NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE HYDROLOGIC SERVICE AREA:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE **SAN JOAQUIN VALLEY - HANFORD, CA**

REPORT FOR:
MONTHLY REPORT OF RIVER AND
FLOOD CONDITIONS MONTH: **June** YEAR: 2023

TO: Hydrometeorological Information Center, W/OH12x1
National Weather Service/Office of Hydrology
1325 East-West Highway #7116
Silver Spring, MD 20910

SIGNATURE: Andy Bollenbacher and Antoinette S.
(In Charge of Hydrologic Service Area)

DATE: July 6th, 2023

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts and hydrologic products issued (WSOM E-41).

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¦ ¦ An **X** inside this box indicates no flooding occurred for the month within this hydrologic service area.
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Overall, June looked to be near climatologically average for temperatures and precipitation. June began with a high pressure ridge building over the area that allowed temperatures to increase above normal over the first weekend. The month began with a Flood Warning out for the Merced River at Pohono Bride that began on May 27th at 8:50am PDT. While temperatures cooled down to around normal, a low pressure system moved through and brought minimal rain to the HSA, which kept the Flood Warning in place. The warning stayed in place as another ridge pattern again brought higher than normal temperatures to the HSA. It was during this period of higher than average temperatures that Pohono Bridge hit flood stage and peaked at 10.58 feet, 0.58 feet below flood stage of 10 feet, on June 6th, 2023 at 4:45am PDT. During this same event, Merced River at Happy Isles got to 7.88 feet on June 6th, 4:30am PDT, 0.12 feet shy of its flood stage of 8 feet, though it wasn't forecast to hit flood stage during this snowmelt event. The Flood Warning for Pohono Bridge was expired on June 7th at 10:30am PDT. After a low pressure system briefly cooled the HSA down, another ridge brought temperatures back up. This time, both Pohono Bridge and Happy Isles of the Merced River were anticipated to reach flood stage, and Flood Warnings for both forecast points were issued a few days apart. On June 14th, both Pohono Bridge and Happy Isles along the Merced River were under a Flood Warning. Merced River at Happy Isles peaked at 7.91 feet, 0.9 feet below their flood stage of 8 feet, on June 18th, 2023 at 4:00am PDT. During this stretch of high temperatures, afternoon convection allowed for ample chances of afternoon and evening thunderstorms in the Sierra Nevada, adjoining foothills, and Kern County mountains and foothills, and multiple flash flood warnings were sent out as isolated rain rates were seen with these cells. There were no flooding concerns apart from these two forecast points, though rivers in our HSA did experience high flows with these elevated temperatures.

While much of the month saw temperatures hovering around average and even had a period of well below average temperatures, the month ended with the first heatwave of the season that continued into July. During the week of June 19-23, while the HSA was experiencing lower than normal temperatures, a high pressure system was setting up off the coast of California. As this high pressure ridge set up, temperatures rapidly increased, skyrocketing past average and into well above average, setting us up for our first major heatwave of the season. As of June 30th, the day the heatwave began, the CDEC Snow Conditions Map showed a 3.3 inch average snow water equivalent, so even though temperatures were high enough to melt the rest of the snowpack off, there were no flooding concerns with any of our forecast points.

Key Hydrologic/Flood Products Issued for June 2023

Flood Watches
None

Flash Flood Warnings
621 PM PDT Saturday, June 3, 2023
444 PM PDT Sunday, June 11, 2023

Flash Flood Emergencies
None

Hydrologic Statements
Thursday, June 1, 2023 – Friday, June 16, 2023: San Joaquin River at Newman and Merced River at Stevinson
Saturday, June 17, 2023 – Tuesday June 20, 2023: Merced River at Stevinson

Flood Warnings
850 AM PDT Saturday, May 27, 2023 (continued into the beginning of June)
908 PM PDT Saturday, June 10, 2023
902 AM PDT Wednesday, June 14, 2023 (Pohono Bridge)
902 AM PDT Wednesday, June 14, 2023 (Happy Isles)
914 AM PDT Saturday, June 17, 2023

Flood Advisories (Rivers & Creeks)
515 PM PDT and 548 PM PDT Sunday, June 4, 2023
814 PM PDT, 1023 PM PDT, and 1151 PM PDT Tuesday, June 6, 2023
219 AM PDT, 410 AM PDT, and 709 PM PDT Wednesday, June 7, 2023
317 PM PDT, 434 PM PDT, and 517 PM PDT Saturday, June 10, 2023
414 PM PDT Sunday, June 11, 2023
207 PM PDT Thursday, June 15, 2023
258 PM PDT Friday, June 16, 2023

Rain totals at our 5 ASOS Stations for April:
Bakersfield – 0.37
Fresno – T
Hanford – 0.02
Madera – T
Merced – 0.00

Fig 1 – Percent of Average Precipitation for June 2023

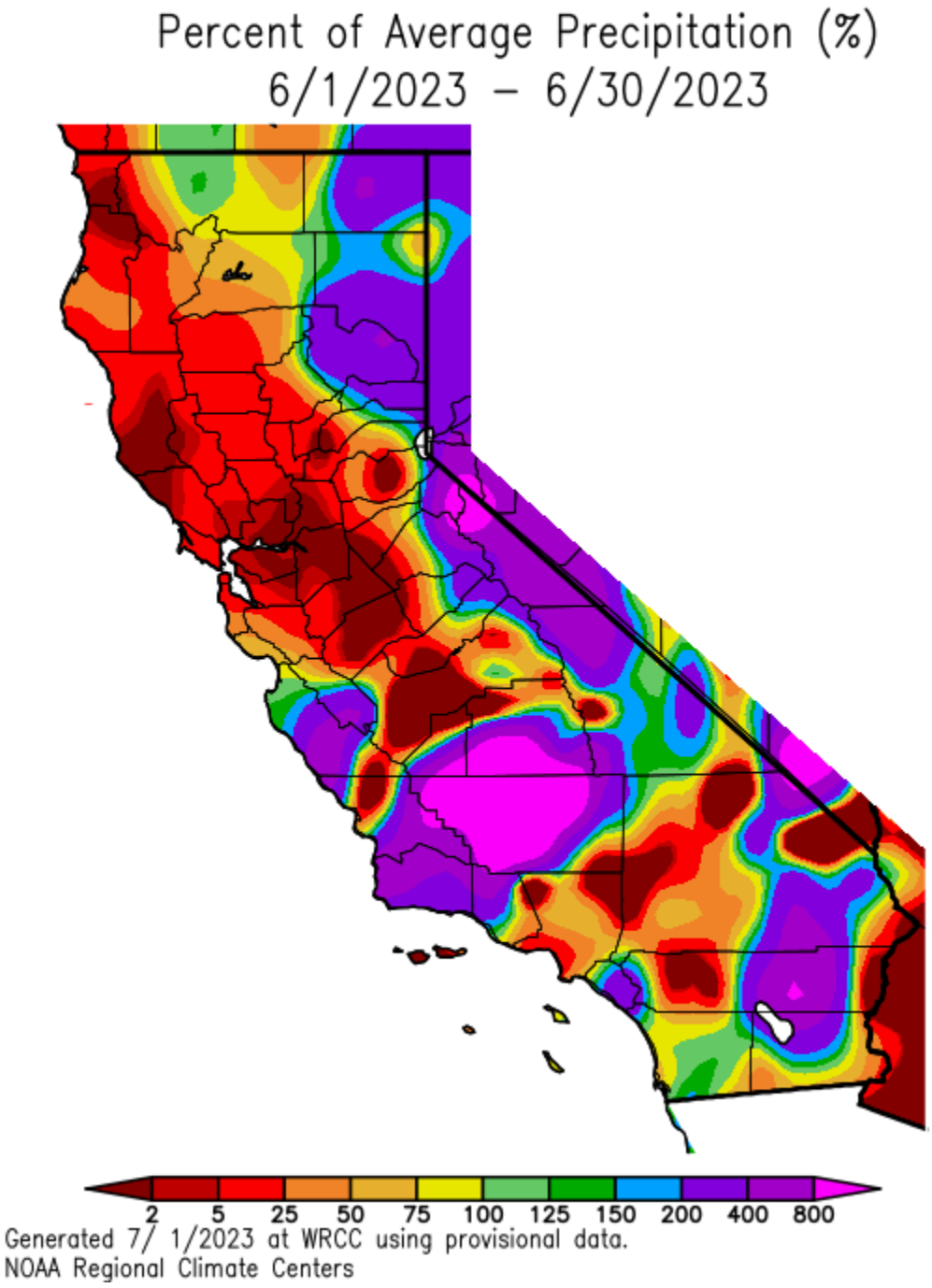


Fig 2 – Drought Status for the state of California released July 6, 2023

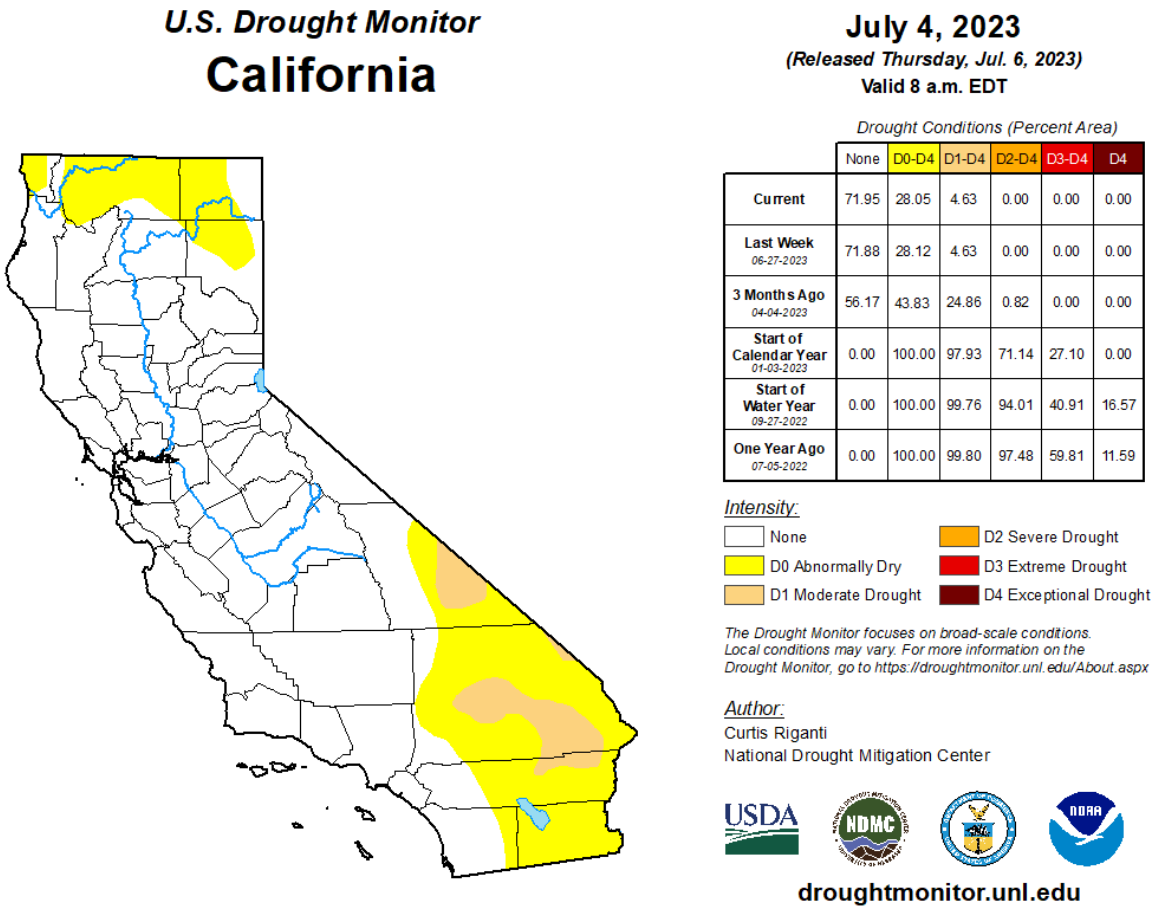


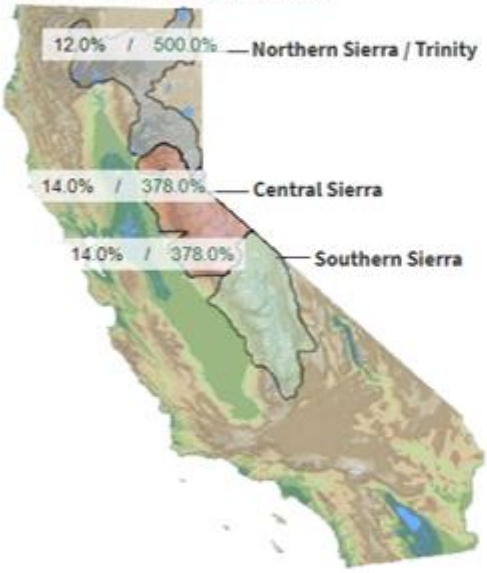
Fig 3 - Snowpack as of July 1st 2023

Snow Water Equivalents (inches)

Provided by the California Cooperative Snow Surveys

Data For: **30-Jun-2023**

% Apr 1 Avg. / % Normal for this Date



Change Date : 30-Jun-2023

NORTH	
Data For: 30-Jun-2023	
Number of Stations Reporting	24
Average snow water equivalent	3.7"
Percent of April 1 Average	12%
Percent of normal for this date	500%

CENTRAL	
Data For: 30-Jun-2023	
Number of Stations Reporting	41
Average snow water equivalent	3.4"
Percent of April 1 Average	14%
Percent of normal for this date	378%

SOUTH	
Data For: 30-Jun-2023	
Number of Stations Reporting	23
Average snow water equivalent	2.8"
Percent of April 1 Average	14%
Percent of normal for this date	378%

STATEWIDE SUMMARY	
Data For: 30-Jun-2023	
Number of Stations Reporting	88
Average snow water equivalent	3.3"
Percent of April 1 Average	13%
Percent of normal for this date	325%

Fig 4 – Major Reservoir Levels on July 1st 2023 (CHANGE)