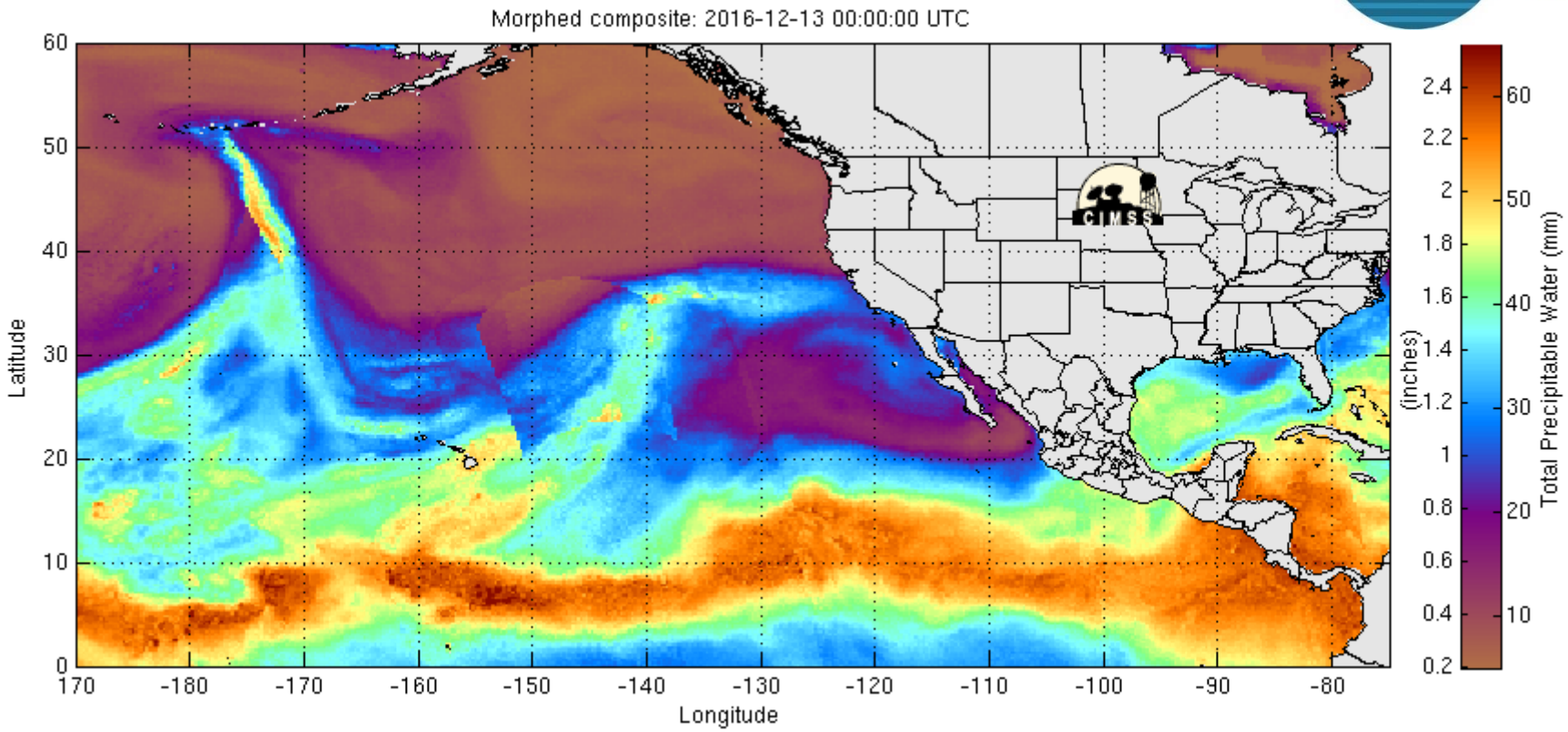
CW3E Atmospheric River Update

For California DWR's AR Program

Center for Western Weather and Water Extremes
SCRIPPS INSTITUTION OF OCEANOGRAPHY AT UC SAN DIEGO



Update on AR Impacting California

- AR conditions and precipitation have ended across the U.S. West Coast
- 72-h precipitation accumulations range from 3-10.5 inches in northern California and 1–6 inches in southern California
- Several rivers have seen a rise in gage height and a few have risen above flood stage
- The Northern Sierra 8-station Index in northern California experienced a considerable contribution towards the average total water year precipitation over the past several days

Summary by C. Hecht & F.M. Ralph 1 PM PT Fri 16 Dec. 2016

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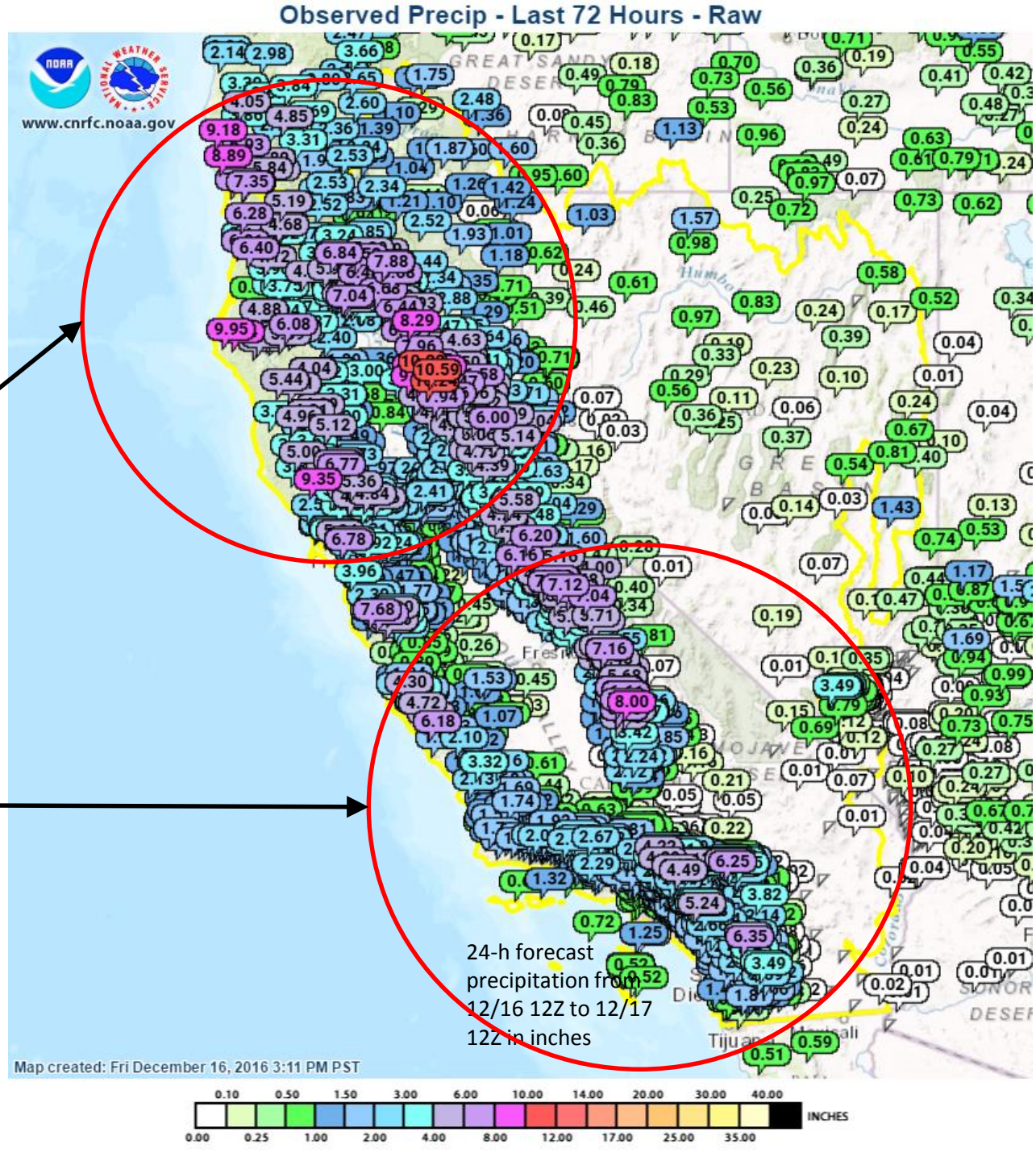
Most Locations in northern CA have received 3 to 10.5 inches over the past 72-hours

72-h precipitation accumulations of 8–12 inches classify this event as an R-Cat 1 event

Most locations in southern California received 1 – 6 inches over the last 48-h

For Official NOAA-CNRFC Precipitation Forecasts and Observations see http://www.cnrfc.noaa.gov/ol.php?type=QPF



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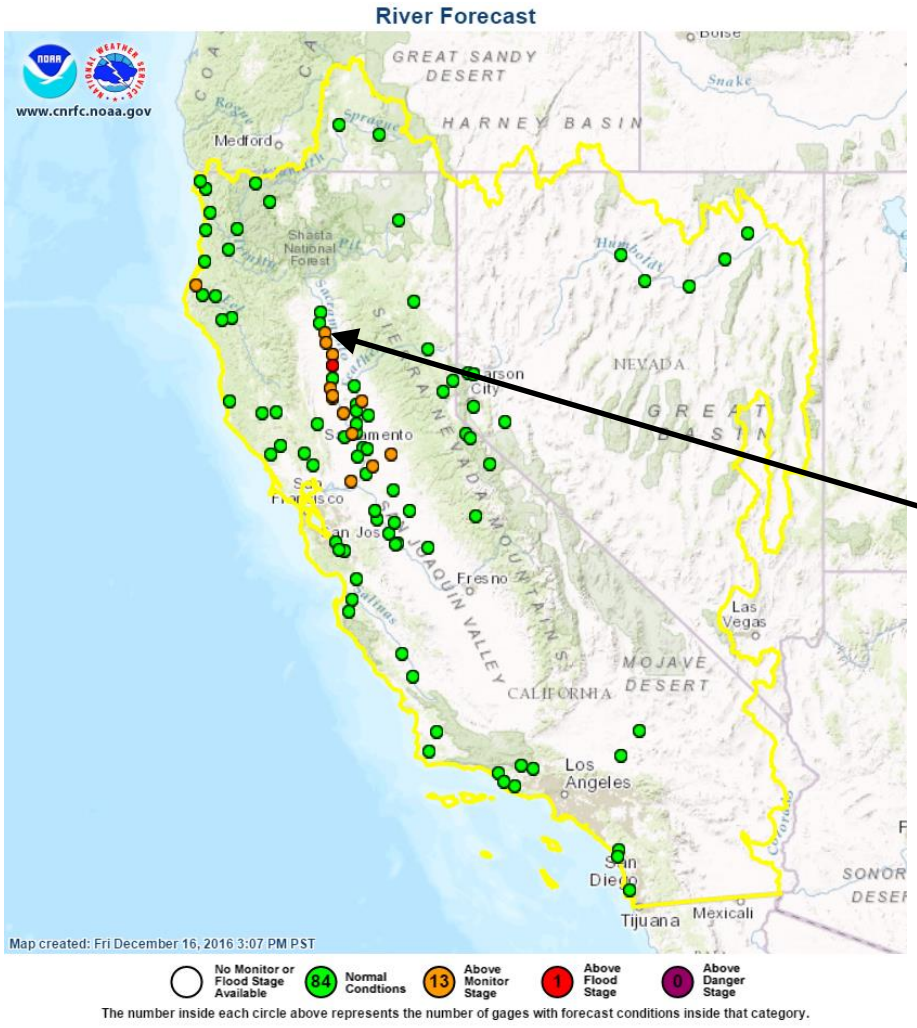
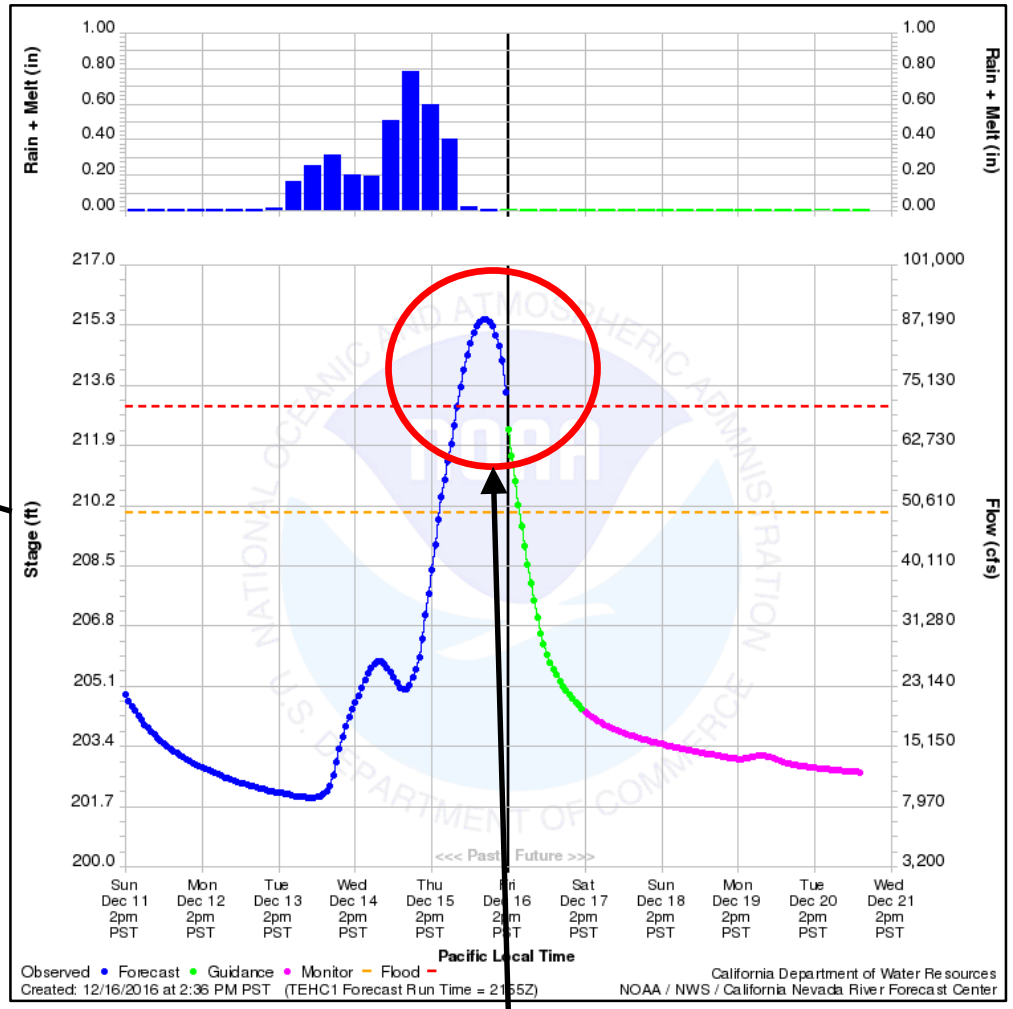
There are currently 13 river gages above monitor stage and one above flood stage

For official NOAA-NWS CNRFC Streamflow Forecasts see http://cnrfc.noaa.gov/rfc_guidance.php





The Sacramento River at Tehama Bridge is currently at 213.4 ft., .4 ft above flood stage, but is expected to drop below flood stage in the next several hours

The NWS has issued a flood warning for the Sacramento River. For more information visit http://forecast.weather.gov/wwamap/wwatxtget.php?cwa=sto&wwa=flood%20warning

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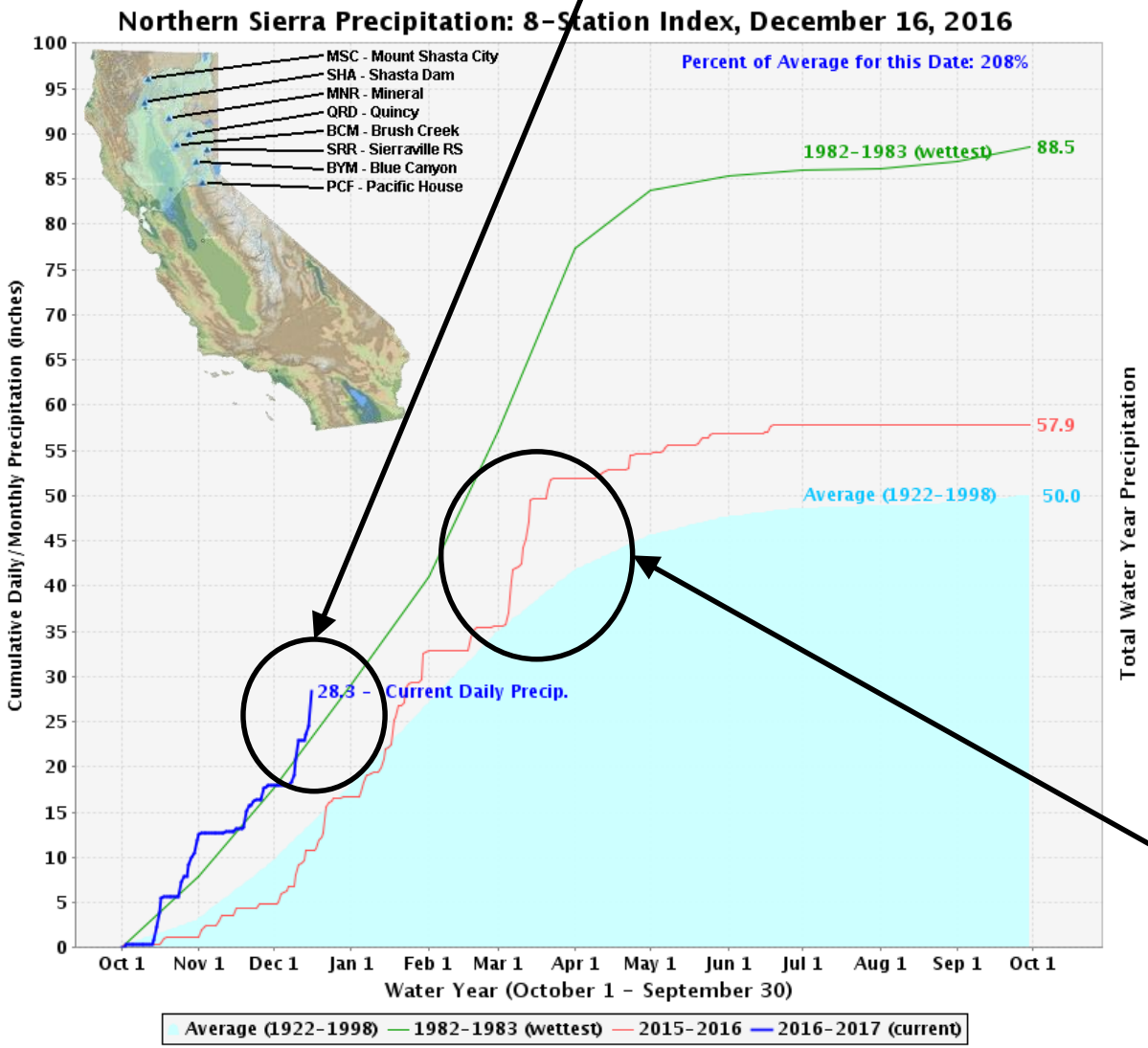
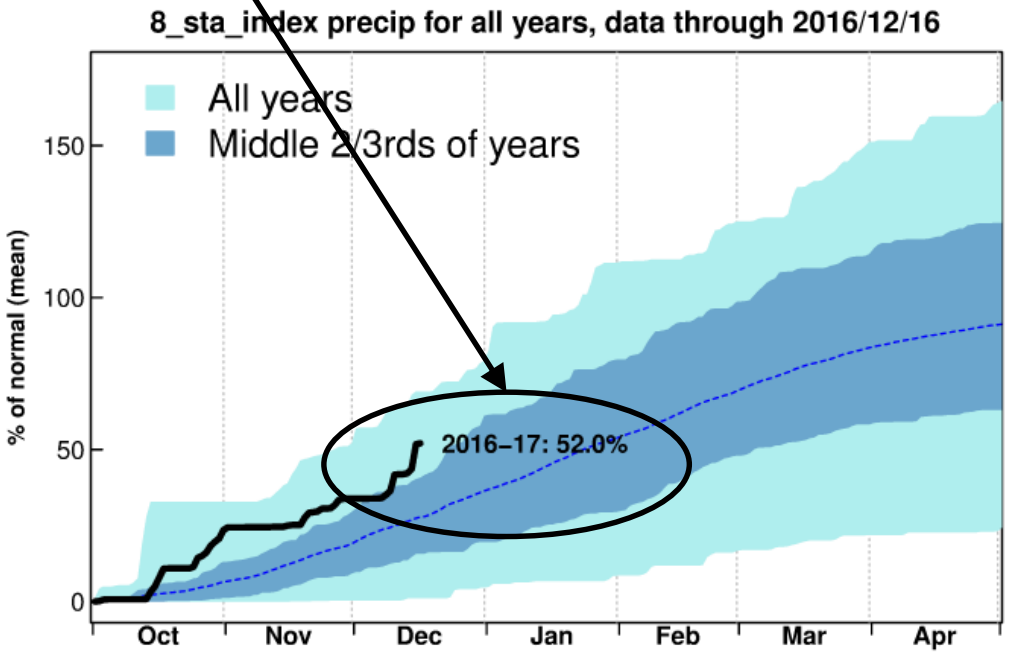
The precipitation over the Northern Sierra 8-station index has brought the annual total to 28.3 inches, which is 208% of the average precipitation for this date

28.3 inches is ~52% of the average total water year precipitation which is up ~10% since 13 December 2016

An AR last week saw a 3-day increase of ~8% from 7–10 Dec. bringing the total change over the past 10 days to ~18%





For comparison, March 2016 saw 3 ARs produce ~25% of the average total water year precipitation over a 10 day period

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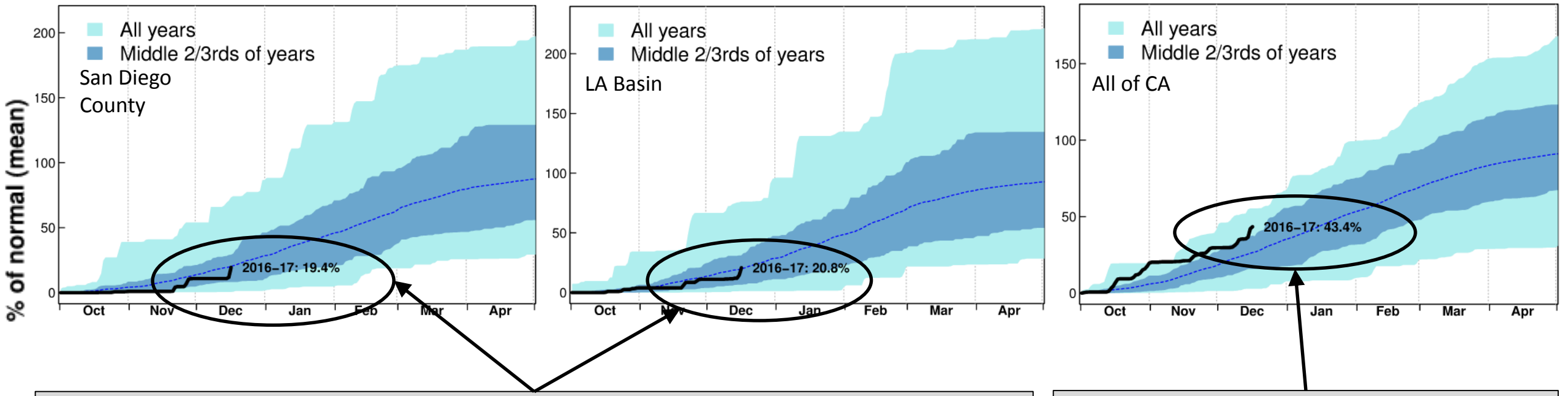
WY to Date Precipitation Compared to All Water Years



The recent precipitation in San Diego County and the Los Angeles Basin has increased the precipitation to date ~9% over the last 2 days to ~20% of the average total WY precipitation, which is approximately average for this date

All of California is now at 43.4% of the average total water year precipitation, an increase of ~8% over the past 3 days

43.4% is in the upper 15% of all water years for this date

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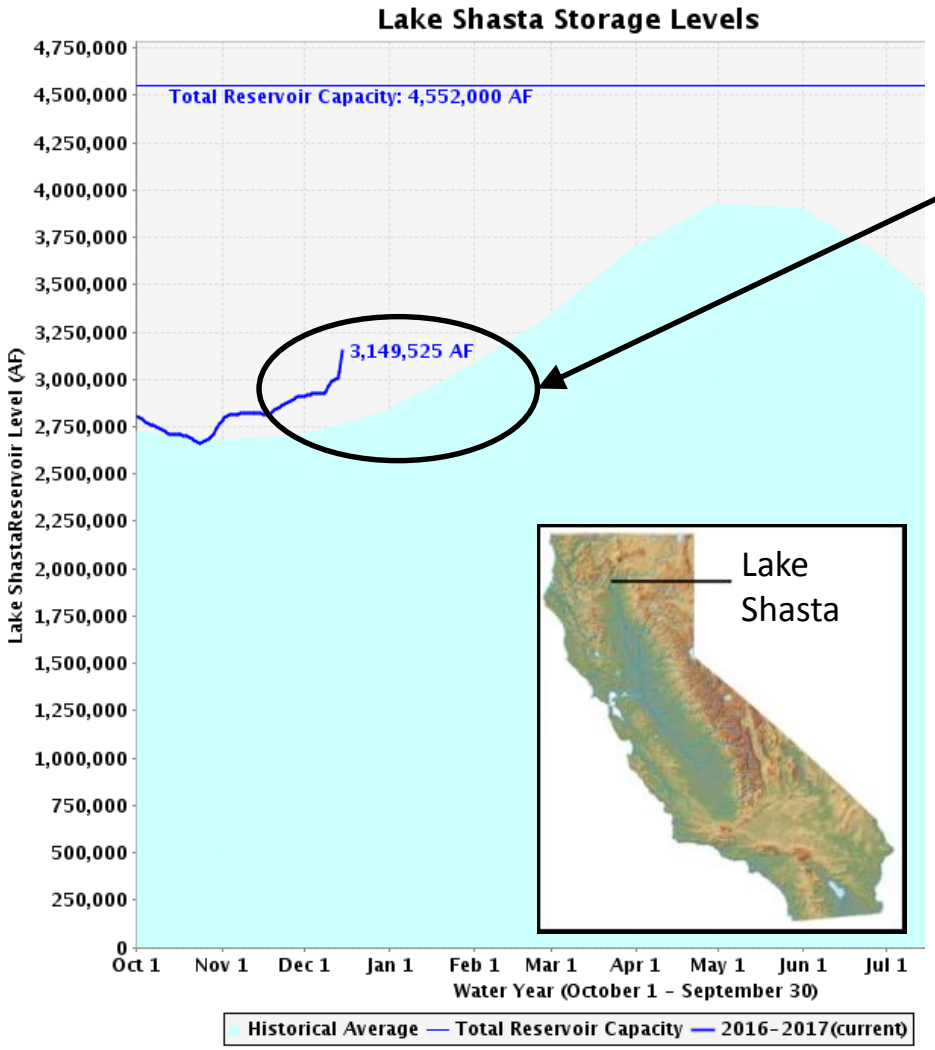
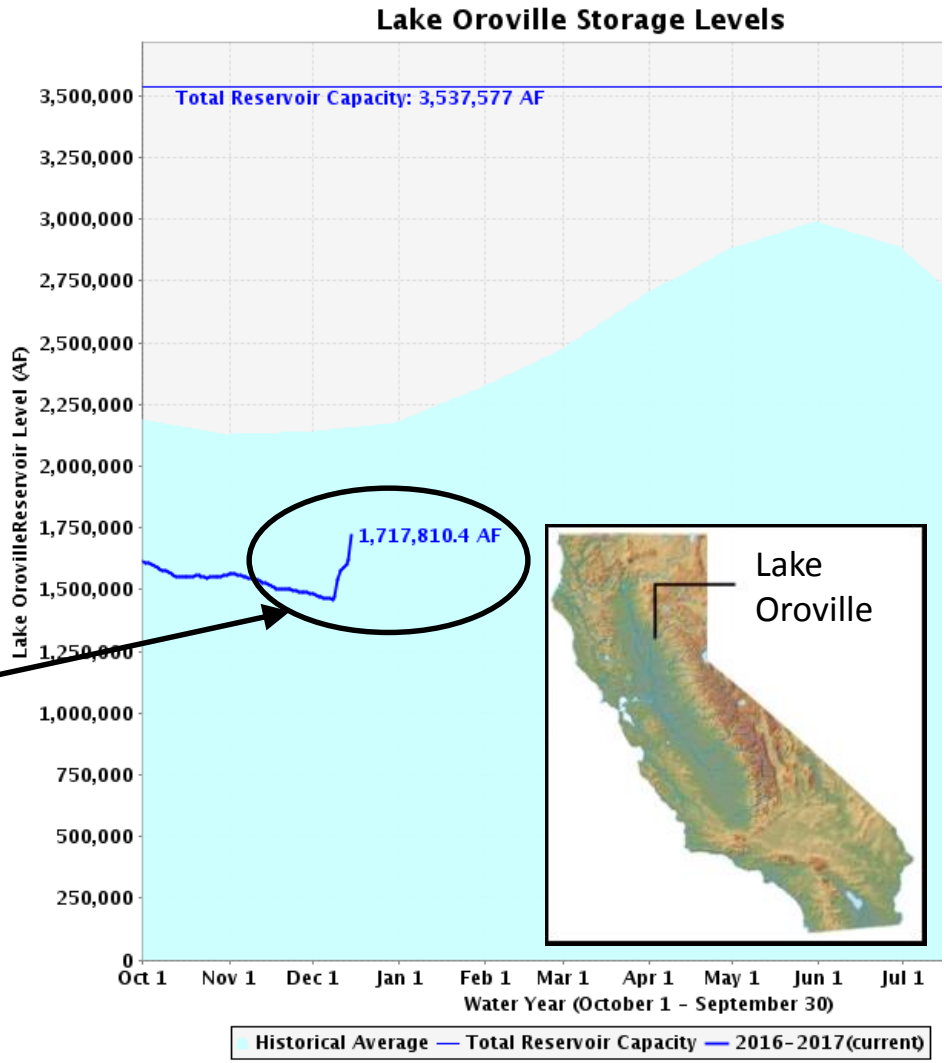


The water level at Lake Shasta in northern CA has risen ~200,000 AF over the past week to ~3,150,000 AF, which is above average for this date

Lake Oroville in the northern Central Valley has risen ~200,000 AF, closer to the average



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