Weather and Climate Summary and Forecast

Summer 2014

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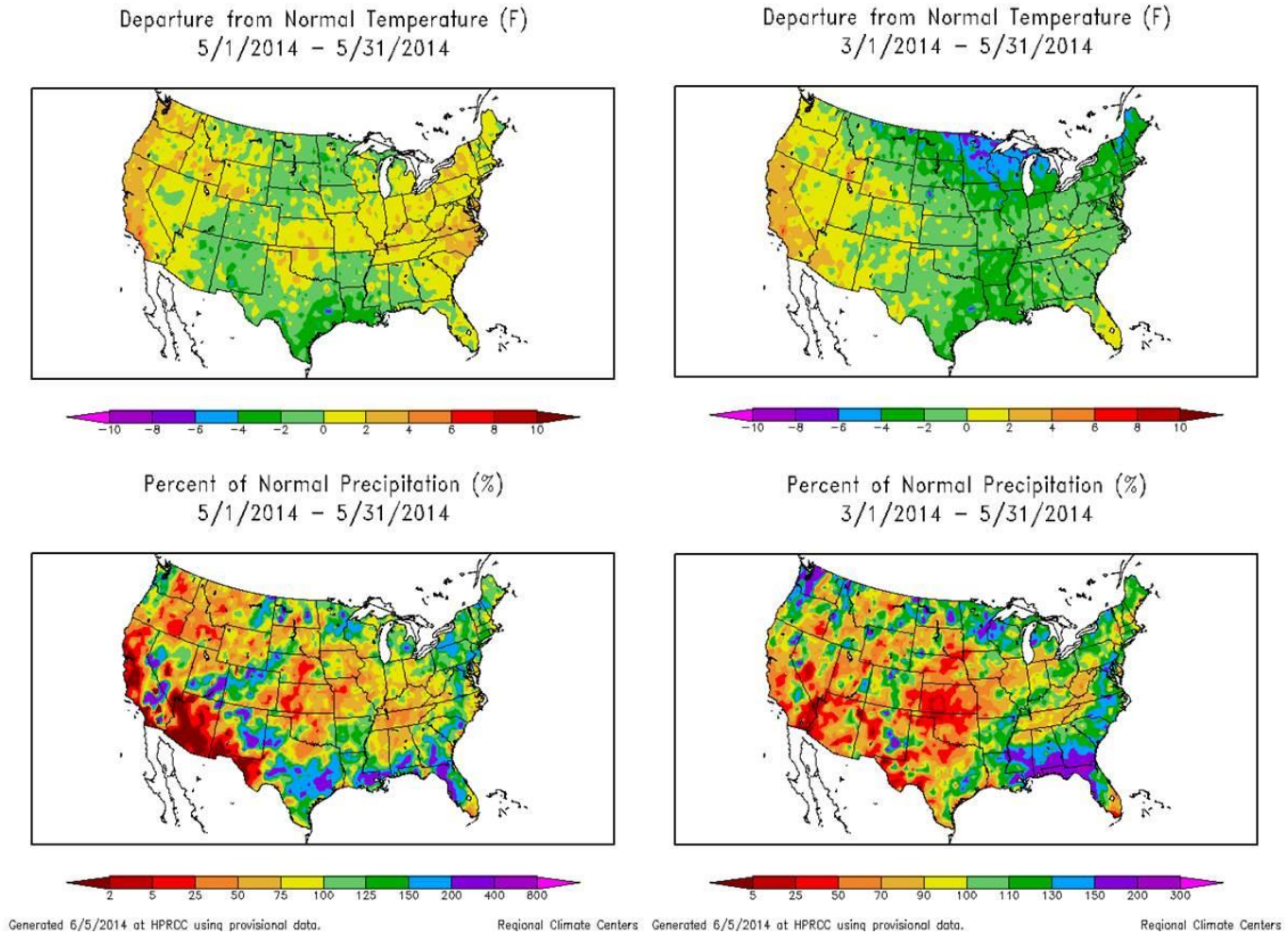
Temperatures during May across the western US continued where April left off with generally warmer than normal conditions (2 to 6 degrees or more), especially within the wine regions in the western and central valleys of California, western valleys of Oregon and across into eastern Washington (see figure below or attached). The upper Midwest and parts of Texas and the Gulf Coast were cooler than normal during May (mostly due to wetter than normal conditions), while the eastern US finally warmed up from one of their coldest winters in many years. Precipitation over the western US in May was generally drier than normal, with some areas of northern Oregon and western Washington seeing slightly greater than normal precipitation and some isolated southern California into Nevada zones that were much wetter than normal (see figure below or attached). Areas of very wet conditions along the Gulf Coast states and up into New England were seen in May.

The March through May period continued the general late winter and spring pattern, with a warmer than normal region from Washington south and southeast across the western Rockies and down into the panhandle of Texas (see figure below or attached). California saw the greatest departures from average with the entire state nearly 3.5 degrees warmer than during March through May. Overall spring precipitation was greater than normal across northern California into Oregon, Washington, and across portions of the northern Rockies, while remaining dry in southern California across the southwest to Texas and much of the southern half of the Great Plains.



For those in Oregon, growing degree-day numbers for May 2014 were below those seen in May 2013, but when added with April this year the cumulative numbers continued near record values. Western Oregon locations experienced 5-15% more GDD than the same period in 2013, while eastern Washington was down slightly (see attached). Compared to the 2004-2013 period, all four locations have above normal GDD, ranging from 21 to 44%. Compared to the 1981-2010 climate normal GDD numbers all four locations are above normal (26-68%), with Medford seeing the greatest at 68% above normal. Station precipitation in Oregon showed that year to date values (January through May) were 5% up in McMinnville and 10-20% down in the other three locations. April and May precipitation was near normal in McMinnville and 20-25% down in Roseburg, Milton-Freewater, and Medford.

The short term to long term forecasts are pointing to the conditions of the last two weeks continuing with only a minor cool down and slight chance of rain in northern Oregon and western Washington during the 6-10 forecast period. The 8-14 day outlooks tilt the odds to being near normal to slightly cooler than normal and likely dry in northern Oregon and western Washington, while California continues to be drier and warmer than normal. Extended out to the rest of June and to the 90 day forecast window (Jun-Jul-Aug), the Climate Prediction Center forecast is showing strong odds of warmer than normal conditions over the western US. Continued seasonally dry conditions over the western US are forecasted for this period, with the only question being the pattern of summer monsoon rains, which could impact parts of southern California (see the El Niño discussion below).

As mentioned here in previous months, the longer term forecasts continued to be bolstered by the fact that North Pacific sea surface temperatures (from the coast to the central North Pacific) remain warmer than they have been for few years now. The tropical Pacific continues its transition from La Nada toward El Niño, with the Climate Prediction Center increasing the likelihood of El Niño developing into the late summer or fall. However, there remains uncertainty as to exactly when El Niño will develop and an even greater uncertainty as to how strong it may become. If the El Niño conditions do materialize later this year the western US would typically see a transition to a wetter and warmer California and a drier/warmer PNW. The timing of the onset is important for the western US, with any impact likely being pushed into the post-harvest period. However, the monsoon rain predictions mentioned in the previous paragraph are an indication of warming tropical waters off Central and South America, and potential increases in available moisture. While not common, monsoon rains can come to parts of southern and central California during the late summer.

In summary, all evidence continues to point to a warmer and drier than average growing season across the west.

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