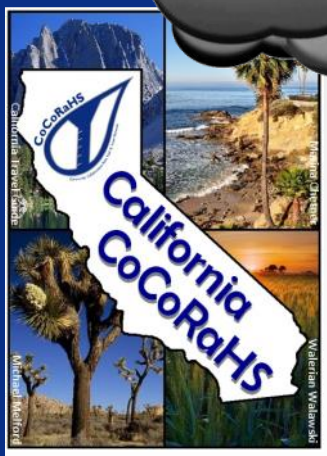
California Cumulonimbus

Spring 2022



Articles in this Edition:

March Madness 2022

by Samantha Connolly

CoCoRaHS March Madness is in full swing, and continues through the end of March. During CoCoRaHS March Madness, states try to win the CoCoRaHS cup by recruiting the most new observers in their state during the month of March each year.

As of March 26, Minnesota is crushing the competition with 342 volunteer sign-ups in March so far. They hold the top spot in the per capita count as well.

CURRRENT STANDINGS - March 26, 2022

Traditional Count Top Five

342	Minnesota
99	Wisconsin
45	South Carolina
43	Massachusetts, Florida
42	Ohio

Per Capita* Count Top Five

59.93	Minnesota
32.81	Rhode Island
28.20	South Dakota
16.80	Wisconsin
14.64	New Mexico

California has recruited 4 new volunteers so far in March, and hopefully we can get some more before the month ends! Spread the word about CoCoRaHS to your friends and family, and have them sign up at: https://www.cocorahs.org/Content.aspx?page=application

Observer Spotlight: Climate Normals

by Matthew Kidwell

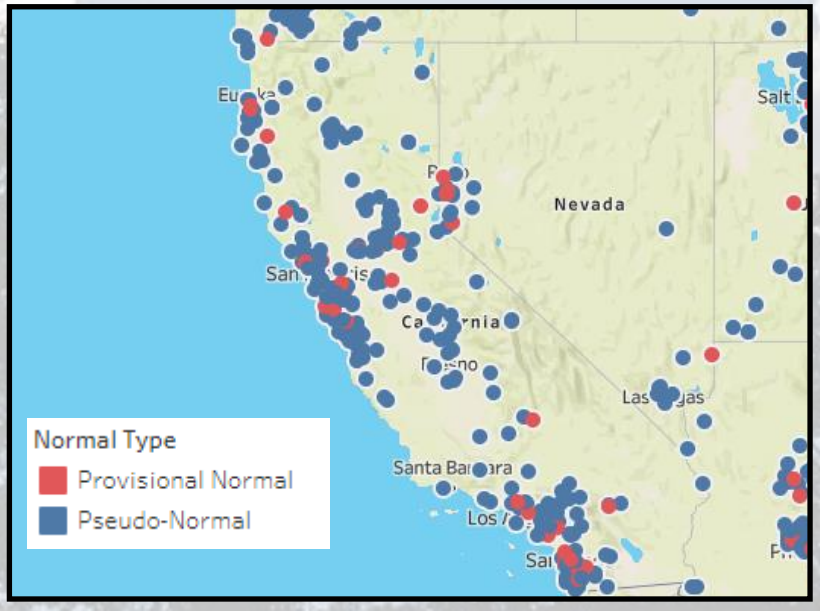
Every ten years the National Centers for Environmental Information (NCEI) publishes climate normals based on data from the last 30 years. Normals are essentially averages of the data, but with quality control done to account for any missing data or data irregularities.

For the first time, some of the CoCoRaHS observers with the most complete and longest records have been included in these normals. The longest running CoCoRaHS stations in California only date back to the year 2000, therefore no CoCoRaHS stations will be included in the traditional 30 year normals. However, there are also two additional categories where normals are created with less than 30 years of data. First, there are Provisional Normals which require stations to have 10 years of daily rainfall (including zeros on days with no rain) on every day of the year 10 times. Twenty-eight stations in California met this criteria with four of those stations in northwest California, thirteen in central California, and eleven in southern California. Here is a listing of all the CoCoRaHS stations that have been included in these normals:

- **Northwest CA**: McKinleyville 2.7 SE, McKinleyville 2.3 NE, Bridgeville 5.2 ENE, and Ukiah 8.4 NW.
- **Central California**: Soda Springs 1.5 SSW, Placerville 3.7 SW, Davis 0.8 NE, Carmichael 0.9 NE, Linden 5.8 ENE, Glen Ellen 1.5 N, Sebastopol 4.5 WSW, Martinez 0.8 SSE, Pacifica 0.3 W, Foster City 1.3 SW, Sunnyvale 1.9 SE, Walnut Creek 1.4 SSE, Inyokern 9.4 WSW.
- **Southern California**: Glendale 2.4 WSW, Whittier 2.9 WSW, Joshua Tree 2.0 S, Corona 12.8 SE, Mission Viejo 1.3 SSE, Oceanside 8.4 NE, San Marcos 2.5 ENE, Encinitas 2.7 N, San Diego Country Estates 1.5 WNW, Poway 3.2 NE, El Cajon 1.5 WSW.

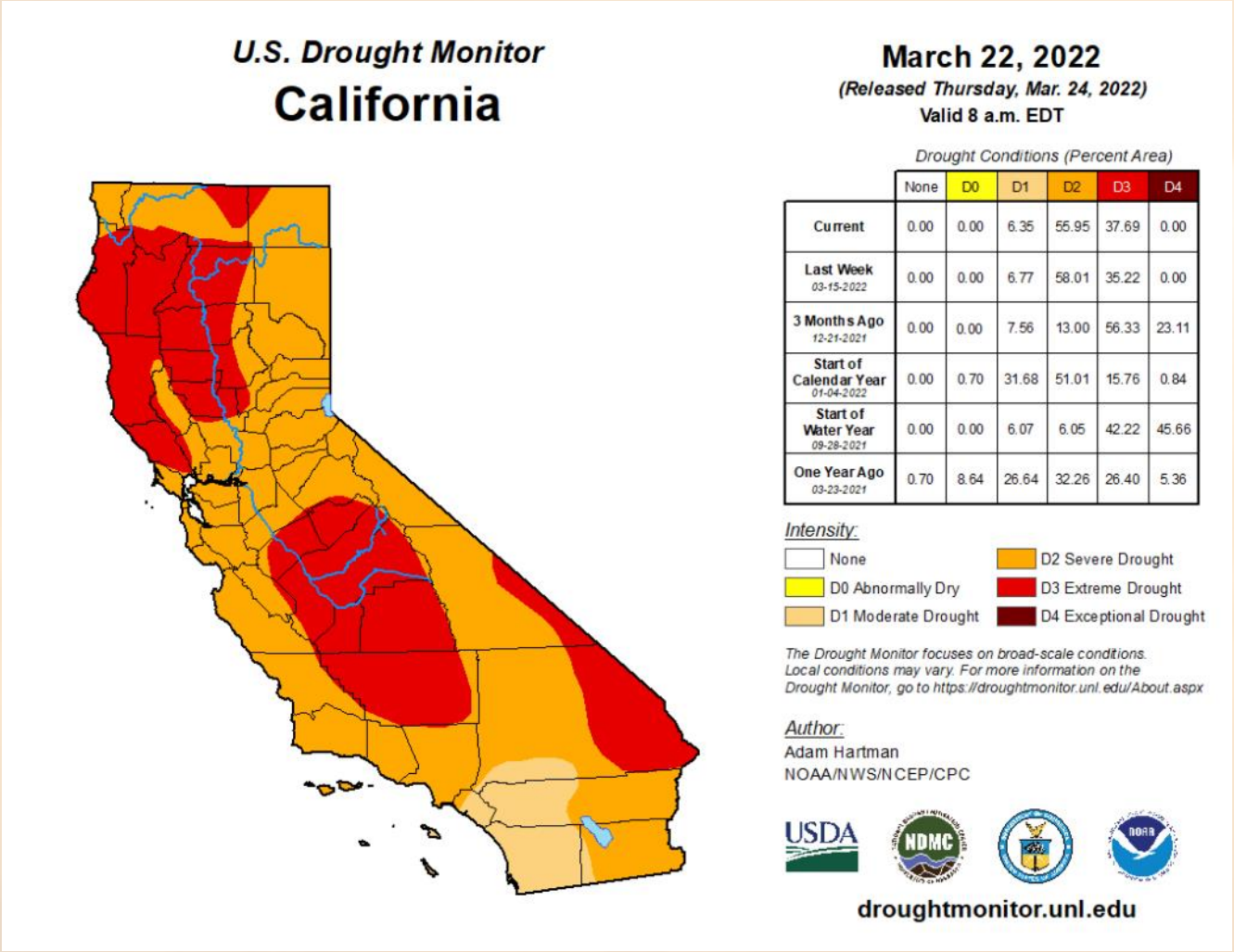
A big thank you to these observers for their diligence and attention to detail!

Additionally, there are Pseudo-Normals, which only have monthly normals. A station qualifying for "Pseudo-normal" status must have each calendar month complete with daily observations in at least two years. This can include a limited number of Multi-day reports if they remain in the same month. This means that observers who report regularly but have only been observing for a few years can qualify. For more details and a list of all the CoCoRaHS stations and their normals visit: https://www.cocorahs.org/Content.aspx?page=climate-normals



Drought Conditions in California

by Samantha Connolly



Drought conditions have worsened across California over the last month, with the entire state in some level of drought as the weather turned mostly dry for the start of 2022. Most recently, the Extreme Drought category (D3) has expanded across much of northwestern California, the Central Valley, and portions of southeast California. The majority of the state (56 percent) remains in Severe Drought (D2).

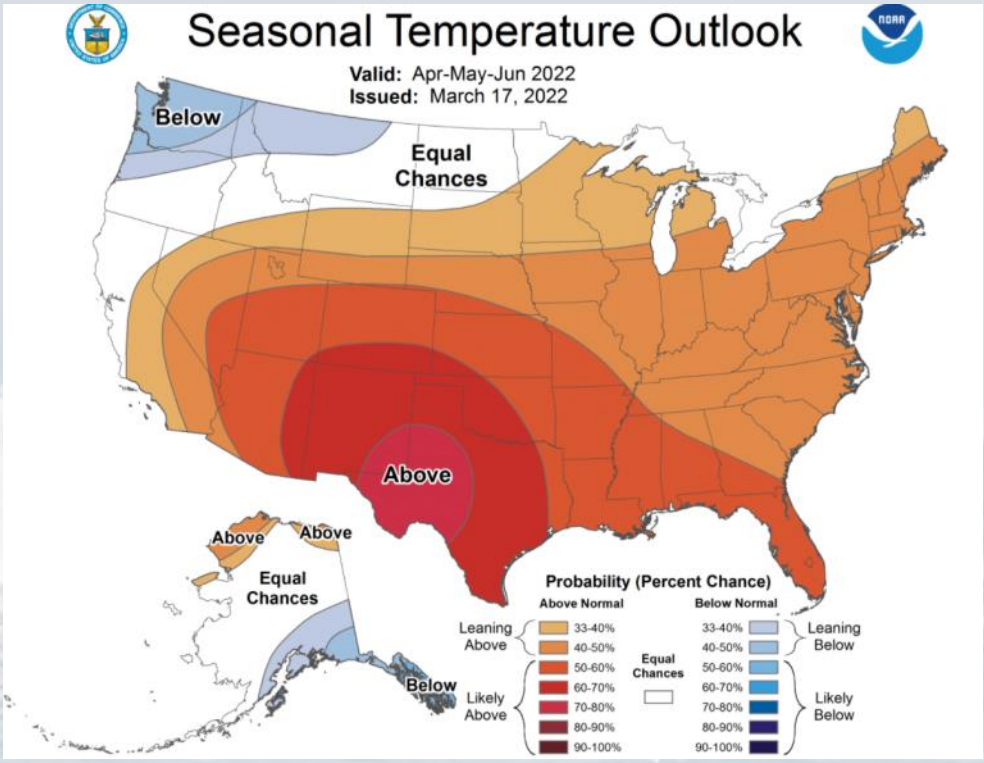
Many of the areas in the Severe and Extreme Drought categories have experienced record dryness since the start of 2022. Groundwater, soil moisture, and snow water equivalent (SWE) are all below-normal and nearby reservoir levels are, on average, 50 percent of their historical averages as we begin transitioning into a drier time of year.

The persistent high pressure that we've had in California this month has finally weakened, and the "storm door" has opened for a late March storm to bring beneficial rains to parts of California. We will take what we can get, given we are towards the tail end of California's wet season.

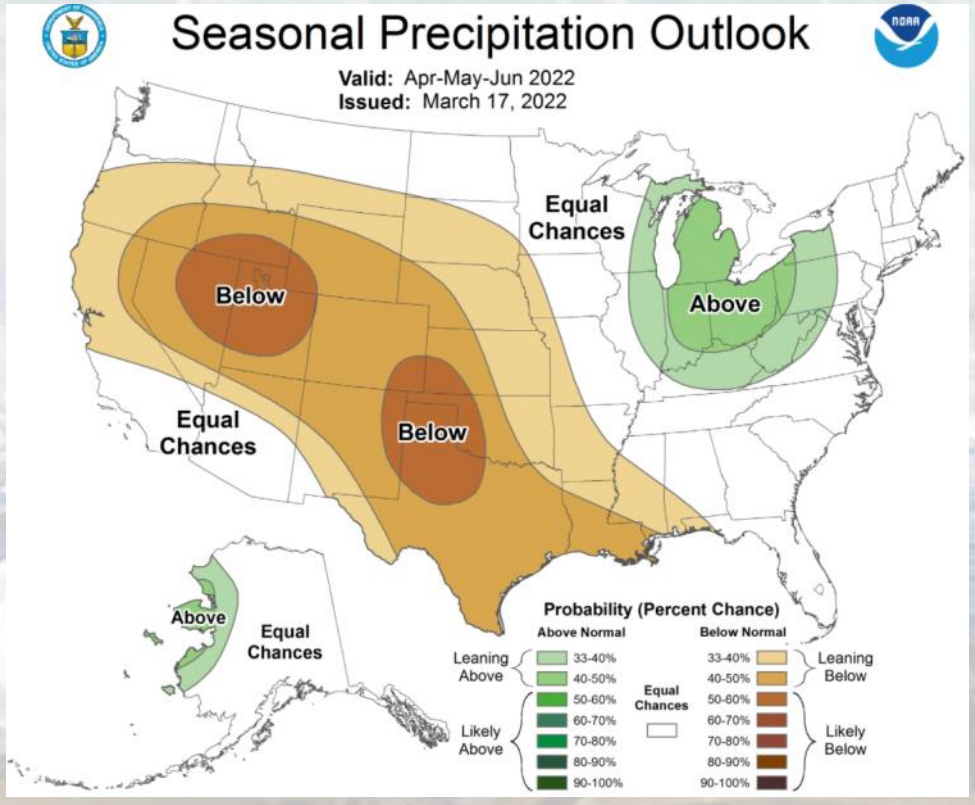
April/May/June 2022 Outlook

By Samantha Connolly

The 3 month outlook for April/May/June 2022 was released on March 17th by the Climate Prediction Center (CPC). The CPC is currently leaning slightly towards above normal temperatures in central and southern California, and equal chances of above, near, or below normal for northern California. Much of the contiguous U.S is leaning towards above normal temperatures for the next 3 months.



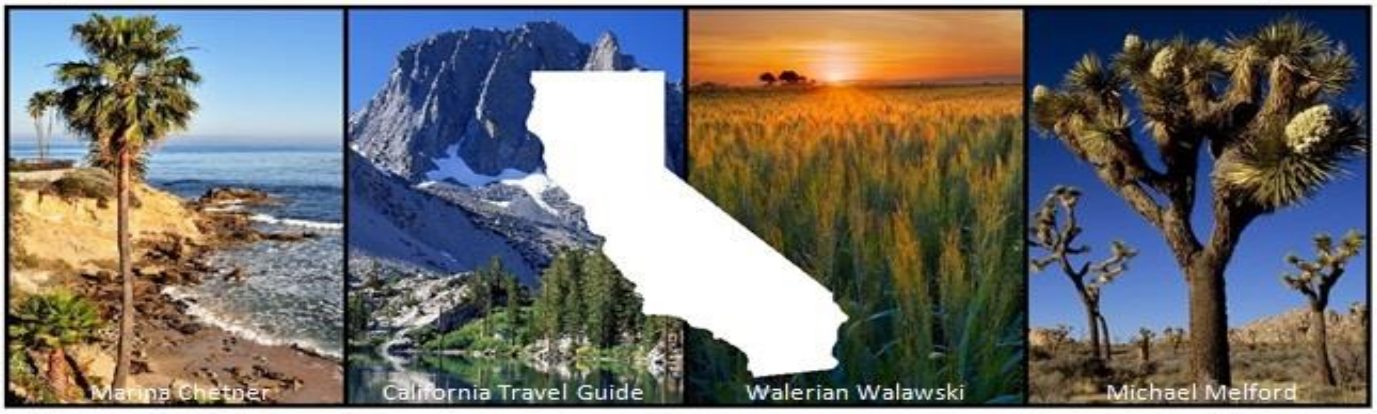
This temperature outlook highly favors the currently active La Niña conditions in the equatorial Pacific. La Niña is favored to continue into the Northern Hemisphere summer with generally equal odds for either La Niña or ENSO-neutral thereafter at about 40-50% likelihood.



For the seasonal precipitation outlook, it is also split for California, with a slight tilt towards below normal in northern and parts of central California, and equal chances of above, near or below normal in southern California.

While California is beginning to transition out of the wet season, storms in April and May can happen. Storms that occur in April and May are generally less strong than in Jan/Feb/Mar, but the rainfall these storms provide can help bump up our rainfall totals ahead of the dry summer and fall seasons.

California CoCoRaHS



California Cumulonimbus

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What is CoCoRaHS?

CoCoRaHS, which stands for Community Collaborative Rain Hail and Snow Network, is a non-profit group of volunteer precipitation observers. Anyone can join, and it's easy to report the information. All you need is a 4 inch rain gauge, the internet, and a few minutes each day. The website is easy to navigate and has different instructional materials for anyone to learn how to record an observation.

The site also has daily maps of observer's reports showing where precipitation fell the day before. It's fun to compare the different amounts of precipitation that can fall in an area from just one storm. Not only is the information interesting to look at, it is very valuable for organizations such as the National Weather Service, hydrologists, farmers and many others.

Visit cocorahs.org to sign up. Join CoCoRaHS, today!

Rain gauge required for the program.

cocorahs.org | California CoCoRaHS State Webpage | California CoCoRaHS | weather.gov

Do you have any ideas or suggestions of future topics that you would like to see covered in this newsletter? If so, simply send an email to Sam at samantha.connolly@noaa.gov!