Weather this Week April 18, 2022

Hi Folks,

April 2022 is a very different outcome from Spring (April/May/June) of 2021. Last year statewide precipitation for the three months totaled 0.53 inches. While not all of California is benefitting from precipitation this month, the areas that are will definitely exceed last year's meager threshold. Over the past seven days, multiple weather systems brought precipitation to northern California. The map of observed precipitation from the National Weather Service California Nevada River Forecast Center (CNRFC) is shown in Figure 1. The coast north of Golden Gate and the northern Sierra Nevada regions picked up multiple inches of precipitation.

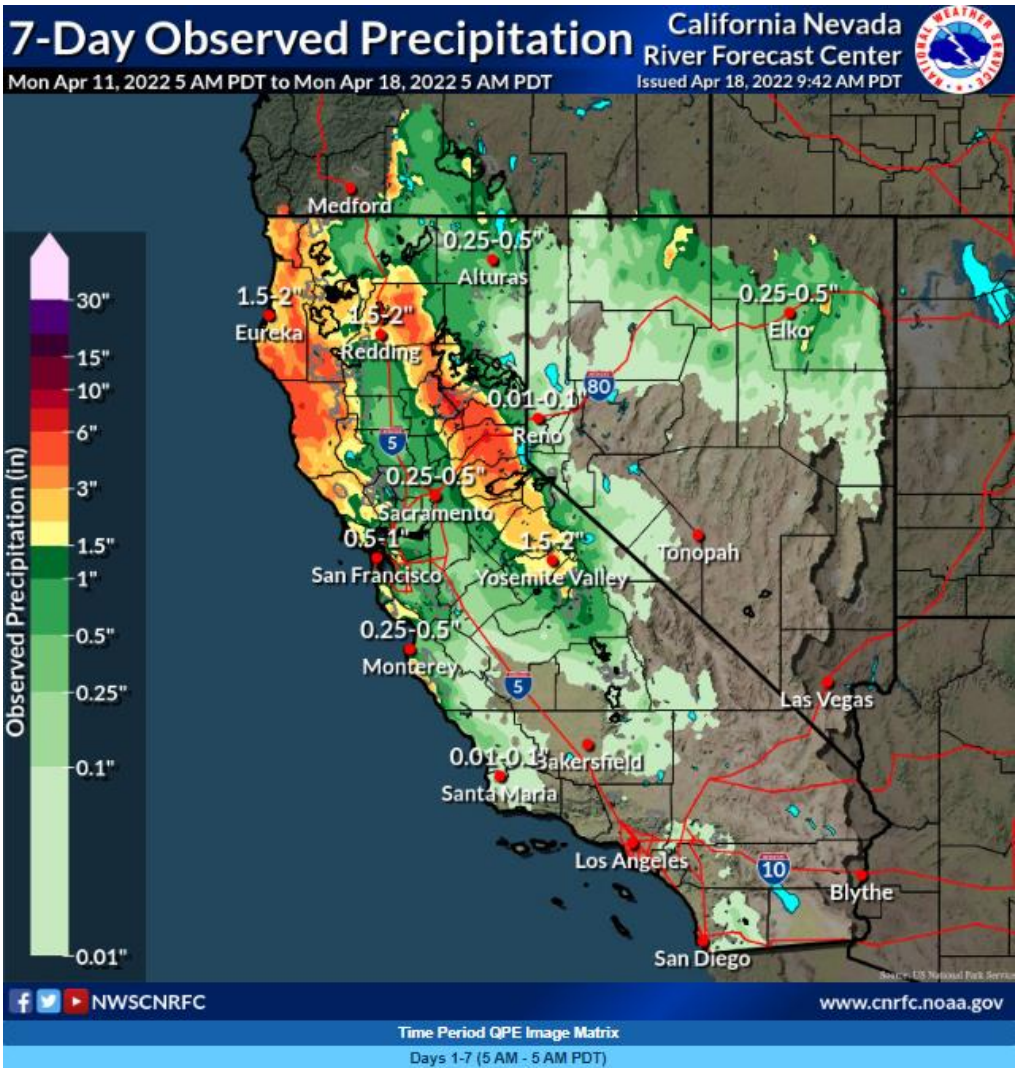

Figure 1. CNRFC map of observed precipitation from 4/11/22 to 4/18/22.

Over the next six days, the pattern of incoming weather systems will impact northern California. Figure 2 shows the six-day forecast accumulated precipitation from the CNRFC. The pattern of where precipitation is highest is consistent with last week.

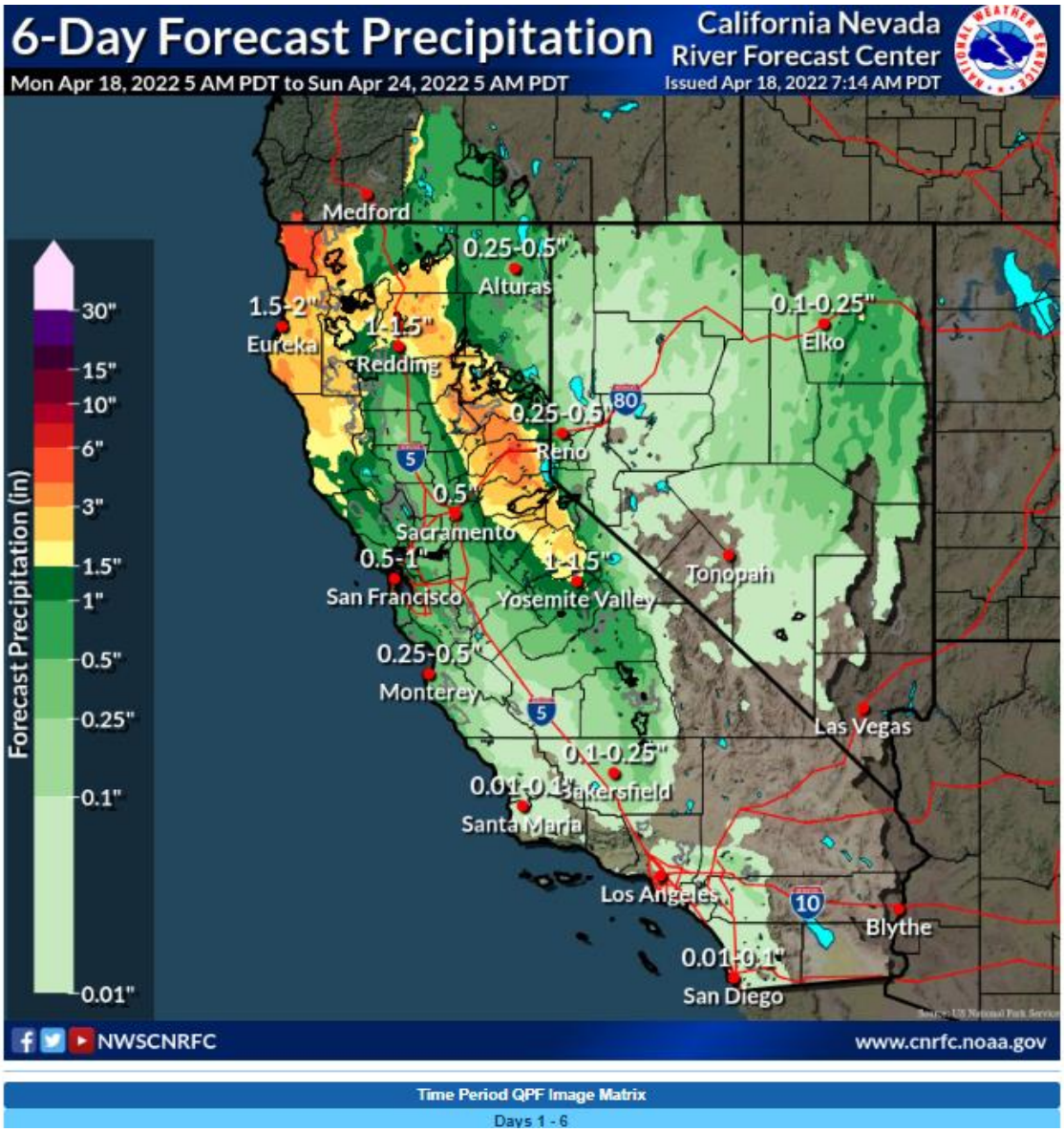

Figure 2. CNRFC map for forecast precipitation from 4/18/22 to 4/24/22.

The timing for the weather systems coming in start with a system making landfall on the North Coast this afternoon (4/18/22) with precipitation spreading across Northern California this evening and overnight. Clearing with some showers tomorrow and then the next system drops into California along the same path Wednesday afternoon and evening with precipitation continuing into Thursday. Mountain showers continue Friday

before clearing across the State on Saturday. After this week, this high pressure in the eastern Pacific re-asserts itself leading to dry conditions returning to California.

The source of California's late arriving precipitation this year is due to an early start to typhoon activity in the western Pacific. The typhoons move large amounts of atmospheric water vapor into the middle-latitudes where it can be transported as an atmospheric river making landfall along the coast of North America. For the upcoming storms, this can be seen in the atmospheric river landfall forecast tool from the Center for Western Weather and Water Extremes (CW3E). This is shown in Figure 3.

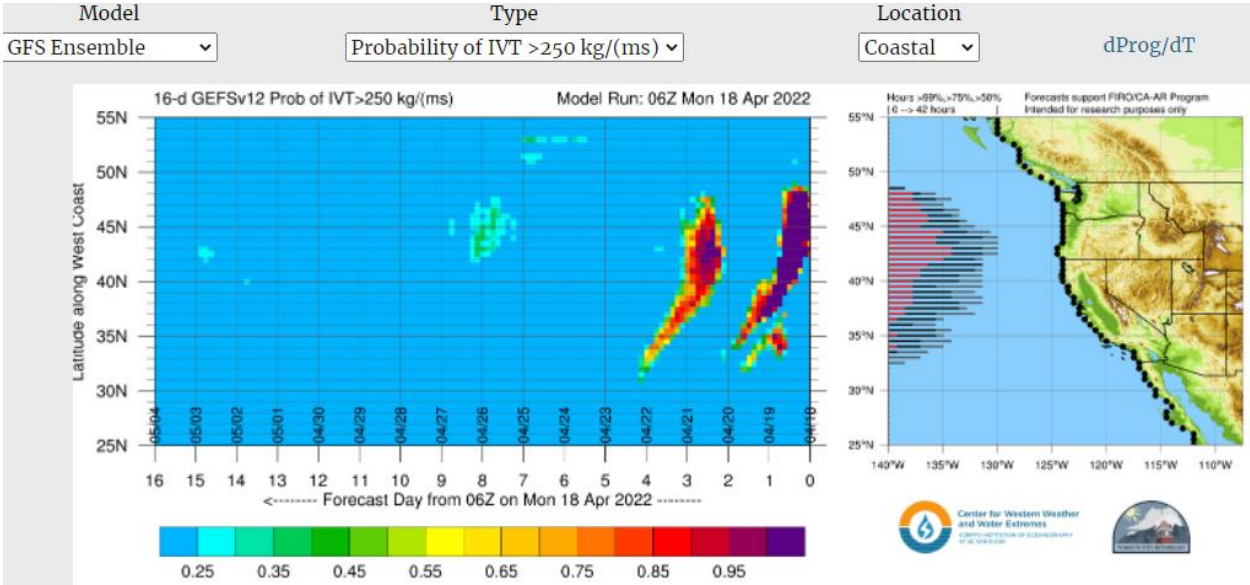

Figure 3. CW3E atmospheric river landfall tool. Two distinct atmospheric rivers making landfall this week and a lack of activity in week 2.

With respect to snowmelt, the past week's storms added 1.7 inches of snow water equivalent per the statewide average reported by the automated sensors. This will help prolong the period where snowmelt contributes to runoff this spring which is very different from last year's outcome.

The next update will be next Monday 4/25/22.