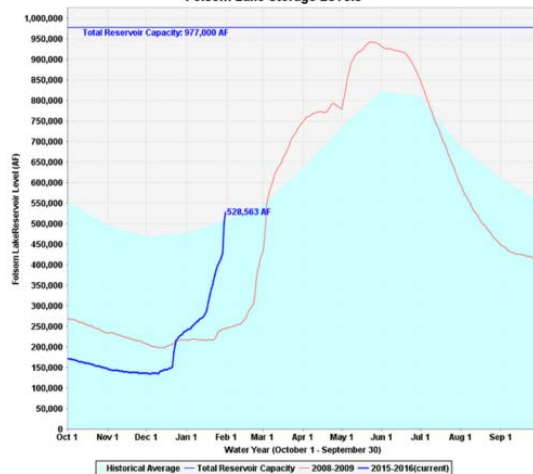
13 12

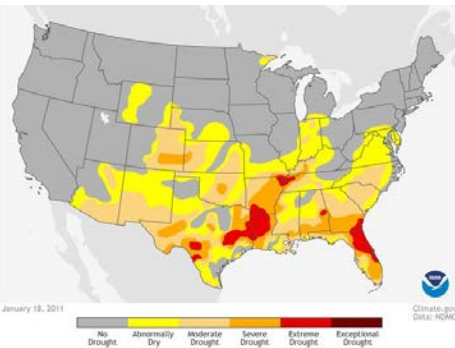
Drought conditions are still present in central CA but expected to improve this season.



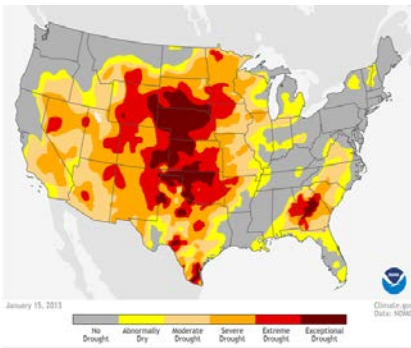
Atmos River @atmosriver · 18h
Steep ramp in Folsom Lake levels. Similar to WY 2008-09 but starts earlier & from lower baseline @NWSSacramento #cawx

Folsom Lake Storage Levels

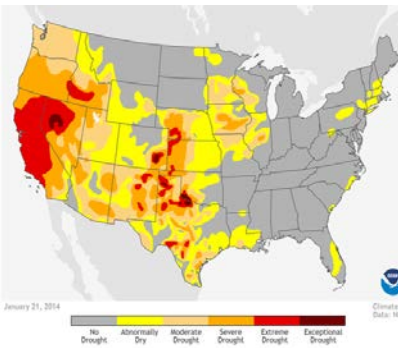




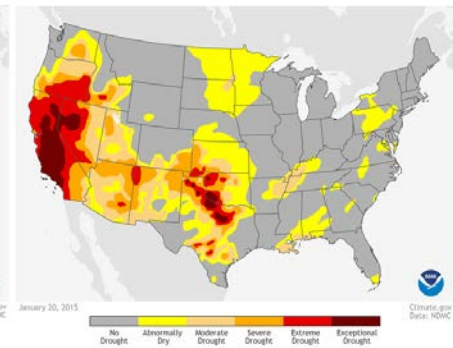
January 17, 2012



January 15, 2013

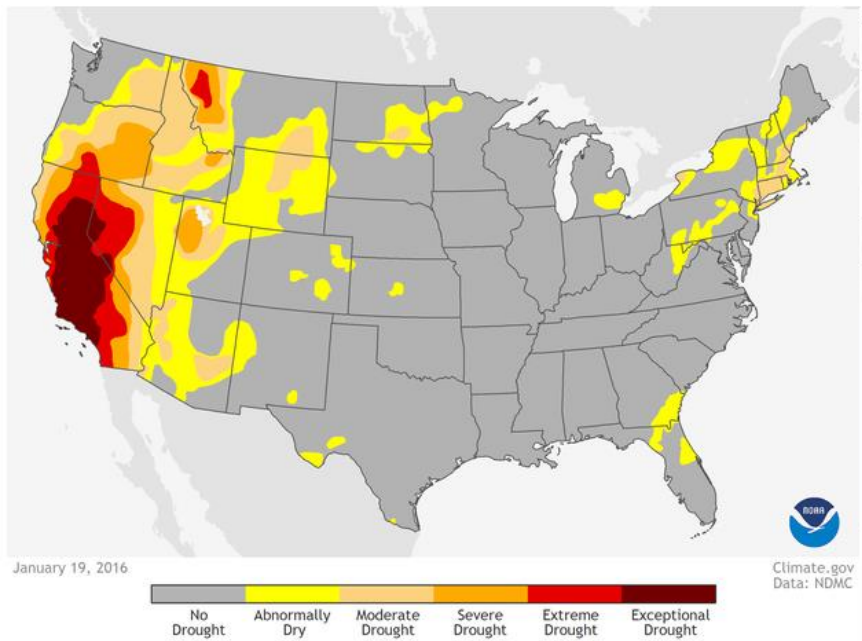


January 21, 2014



January 20, 2015

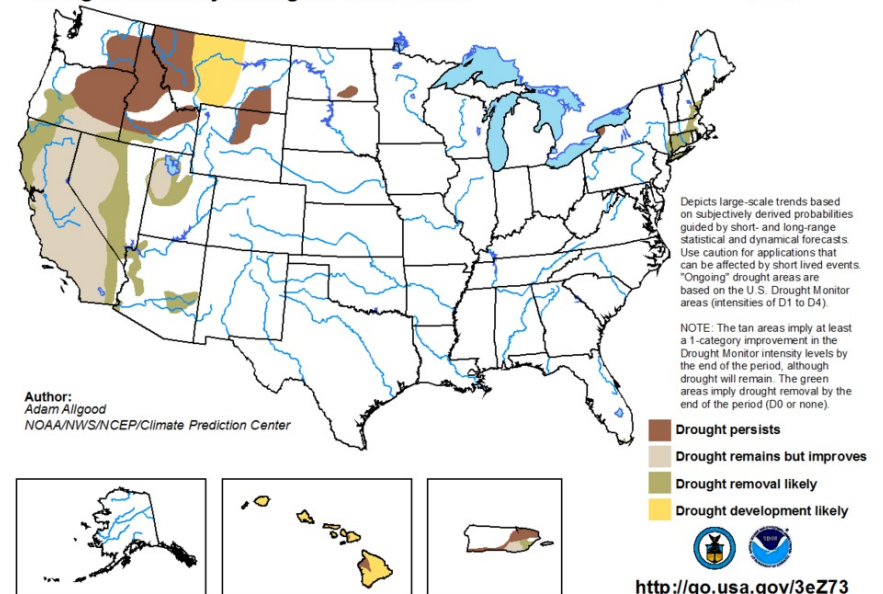
Drought Progress 2012- 2016



January 19, 2016

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for January 21 - April 30, 2016
Released January 21, 2016



<http://go.usa.gov/3eZ73>

Historical Timing of Precipitation During Strong El Niño Years

Shown below are national-scale composites of monthly precipitation during historical strong El Niño winter seasons, expressed as anomalies from long-term averages. Strong El Niño conditions may provide some guidance for preparing seasonal precipitation outlooks in parts of the U.S. at certain times of the year, but El Niño is not the only factor influencing the climate system. Each winter season is unique, and past performance should not be taken as a guarantee of future outcomes.

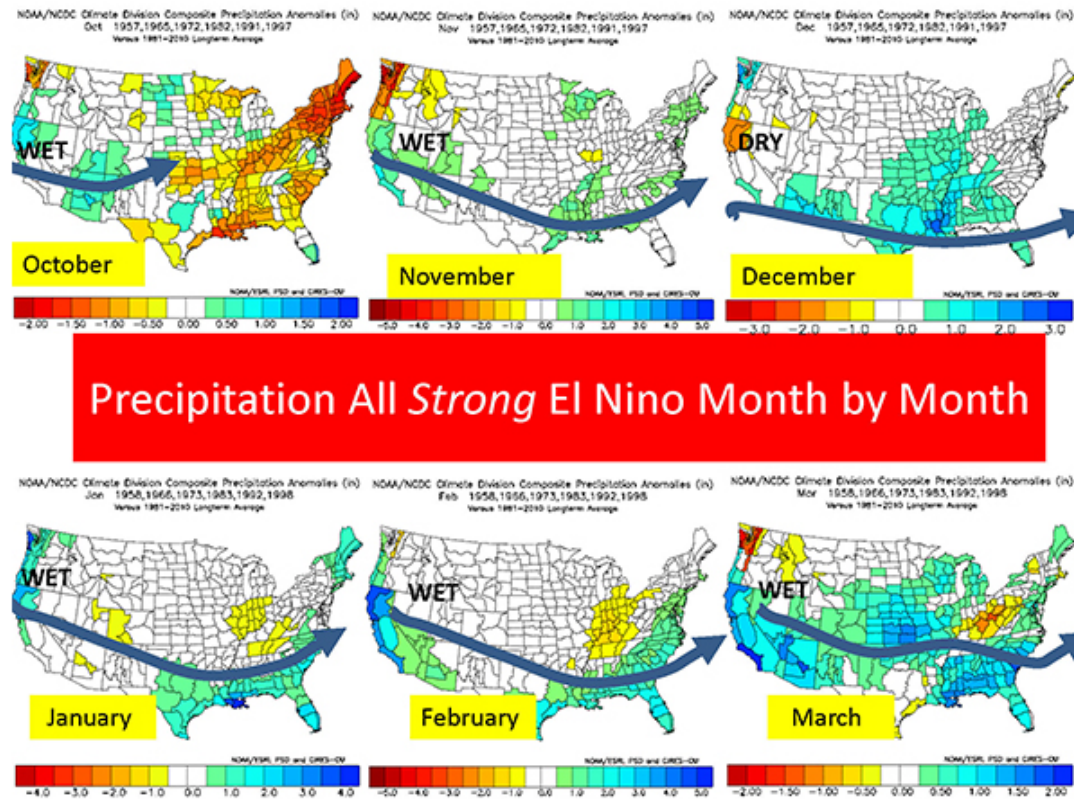


Figure courtesy of National Weather Service's San Diego Weather Forecast Office. Download a PDF version of the graphic.

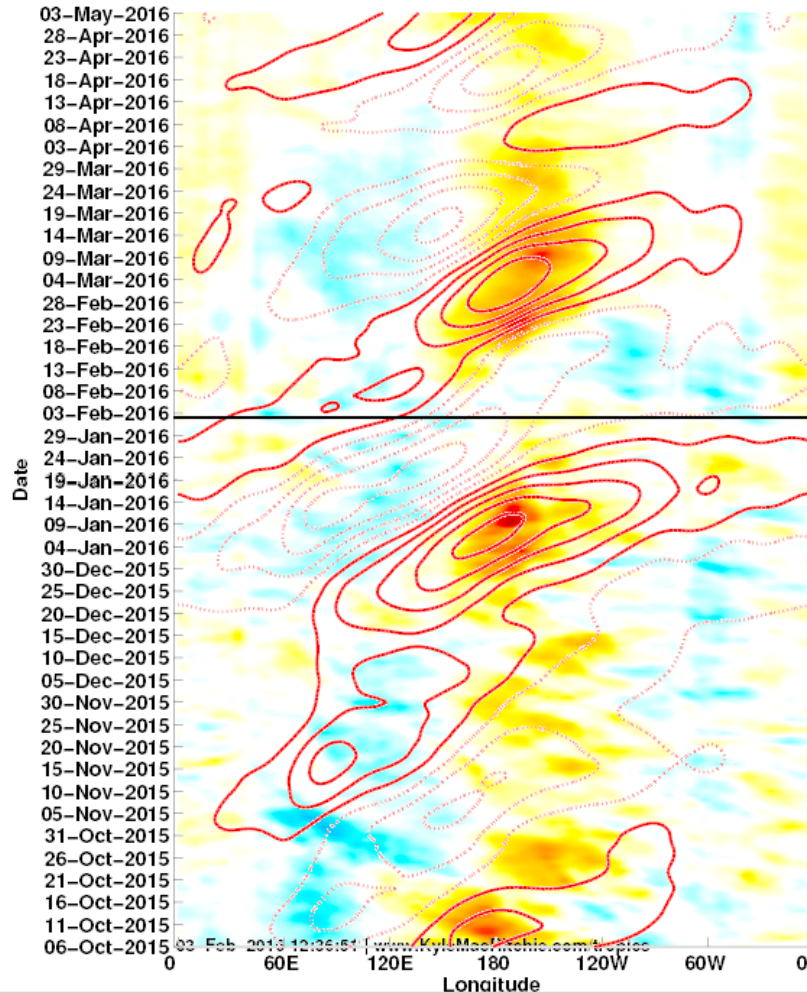
<http://www.water.ca.gov/waterconditions/waterconditions.cfm>

Real Time CFS 800/850 hPa U-Wind – 7.5S to 7.5N



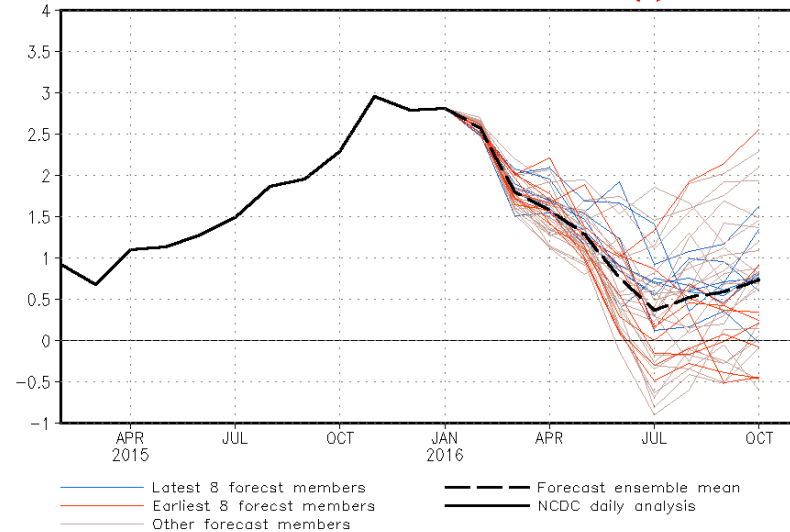
NWS/NCEP/CPC

Last update: Wed Feb 3 2016
Initial conditions: 24Jan2016–2Feb2016



Red contours = MJO active phase forecast- as in January 2016 which lead to above normal precipitation for most of northern CA, the active phase of the MJO is expected to return in March and may enhance the El Nino base state, possibly bringing more rain to the state. (Figure from <http://www.kylemacritchie.com/real-time-maps/>)

CFSv2 forecast Nino3.4 SST anomalies (K)



Long Range Outlook

The active phase of the Madden Julian Oscillation is anticipated to enhance El Nino base-state convective activity and may return rainfall to Central and Southern California beginning later February and early March. El Nino conditions (sea surface temperatures > 0.5 in the Nino3.4 region) may continue through the summer into early fall.