

Weather and Climate Summary and Forecast Spring 2015

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The western United States recently posted its warmest winter on record (winter months of December through February; see Figure 1). Each winter month was warmer than average at almost every California, Oregon, and Washington long term recording station. Hundreds of high-temperature records were broken, with only a few dozen low-temperature records set. While March continued this trend of warmer than average conditions, a couple of cool periods during the month slowed things down some. However, heat accumulation has been enough to generate early growth for many native and crop species.

Precipitation for the winter (December through February) ranged from 10 percent to 30 percent below average in western Oregon, Washington, and northern California while central to southern California ranged from 50 to 90 percent below average (Figure 1). March continued the dry trend over the west with only the Northern Cascades and eastern Washington seeing above normal precipitation while the majority of California experienced 75 percent or more below normal. In addition, much of the precipitation across the west coast mountains this winter fell as rain instead of snow. As a consequence, 2015 stands as the lowest snowfall year on record at many locations in the west. The last time we saw conditions anything near this was during the winter of 1976-77.

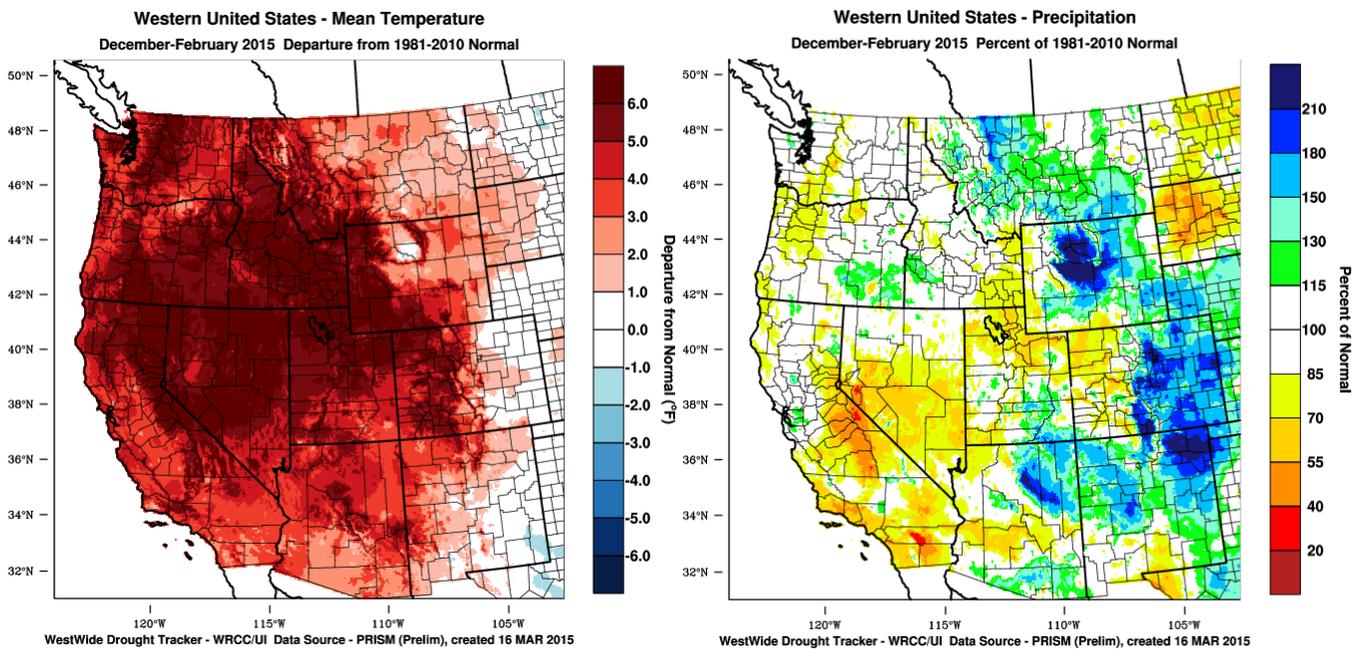


Figure 1 – Western US winter 2014-15 (Dec-Jan-Feb) temperature departure from normal (°F, left panel) and percent of normal precipitation (images from WestWide Drought Tracker, Western Region Climate Center, University of Idaho).

The persistent ridge pattern over the west for the past few years has held through most of the winter. It has also been bolstered by very warm waters in North Pacific (Figure 2). However, currently we are experiencing a 10-14 day cool period that was ushered in when the ridge broke down a few days ago. This cool period is bringing frost/freeze risk in the western valleys, and given the early growth, clear concerns for many crops. During this period we will be seeing some precipitation over most of the west, even a chance of snow down to lower elevations in parts of Oregon and Washington.

NOAA/NESDIS 50 KM GLOBAL ANALYSIS: SST Anomaly (degrees C), 3/30/2015
(white regions indicate sea-ice)

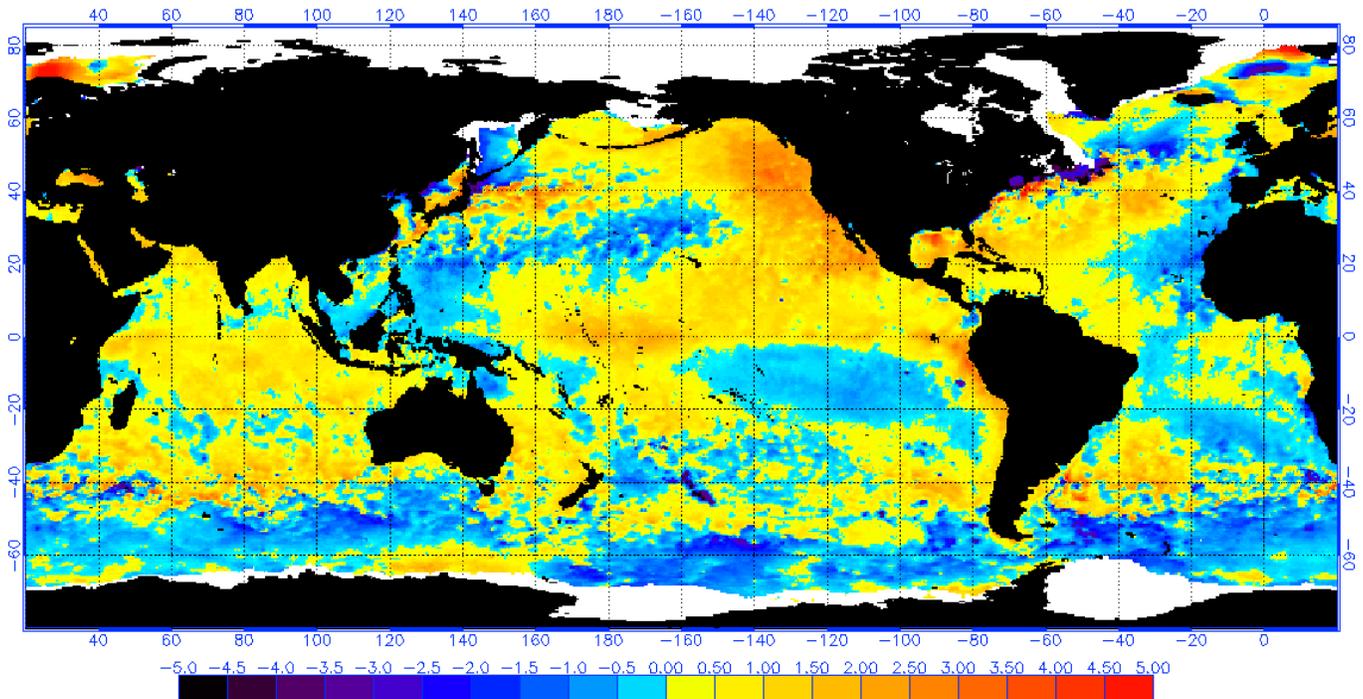


Figure 2 – Global sea surface temperatures (°C) Western US winter 2014-15 for the week ending March 30, 2015 (image from NOAA/NESDIS).

Forecast Periods:

6-10 Day: Greater likelihood of seasonal temperatures over most the western valleys, but cooler than normal inland. Greater likelihood of above normal rainfall over the west, with some mountains snows for Oregon and Washington.

8-14 Day: Warming trend at the end of the forecast period shows greater likelihood of normal to slightly warmer than normal conditions. Precipitation likelihood also continues, with normal to slightly wetter than normal conditions out 14 days (mid-month).

30 Day: Seasonal outlook for April with normal to slightly warmer than normal overall conditions forecasted and near normal precipitation (greater chance north, lower chance south).

90 Day: NOAA’s seasonal outlook (Apr-May-Jun) calls for significantly enhanced likelihood for a warm spring and early summer— especially in western Washington and western Oregon — and somewhat reduced likelihood for a wet spring, early summer.

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