Weather and Climate Summary and Forecast

Spring 2015

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May 1, 2015

After a run of five months of extreme record warmth over the western United States (2-8°F above normal), a cool late March lead into an equally cool early April that brought conditions back to near normal. Ultimately, a warmer second half of April resulted in temperatures being mixed over Oregon and Washington with most regions falling into ± 1.5°of normal while the majority of California was much above normal (Figure 1). The cooler conditions during the last week of March and first two weeks of April slowed growth down in some areas, but also brought increased frost/freeze pressure over many nights. To date in 2015 growing degree-days are higher than normal over all of California, Oregon, and Washington with April accumulations running between the last two warm years (2013 and 2014) (see the Appendix figure for four locations in Oregon).

Precipitation for April continued the overall dry conditions carrying over from the winter (Figure 1). The majority of the PNW and into the northern Rockies were below normal to much below normal for the month of April. Northern and Southern California continued dry during April, while the central portion of the state and into north central Nevada was near normal to above normal.

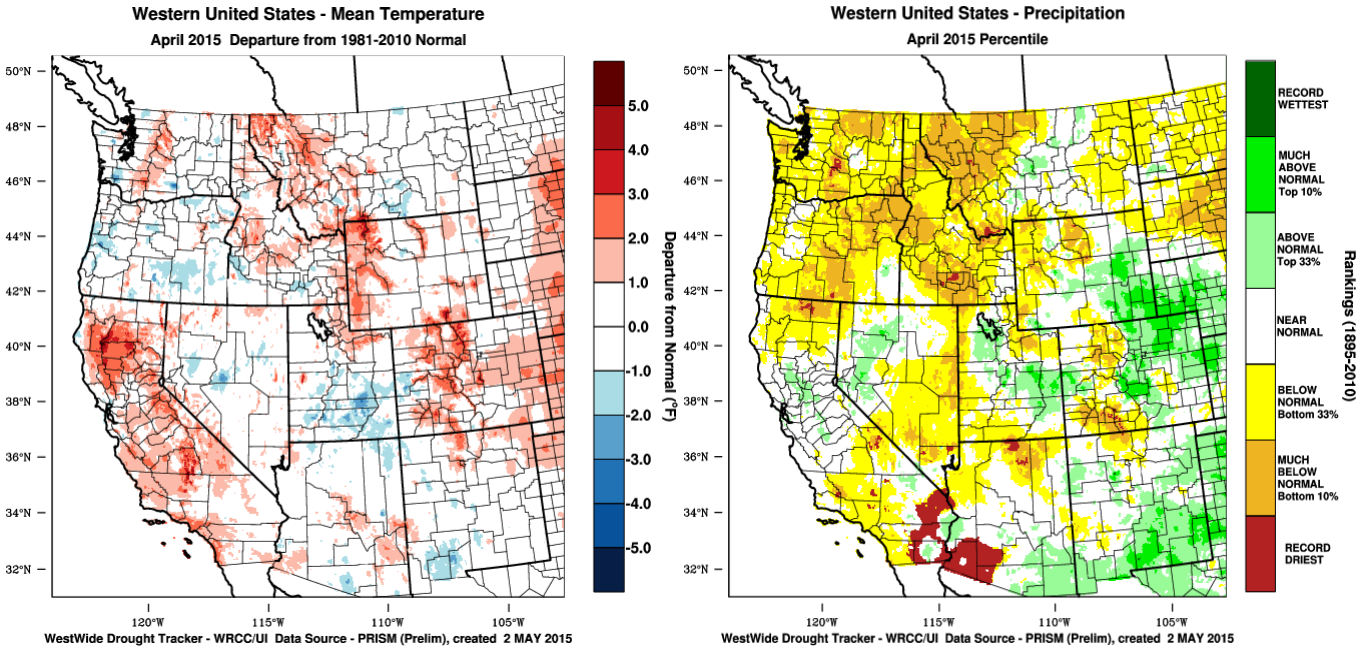

Figure 1 – Western US April 2015 temperature departure from normal (left) and percent of normal precipitation (right; images from WestWide Drought Tracker, Western Region Climate Center, University of Idaho).

While the persistent ridge pattern over the west broke down for a few weeks in late March into mid-April allowing some spring rains into the western US, most forecasting agencies are pointing to continued ridging over the west. These conditions are likely to continue due to warm sea surface temperatures in the North Pacific (Figure 2), called the "blob" by many in the media in the last couple of months. The US Drought Monitor and others are forecasting severe drought in California will continue and likely worsen this summer and that the drought conditions are forecast to expand northward at full force into the Pacific Northwest, especially east of the Cascades. Discussions on El Niño conditions continue to center around a mild event occurring in early fall and into winter. If this does materialize, historical conditions would point to some rainfall relief for California and the desert southwest, but drier conditions are likely to continue into the PNW, western Canada and Alaska.

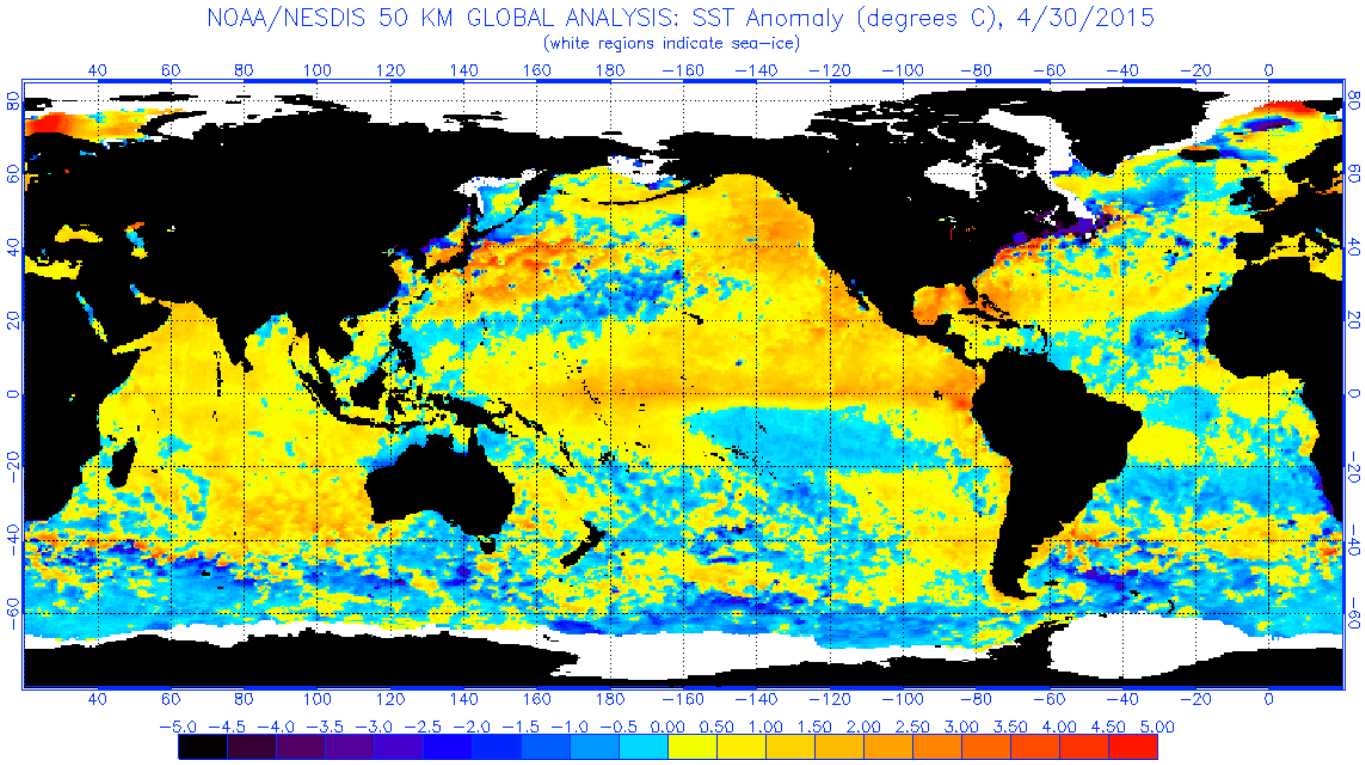

Figure 2 – Global sea surface temperatures (°C) for the week ending April 30, 2015 (image from NOAA/NESDIS).

Forecast Periods:

6-10 Day: Slight cool down into next week with increasing chance for rain into the middle of the week. However, overall there is a greater likelihood of warmer than normal temperatures over most the western valleys with a greater likelihood of below normal rainfall over the PNW but normal conditions south into California.

8-14 Day: Trending similar to the 6-10 day, but greater chance of warmer and drier than normal conditions. No risk of frost in any models over the two week period.

30 Day: Seasonal outlook for May reflects expected warmer than normal overall conditions and near normal precipitation (greater chance south, lower chance north). But recall that May is typically not that wet to begin with.

90 Day: NOAA's seasonal outlook (May-Jun-Jul) continues the strong likelihood for a warm late spring and early summer— especially in the western valleys and coastal zones of California, Washington and Oregon.

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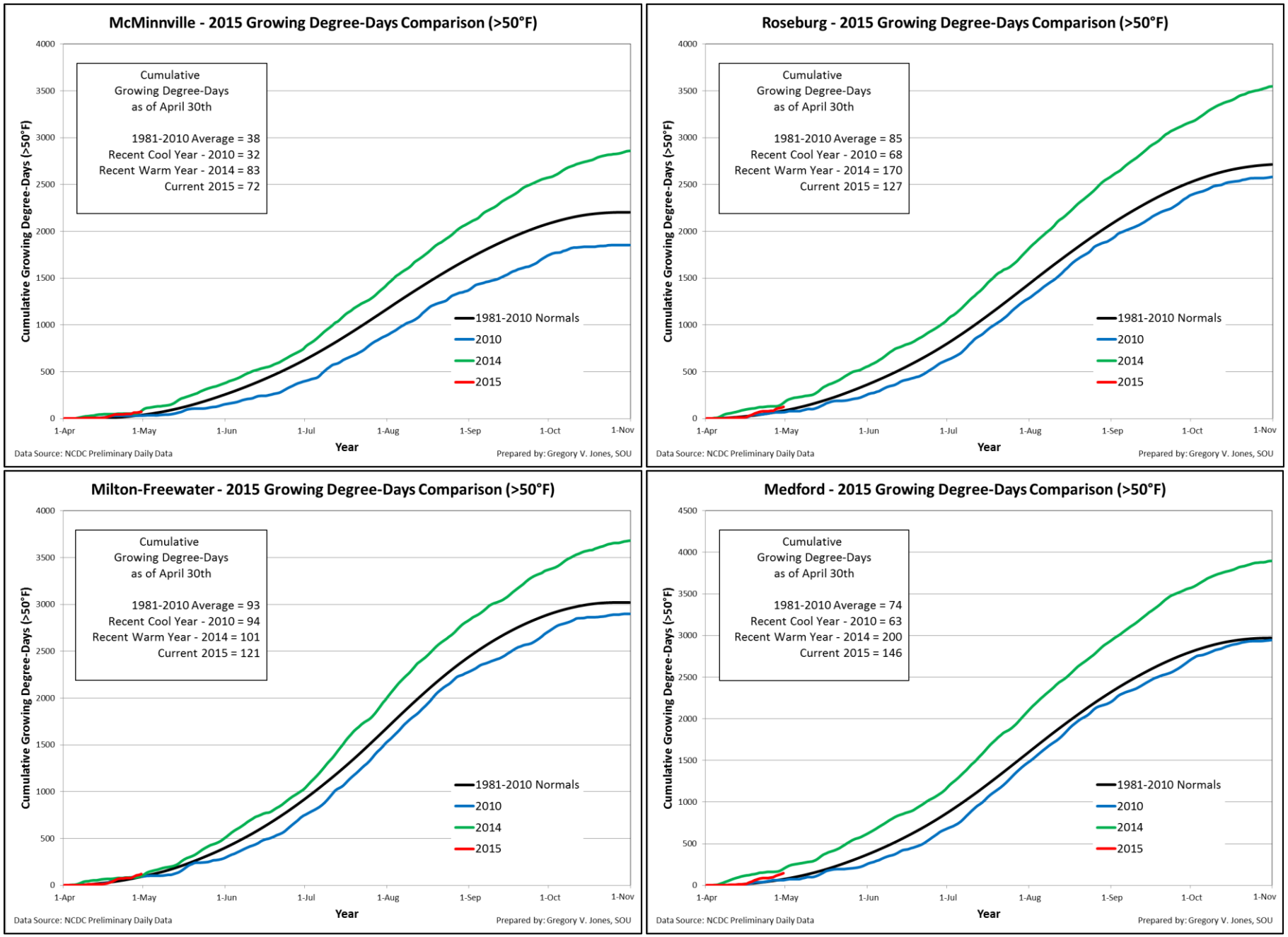

Appendix Figure – Cumulative growing degree-days (base 50°F, no upper cut-off) for McMinnville, Roseburg, Milton-Freewater, and Medford, Oregon. Comparisons between the current year (2015) and a recent cool year (2010), a recent warm year (2014) and the 1981-2010 climate normals are shown (NCDC preliminary daily data).