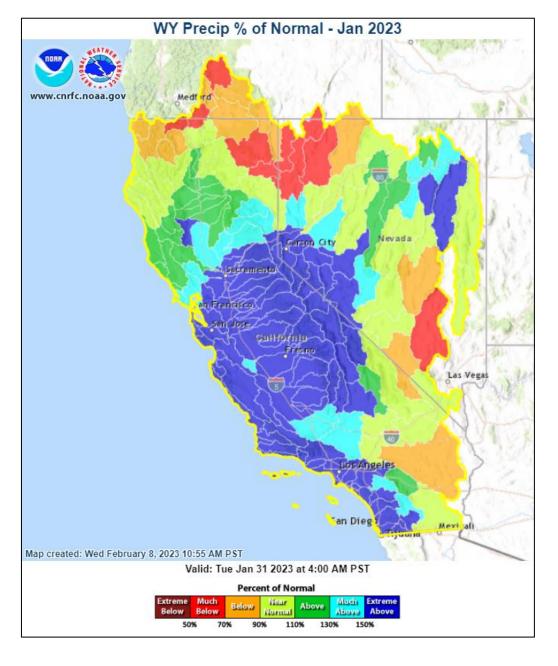
WY2023 Water Resources Update - February 8, 2023

Summary:

- January precipitation ends dry; Central California continues as the wettest region.
- Snow continues at high levels some record high levels for Feb 1st.
- Potential for Presidents Day weekend precipitation.
- Drier Feb. outlook allows for watersheds to dry out; but water supply still well above average.

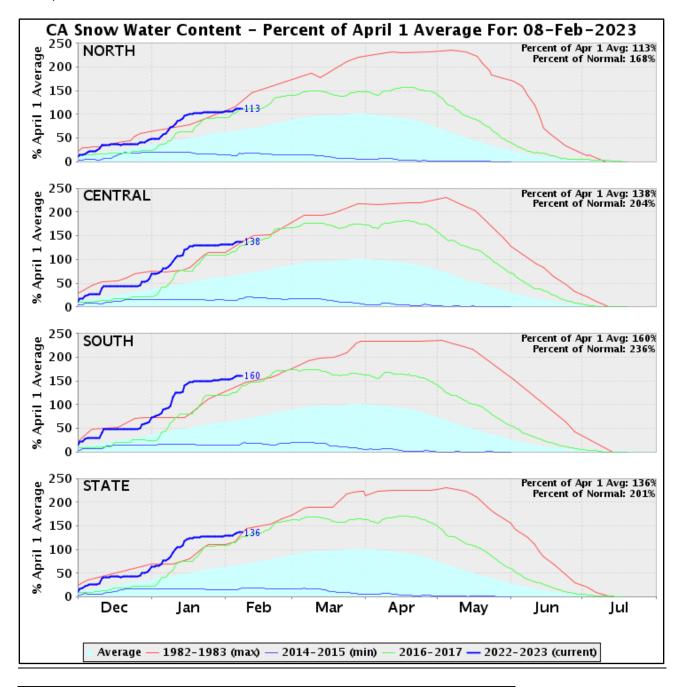
Details:

The final two weeks of January were dry. Water Year totals for 2023 show a clear focus on the Central Sierra basins, from the American down through the Kern River watershed.



Snowpack Trends

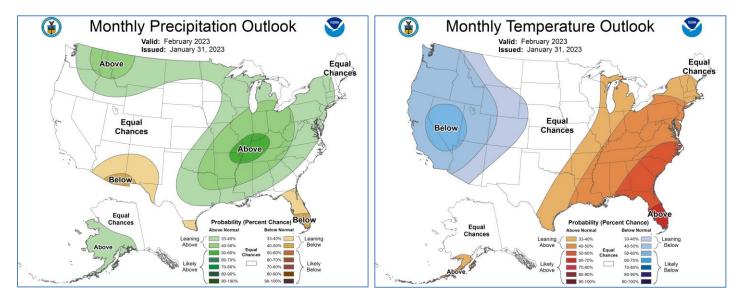
Snowpack has been running much above normal (currently at 201% of normal) with a clear North-South trend. Highest values are in the Southern Sierra, with some February 1 snow courses having the most SWE in the past 40 years for this time of year. The central and southern regions remain at or above the 1982-83 snowpack.



Source of graphic: https://cdec.water.ca.gov/snowapp/swcchart.action

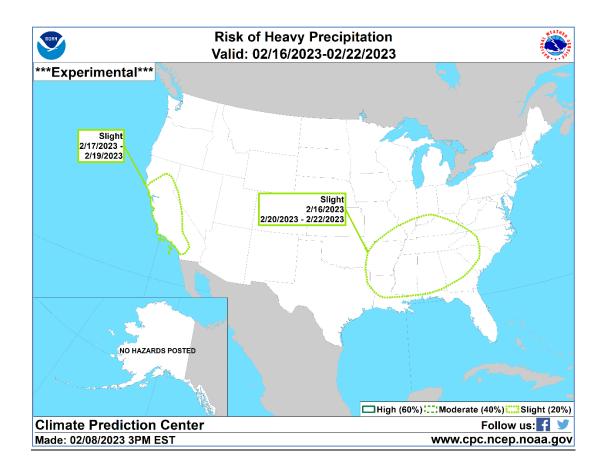
February Outlook

The rest of February remains uncertain with a storm track moving from the Northwest Pacific and diving into the Southwest US. This track tends to be colder and much less moist than what we saw in January. Right now the best chance for heavier precipitation amounts looks to be around Presidents' Day weekend. Chances for heavy precipitation are still considered "slight" (20%).



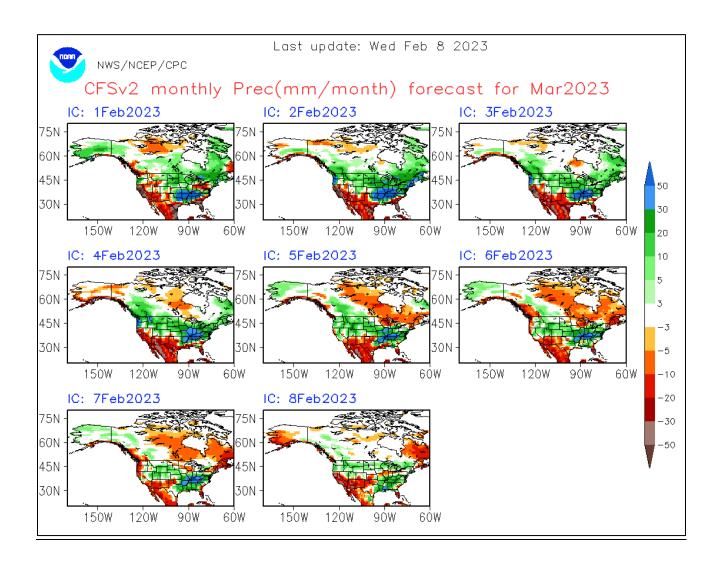
Source:

https://www.cpc.ncep.noaa.gov/products/predictions/30day/off15 prcp.gif https://www.cpc.ncep.noaa.gov/products/predictions/30day/off15 temp.gif



March Outlook uncertainty

Plenty of uncertainty when you begin looking out into March. The European model indicates a wetter March for N. California, while the CFSv2 is trending dry for March.

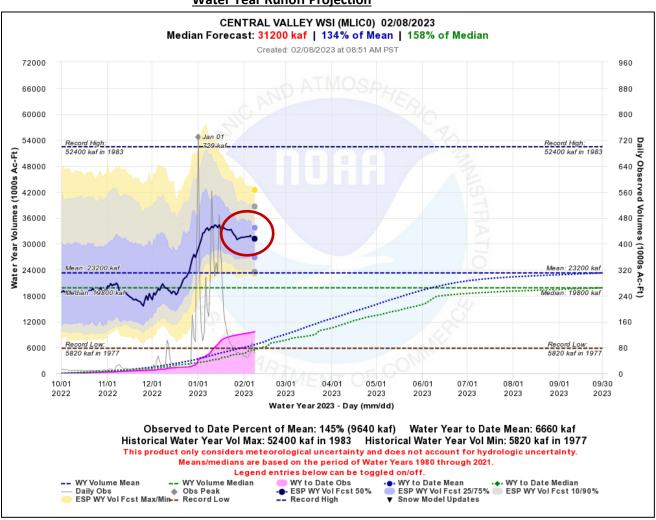


Water Supply Impacts (HEFS = Hydrologic Ensemble Forecast Service)

Over the past two weeks, CNRFC water supply forecasts have slowly drifted lower. The lighter precipitation event last weekend and the forecast precipitation has resulted in a slow decline. Compared to the sharp declines last year, the outlook is much improved.

With about 45% of the water year still ahead of us, the overall water supply is in good shape. Current observed runoff is at 145% of normal. Even a very dry future would still result in average runoff for the Central Valley.

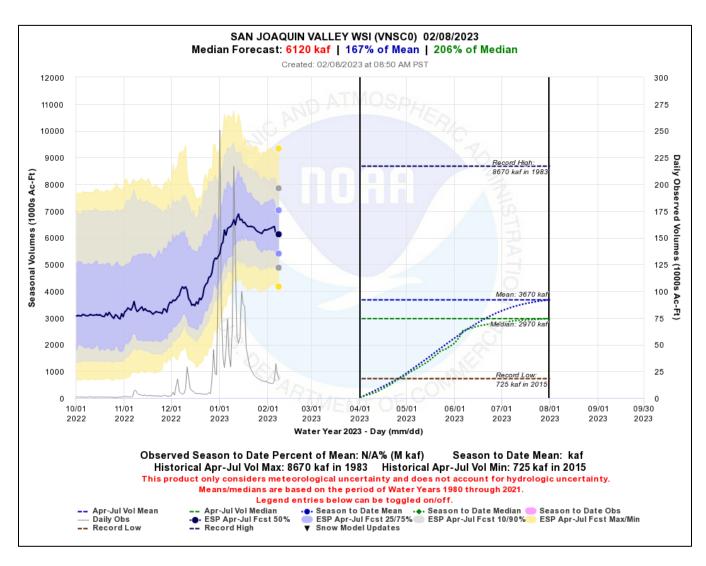
Water Year Runoff Projection



Source: https://www.cnrfc.noaa.gov/ensembleProduct.php?id=MLICO&prodID=9

Water Supply Outlook for San Joaquin region

The large snowpack in Central and Southern Sierra puts this region at risk for snowmelt flooding. The April – July runoff has about a 5% chance of exceeding the WY1983 AJ runoff. Even the driest scenario would be above average (see yellow shading in graphic below).



Conclusion:

The past few weeks have been a good break to allow river levels to recede and soils to dry out some. CNRFC and DWR forecasters have been looking at many data sources to get a better assessment of the snowpack. There is still plenty of uncertainty as to how far above normal we go from here, but a normal year is the lowest we'd probably go.

CNRFC Pete Fickenscher