

**Summary:**

- Prolonged dry spell is more bad news for the record breaking multi-year deficits
- Water supply forecasts continue to drop since the last update
- Long range models continue to show dry forecasts

**Details:**

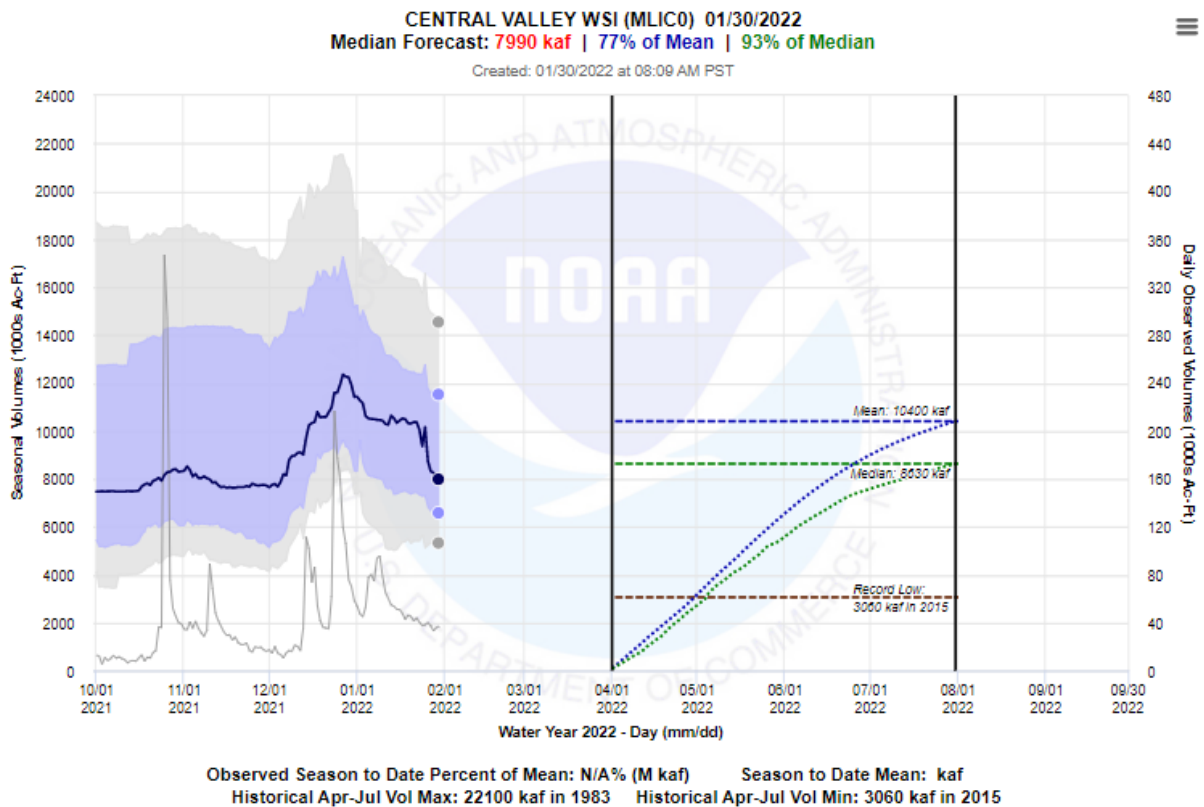
Since the January 12th water resource update, there has been zero observed precipitation for all three Central Valley indices. This not only adversely impacts the water supply outlooks for this year, but also continues to add to the large multi-year deficits. Dan Kozlowski, a meteorologist here at the CNRFC, totaled up the precipitation over the past three years for all three indices - Sacramento, San Joaquin, and Tulare. All three show that the most recent three water years (2020-2022) are the driest on record. He also combined all three indices and ranked them. The top 10 driest are in the table below. If we were to receive no more precipitation for the rest of the 2022 water year, this is what the numbers would be. Also, to put into perspective, the average single year combined index total is 121.49 inches. So that would mean the last three years is a mere 158% of a single average year. The second and third driest 3-year periods also fall within the last 10 years (with #2 and #3 in overlapping periods).

**Fig 1. Combined 8-station, 5-station, and 6-station precipitation indices (3-year totals)**

RANK	PRECIP	WY RANGE
1	192.39	2020-2022
2	225.35	2013-2015
3	240.36	2012-2014
4	240.55	1975-1977
5	244.34	1929-1931
6	247.35	1959-1961
7	254.80	1990-1992
8	257.99	1987-1989
9	259.27	2014-2016
10	261.01	1924-1926

So it is no surprise that the Central Valley Water Supply forecast for WY 2022 has dropped 9% since the last water resource update on January 12th, and down to 89% of average. The CA statewide snowpack was above normal for much of the water year, but is now down to about average for this time of year. As expected, the April-July Central Valley Water Supply forecast is also down, and currently 77% of average, with most major reservoirs ranging from 70 to 90% of average.

**Fig 2. Central Valley Water Supply Index April-July Forecast**



CPC's 3-4 week precipitation outlook indicates an equal chance of being above or below normal. Looking a little further out at the entire month of February, the CFSv2 has been showing a strengthening trend of dry as well (see below). Let's hope at least the second half of February will be a bit wetter, but it is looking more and more like our only hope of improvement is a "miracle March".

**Fig 3. CFSv2 Precipitation Forecast Progression for the Month of February**

