APRIL 2024 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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The month began with an average to slightly above average snowpack, or near 100 to 110 percent of average as of April 1st, for the portions of the Sierra Nevada that are within our service area (i.e., Yosemite National Park to Kern County), as found in the survey that the California Department of Water Resources conducted. Relatively quiet and warm weather dominated for the first few days. However, much colder than normal temperatures soon followed, as a cold low pressure system brought gusty winds, showers, low elevation snow, and isolated thunderstorms on the 4th and 5th. Another low pressure system, albeit weaker, brought light precipitation on the 7th, and cooler temperatures otherwise prevailed. Warmer, dry weather was the rule from the 8th until the 12th. Another relatively cold storm arrived on the 13th and brought abundant precipitation, including rain and mountain snow, until the 14th. Warm and dry weather returned for several days, and high temperatures peaked in the 90's in quite a few lower elevation locations by the 22nd. Cooler than average to seasonal temperatures prevailed for the remainder of the month, although another low pressure system brought precipitation to mainly the mountains on the 26th and gusty winds at times. Dry weather with seasonal temperatures prevailed from the 27th through the 30th, although gusty winds continued on a daily basis during each afternoon and evening along the Mojave Desert slopes in eastern Kern County.

Number of Days with Freezing Temperatures

Bakersfield: 0 for April (month's average of 0 days); total since November 1st: 2 (season average of 11 days)

Fresno: 0 for April (month's average of 0 days); total since November 1st: 0 (season average of 11 days)

Hanford: 0 for April (month's average of 0 days); total since November 1st: 16 (season average of 27 days)

Madera: 0 for April (month's average of 0 days); total since November 1st: 20 (season average of 23 days)

Merced: 0 for April (month's average of 0 days); total since November 1st: 12 (season average of 26 days)

Table 1 – April 2024 Summary Statistics– NWS Hanford, CA ASOS Sites						
Location	**Monthly Average Temp (deg F)**	**Departure from Average (deg F)**	**Temperature Rank**	**Total Monthly Precipi-tation (inches)**	**Departure from Normal (inches)**	**Precipitation Rank**
Bakersfield	62.8	-0.4	60th highest	0.78	+0.18	38th highest
Fresno	63.2	+0.9	39th highest	1.36	+0.32	33rd highest
Hanford	62.7	+0.9	35th highest	1.08	+0.36	27th highest
Madera	60.8	+0.1	42nd highest	0.89	+0.34	35th highest
Merced	60.8	+1.1	41st highest	1.70	+0.58	26th highest

A warming and drying trend occurred on the 1st through the 3rd, and near to above average temperatures prevailed. The warmest locations, including in the San Joaquin Valley, reached the lower 80's on the 2nd and 3rd. Afterward, a very cold low pressure system began to approach the forecast area by the evening of the 3rd.

By the 4th, much of the region was under a very cold, unstable airmass. On the 4th and 5th, shower and thunderstorm activity prevailed in the Central Valley, although the 5th was the more active day due to more thunderstorms and reports of small hail. In Sanger, there was a report of penny-sized hail, or a diameter of around 0.75 inch due to a strong thunderstorm that passed over this city on the afternoon of the 5th. Much colder than average temperatures prevailed on these days, and a record low maximum temperature of 53 degrees was even reached (tied) at Fresno on the 5th. On the evening of the 5th, light snow accumulated along Interstate 5 in Kern County near the Tejon Pass which caused a slowdown in traffic. Gusty winds also occurred in the Kern County mountains and desert where gusts reached 45 to 60 mph with some isolated stronger gusts at times. Until the 5th, several inches to over a foot of snow fell in the Sierra Nevada, and a dusting of snow accumulated as low as around 1,100 feet. In addition, our office received a report of six inches of snow near Springville in Tulare County at an elevation near 3,500 feet.

On the 7th, a weak low pressure system brought another round of gusty winds, or gusts around 45 to 55 mph, into the Kern County mountains and desert. This system otherwise produced cooler temperatures and a few light showers with up to 0.10 inch of precipitation over the Sierra Nevada. Relatively cool temperatures continued until the 8th, and a warming trend followed during the next few days.

On the 11th and 12th, temperatures warmed to well above seasonal averages. Highs in the warmest locations were in the mid 80's to around 90 degrees. Bakersfield reported its first 90 degree or warmer reading on the 12th, with a maximum temperature of 91 degrees. Another cold low pressure system arrived afterward, although winds began to pick up on the afternoon of the 12th.

Gusty winds were reported in many locations, with widespread gusts of at least 30 to 40 mph, including in portions of the Central Valley. Even stronger gusts were reported in the coastal ranges, as well as the Kern County mountains and desert, with gusts of 45 to 60 mph, mainly from the afternoon of the 12th until the 13th The colder air arrived on the afternoon of the 13th, and temperatures dropped by about 20 to 25 degrees from the late morning hours. From the 13th until the 14th, precipitation amounts ranged from 0.50 inch in the southern San Joaquin Valley to over an inch in portions of the San Joaquin Valley north of Kern County. Sierra Nevada and foothill precipitation amounts were around 0.75 inch to 1.50 inches. In addition, strong and gusty westerly winds developed on the 13th in much of the Central Valley, and Bakersfield reached a peak gust of 52 mph with a northwest direction, which was the strongest wind gust recorded in April (previous record of 46 mph from the southeast set back on April 11, 2010). A few isolated thunderstorms developed on the afternoon of the 14th in mainly southern portions of the San Joaquin Valley due to cold, unstable conditions. The highest snow amounts were from several inches up to a foot above 6,000 feet in the Sierra Nevada on the 13th and 14th, while the majority accumulated on the 13th. A dusting of snow did accumulate at elevations just below 3,000 feet during the 13th. Around one to three inches of snow also accumulated at elevations above 6,000 feet on the 14th.

Drier, though still cool, conditions prevailed on the 15th, and some low clouds developed during the morning into the afternoon. A warming trend began on this day, and highs peaked at around ten degrees above average by the 18th. The warmest locations reported highs around 85 to 90 degrees; this time a maximum temperature of 90 degrees was recorded at China Lake NAF. Patchy shallow fog provided brief reductions in visibility in the San Joaquin Valley during the mornings, mainly within a couple of hours on each side of sunrise on the 15th until the 18th. Similarly warm temperatures continued until the 22nd, although more widespread highs in the 90's occurred in the Central Valley. Hanford recorded its first 90-degree day on the 22nd, while Bakersfield recorded 91 degrees once again. Dry conditions prevailed, except for isolated afternoon thunderstorms in the mountains from Madera County to Kern County on the 19th.

A cooling trend began on the 23rd, and temperatures lowered to below average by the 24th due to a couple of low pressure systems. A few isolated mountain showers developed in the late afternoon of the 24th, but dry conditions otherwise prevailed until the 25th. A stronger system arrived on the 26th and brought rain and high elevation (above 8,000 feet) snow to the Sierra Nevada along with isolated thunderstorms. A few light showers also developed in the San Joaquin Valley until the evening hours. Gusty winds, including gusts of 50 to 70 mph, also developed in the typical prone areas in eastern Kern County (or the desert floor and the adjacent slopes near the passes and canyons) on the 24th and lasted until the evening of the 26th. The strongest gusts were mainly reported on the 26th due to the stronger low pressure system. High temperatures were lowest on the 26th, or about 10 degrees below seasonal averages.

A gradual warming trend on the 27th through the 30th occurred, and seasonal temperatures prevailed during much of this period. The warmest readings were mainly in the 70's on the 27th, and highs reached the 80's at the warmest locations on the 28th through the 30th while overnight lows were generally seasonably cool. Gusty winds were a daily occurrence along the Mojave Desert slopes in eastern Kern County, with gusts around 45 to 65 mph. Although, the strongest gusts occurred on the evening of the 30th, including in the town of Mojave.

Overall, seasonal temperatures were observed (Fig 1) with above average precipitation, except for below average precipitation in the southern San Joaquin Valley (Fig 2).

Table 2 – Seasonal Precipitation for ASOS Locations (ending on April 30th, 2024)

Location	Since Jan 1st (inches)	Departure From Average (inches)	Since Jul 1st (inches)	Departure From Average (inches)	Since Oct 1st (inches)	Departure From Normal (inches)
Bakersfield	5.77	+1.65	7.81	+1.75	6.01	+0.72
Fresno	8.76	+1.73	9.84	-0.49	9.65	-0.60
Hanford	7.05	+1.84	8.81	+1.10	8.33	+0.68
Madera	7.65	+0.71	9.67	-0.49	9.54	-0.58
Merced	11.64	+4.13	14.76	+3.63	14.64	+3.56

Table 3– Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations				
Location	**High**	**Date(s)**	**Low**	**Date(s)**
Bakersfield	91	12th & 22nd	37	6th
Fresno	88	12th & 22nd	40	6th
Hanford	91	22nd	36	6th
Madera	88	12th & 22nd	37	6th
Merced	88	22nd	34	6th

Daily Records Set During April 2024

Bakersfield – No daily records reached.

Fresno – 5th: Record low maximum temperature of 53 degrees tied which last occurred on the date in 1929.

Hanford – No daily records reached.

Madera – No daily records reached.

Merced – No daily records reached.

Fig 1 – Departure from Average Temperature for this month

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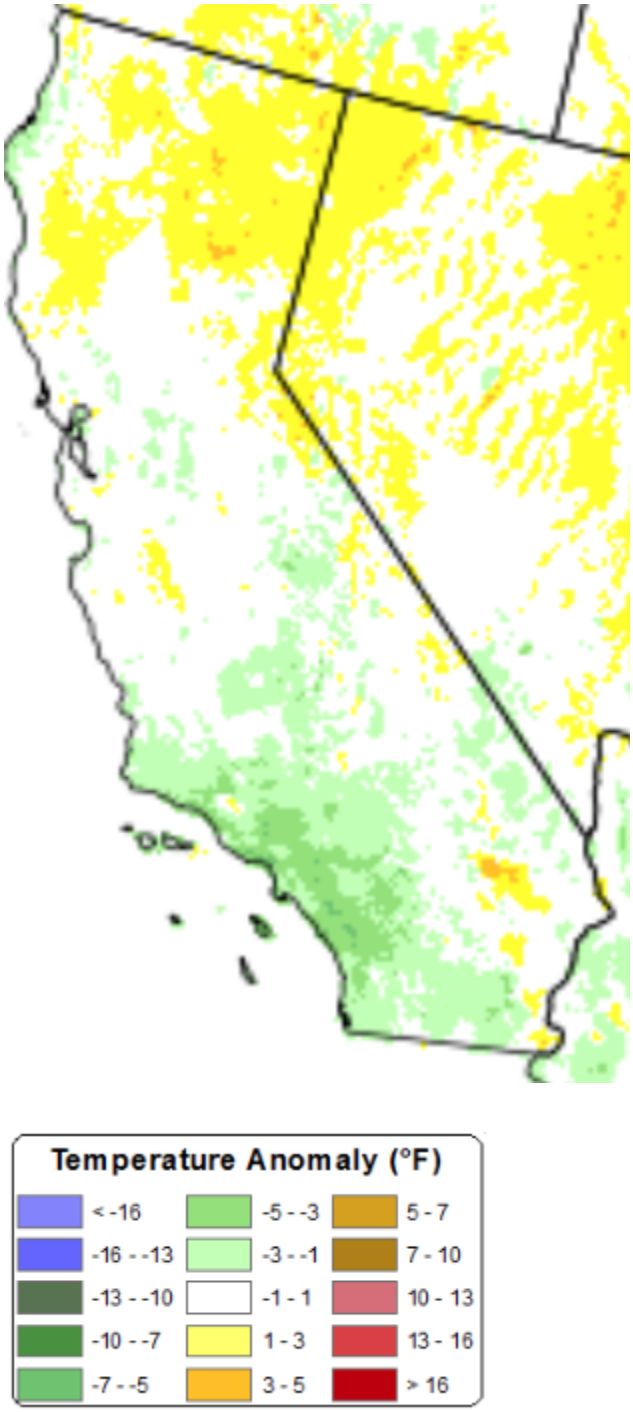

Fig 2 – Percent of Average Precipitation for this month

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