

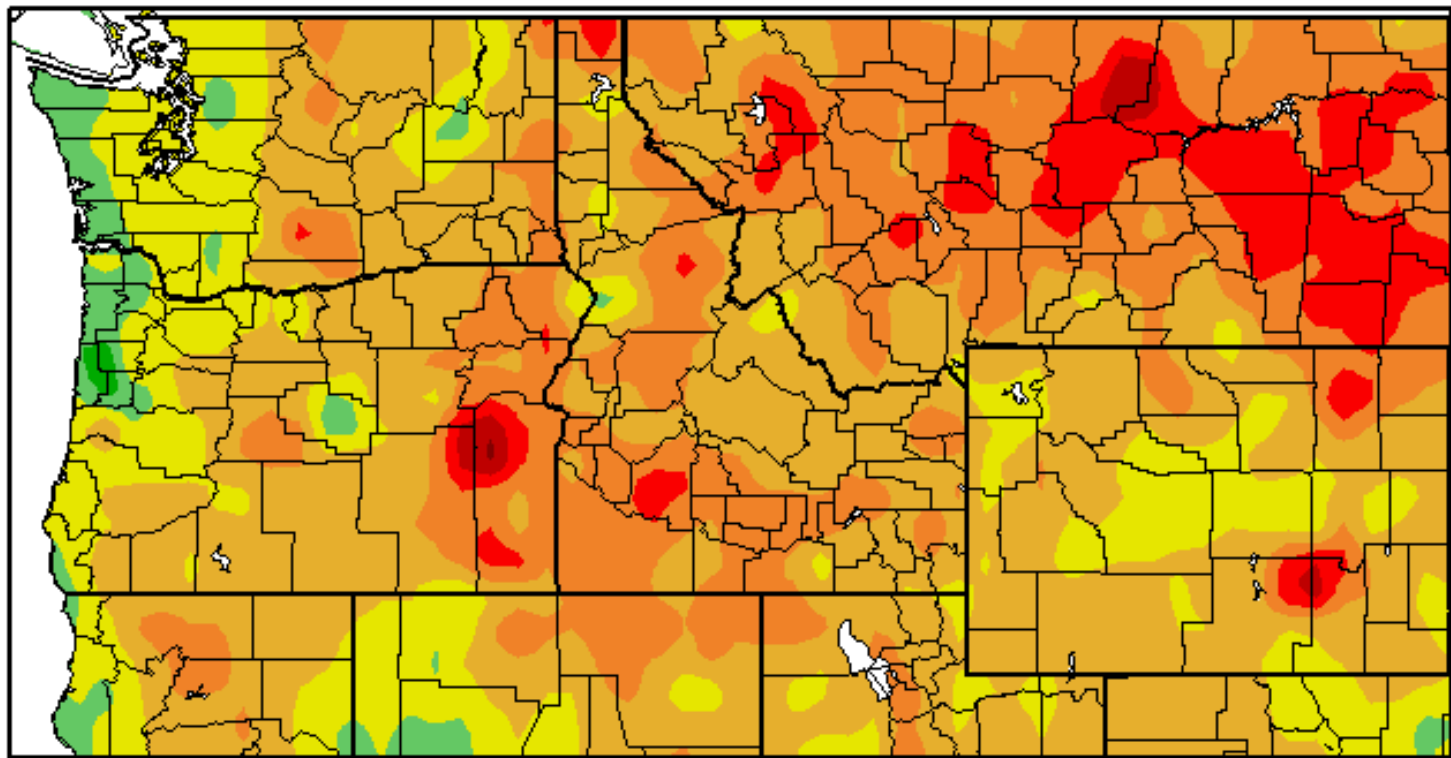


The Month In Review

July 2017

National Weather Service
Pendleton, Oregon

Departure from Normal Temperature (F) 7/1/2017 - 7/31/2017



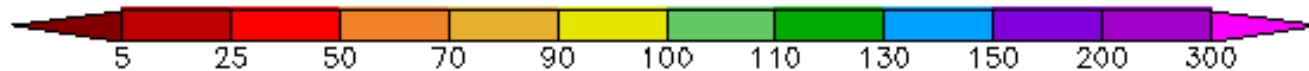
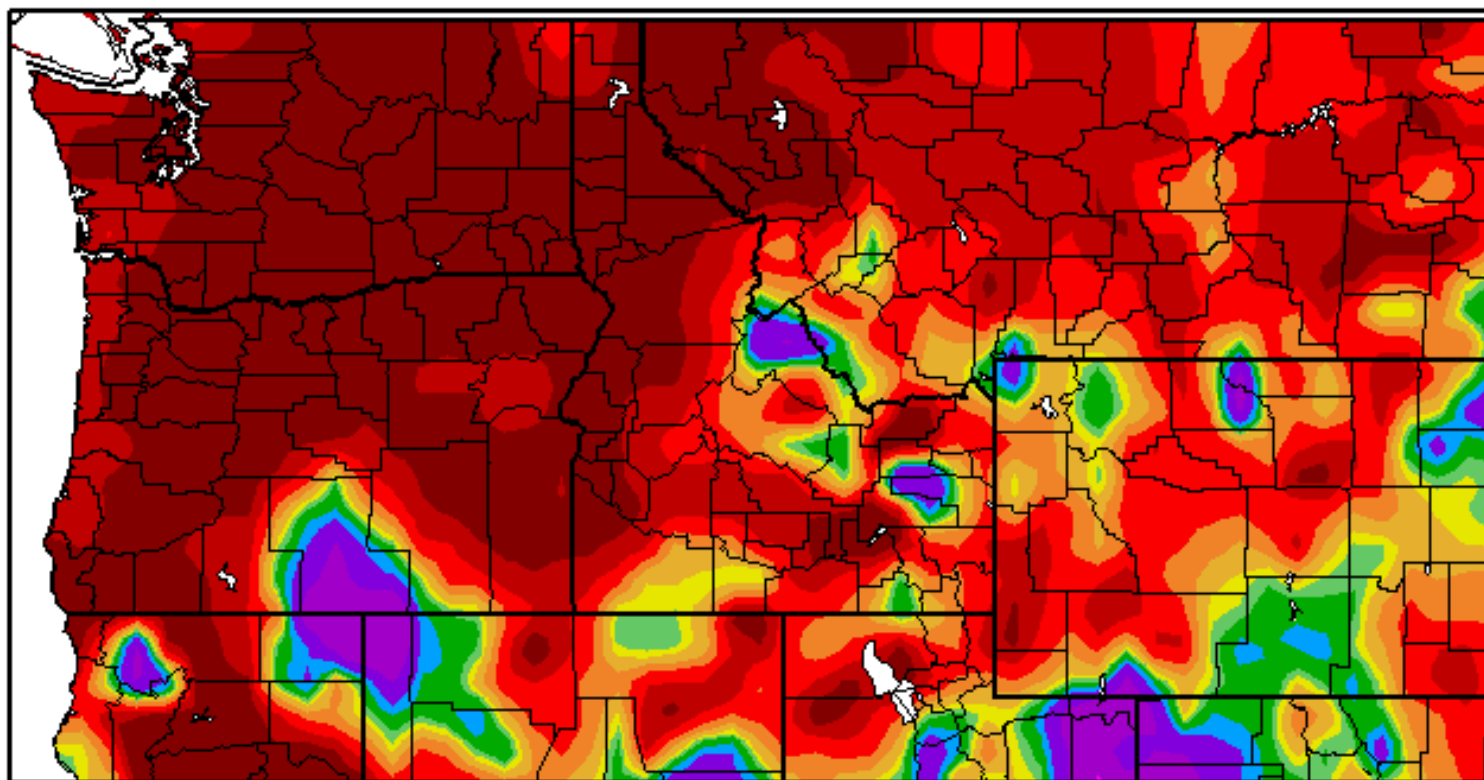
Generated 8/1/2017 at HPRCC using provisional data.

Regional Climate Centers



Percent of Normal Precipitation (%)

7/1/2017 – 7/31/2017



Generated 8/1/2017 at HPRCC using provisional data.

Regional Climate Centers

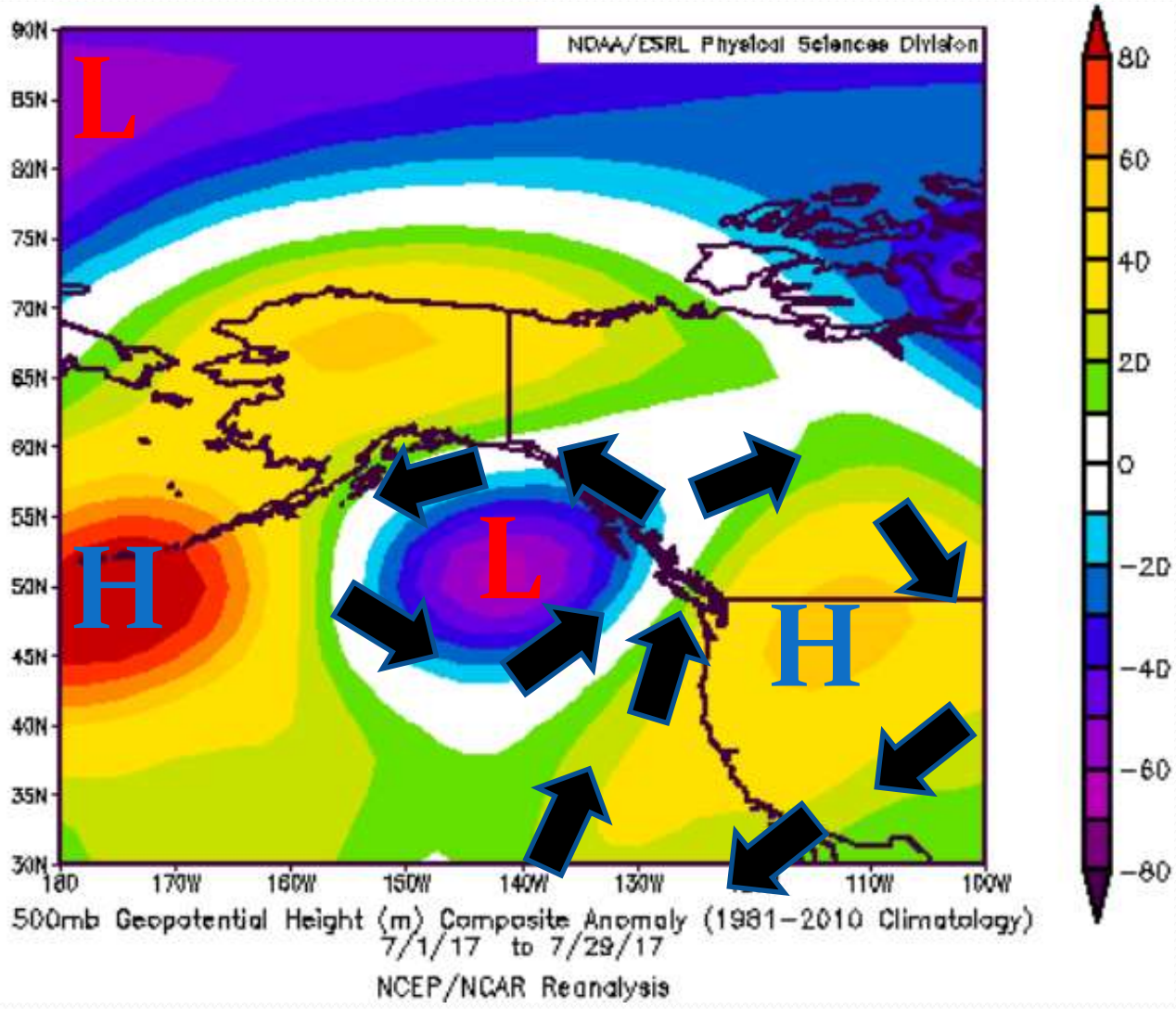


Select July Averages and Departures

	Max T	Max T D	Min T	Min T D	Ave T	Ave T D	PCPN	PCPN D
Yakima	95.2	7.3	58.8	5.5	77.0	6.4	0.00	-0.22
Kennewick	94.5	4.2	64.5	2.8	79.5	3.5	0.00	-0.22
Walla Walla	94.8	5.6	64.9	4.0	79.9	4.9	Trace	-0.59
The Dalles	91.1	3.6	62.3	1.9	76.7	2.7	Trace	-0.16
Redmond	91.1	5.5	48.8	2.6	70.0	4.1	Trace	-0.53
Pendleton Airport	92.8	4.8	57.4	0.2	75.1	2.5	Trace	-0.32
La Grande	92.8	7.4	56.4	2.6	74.6	5.0	0.00	-0.68

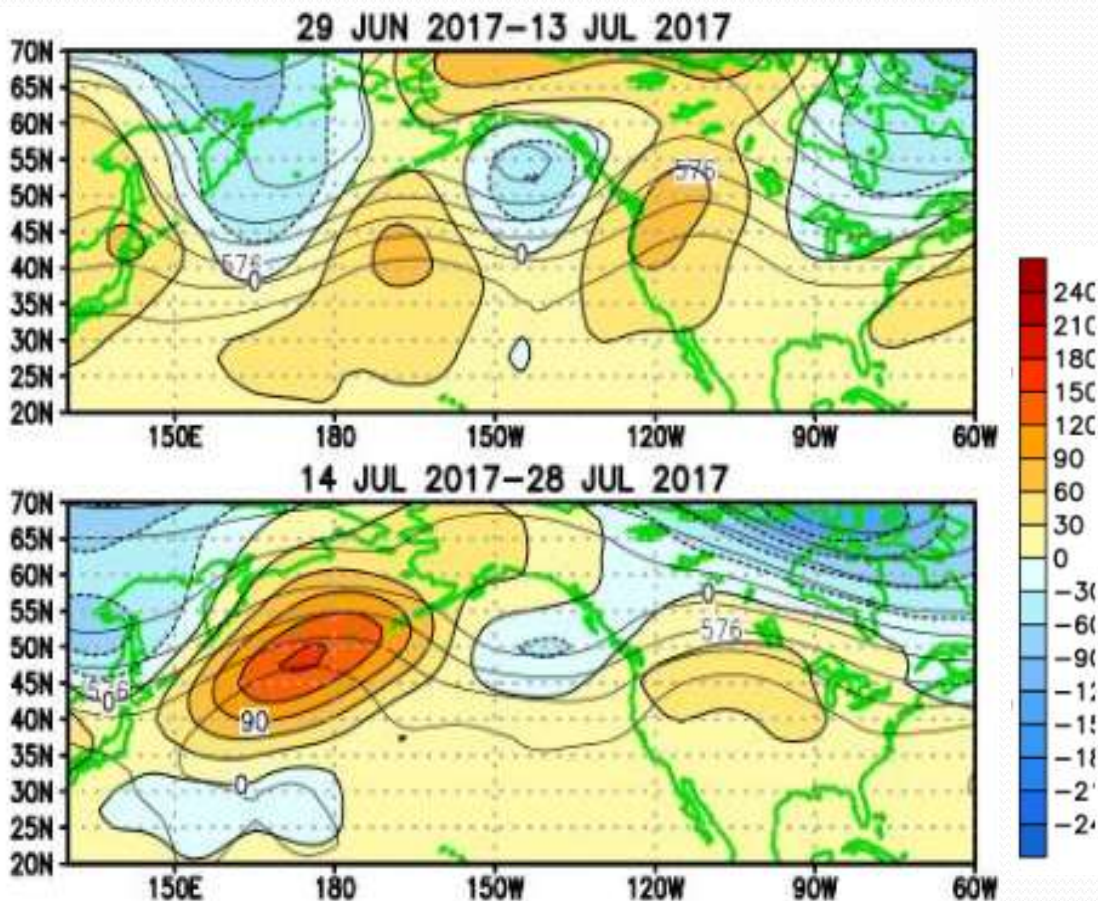


July 2017 Weather Pattern



The mean synoptic pattern for the month of July 2017 was characterized by an upper level low pressure system over the central gulf of Alaska, with a large upper level ridge of high pressure over the western US. The highest heights compared to average were found over the interior Pacific Northwest, where temperatures average above normal for the month, and conditions remained very dry.

July 2017 Detailed Upper Level Pattern Analysis



- ❖ During the first half of July, an upper level trough of low pressure was evident over the Gulf of Alaska. Meanwhile a large ridge of high pressure remained anchored over the Pacific Northwest...keeping our weather dry and hot.
- ❖ The second half of the month featured a weakening trough in the eastern Gulf of Alaska, with a lower amplitude, flat ridge over the interior Pacific Northwest. This kept conditions mainly dry with above average temperatures continuing.



Daily Record High Temperatures In July

City	July 2017 Daily Max T	Previous Record High
Dayville, OR	106 on 7/7	105 in 1985
Bickleton, WA	96 on 7/7	95 in 1960
Kennewick, WA	105 on 7/8	103 in 1906
La Grande, OR	101 on 7/7	99 in 1985
Long Creek, OR	99 on 7/8	98 in 1968
Moro, OR	99 on 7/7	99 in 1968
Sisters, OR	97 on 7/10	96 in 1985
Meacham, OR	94 on 7/6	93 in 1968
Yakima, WA	103 On 7/7	101 in 2015
Easton, WA	94 on 7/7	93 in 2007
Ellensburg, WA	103 on 7/6	100 in 2015



Daily Record Low Temperatures In July

City	July 2017 Daily Min T	Previous Record Low
Meacham, OR	32 on 7/17	35 in 1999
Pasco, WA	48 on 7/17	51 in 2003



Greatest Number of Days with $\text{Max } T \geq 95^{\circ}\text{F}$ in July

City	Number of days $\geq 95^{\circ}$ in July 2017	Rank	Record Number of days and Year of Occurrence
Tri-Cities, WA	21	4 th	25 days in 1906
Yakima, WA	20	1 st	18 days in 2014
Pelton Dam, OR	20	9 th	27 days in 1985
Hermiston, OR	19	2 nd	22 days in 2014
Walla Walla, WA	16	6 th	24 days in 1985
Prosser, WA	14	7 th	18 days in 2003
Sisters, OR	9	4 th	14 days in 2003
Long Creek, OR	6	2 nd	10 days in 2003



Top 3 Driest Julys on Record

City	Rank	July 2017 Precipitation	Current or Previous Driest July on Record
Yakima ,WA	#1	0.00"	Trace in 2013
Hermiston, OR	#(T)	Trace	Trace in 2013
Walla Walla, WA	#2(T)	Trace	0.00" in 1953
Ellensburg, WA	#2(T)	Trace	0.00" in 2013
Pendleton Arpt	#3(T)	Trace	0.00" in 1931



July

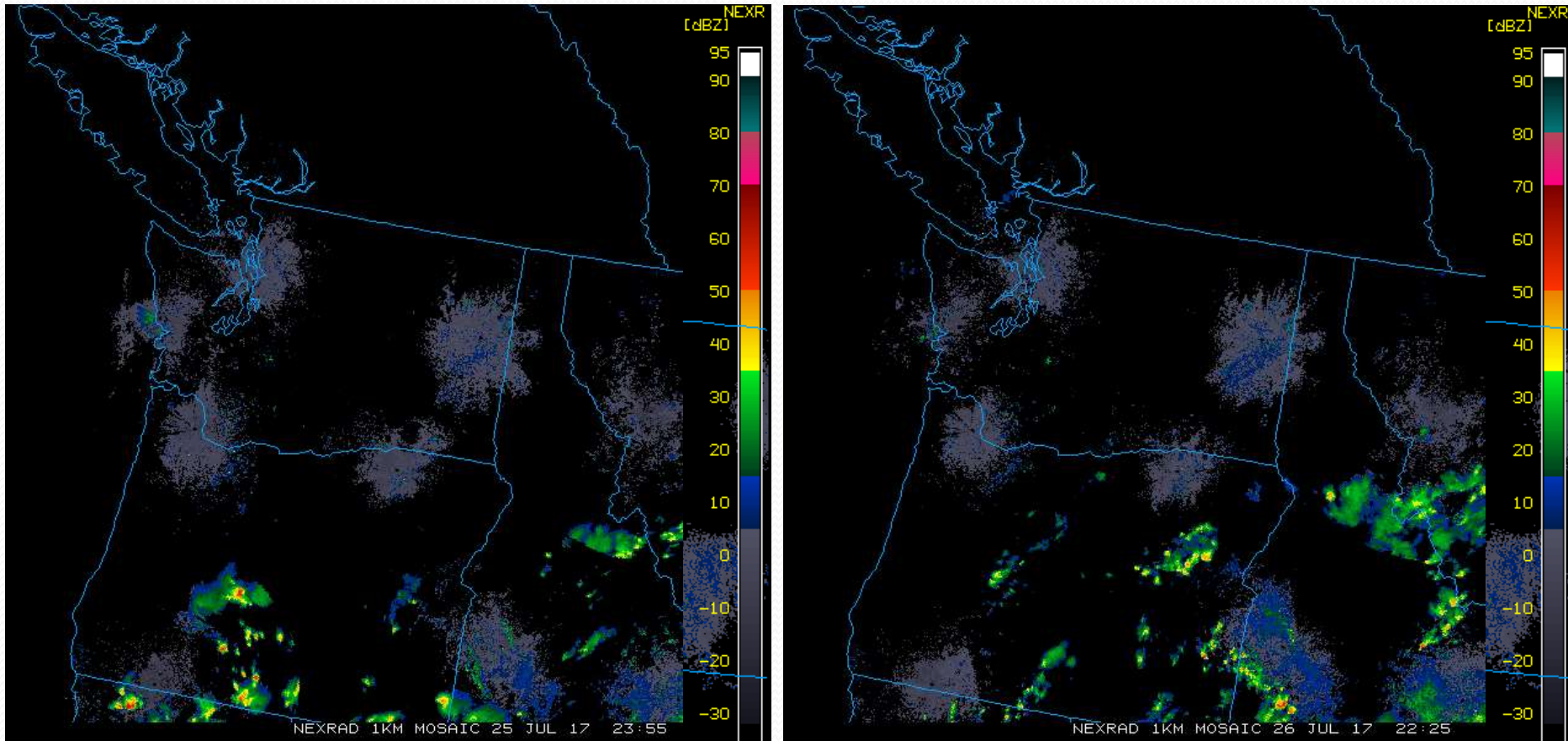
Significant Weather

July 5 – 8th Very Hot Temperatures

Location	Hottest Temperature
Pendleton	101
Hermiston	104
Pasco	106
Yakima	103
Ellensburg	103
Walla Walla	103
The Dalles	99
La Grande	101
Redmond	99
John Day	97



July 25-26th Oregon T'Storms



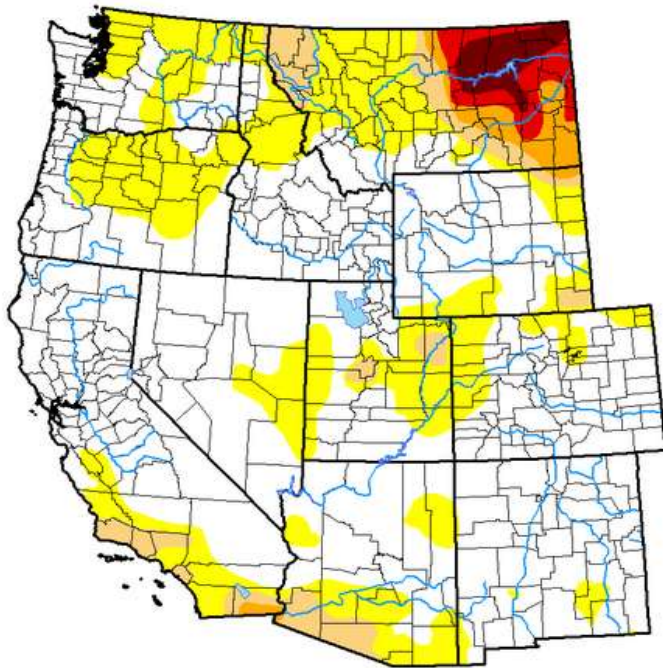
(Above Left) Radar imagery from 7/25 showing an isolated, well developed thunderstorm in southern Deschutes County, Oregon. Nickel size hail was reported 5 miles west of La Pine. Other storms impacted south-central Oregon on this day.(Above Right) The following day 7/26, scattered t'storms drifted into the northeast Oregon mountains. The main impact from these was the potential for new fire starts. Red flag warnings were in place during this time.

Abnormally Dry Conditions Return

U.S. Drought Monitor West

August 1, 2017
(Released Thursday August 3, 2017)
Valid 8 a.m. EDT

Statistics type: Traditional Percent Area Export table:   








Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current 2017-08-01	65.88	34.12	9.67	4.94	3.11	1.47
Last Week 2017-07-25	59.47	40.53	9.66	4.94	2.96	1.47
3 Months Ago 2017-05-02	87.17	12.83	2.72	0.16	0.00	0.00
Start of Calendar Year 2016-12-27	52.19	47.81	22.47	9.10	5.43	2.44
Start of Water Year 2016-09-27	27.78	72.22	30.95	13.45	5.77	2.81
One Year Ago 2016-08-02	27.57	72.43	32.16	11.10	6.09	2.81

Estimated Population in Drought Areas: **11,886,751**

[View More Statistics](#)

Intensity:

 D0 (Abnormally Dry)
  D2 (Severe Drought)
  D4 (Exceptional Drought)

 D1 (Moderate Drought)
  D3 (Extreme Drought)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying [text summary](#) for forecast statements.

Author(s):

Deborah Bathke, National Drought Mitigation Center

Download:   

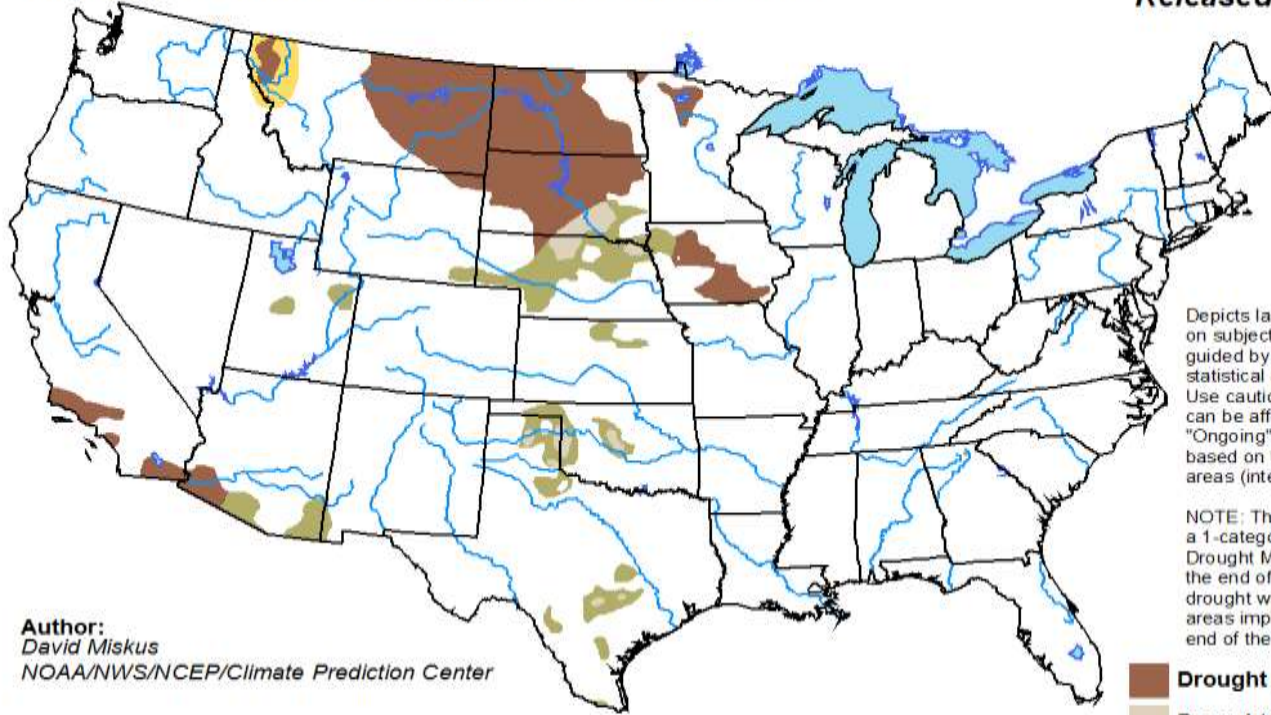
Drought conditions are no longer being reported in either Washington or Oregon at this time. However, abnormally dry conditions have returned to parts of the area, after seeing very little if any precipitation through the month of July. Extreme to exceptional drought has developed in eastern Montana. California continues to have much improvement over last year's conditions.



Drought Outlook Through August

U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

Valid for August 2017
Released July 31, 2017



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

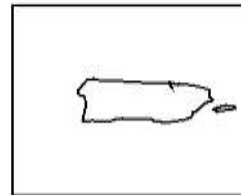
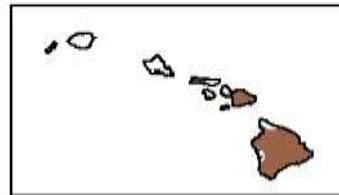
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center

-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZGd>



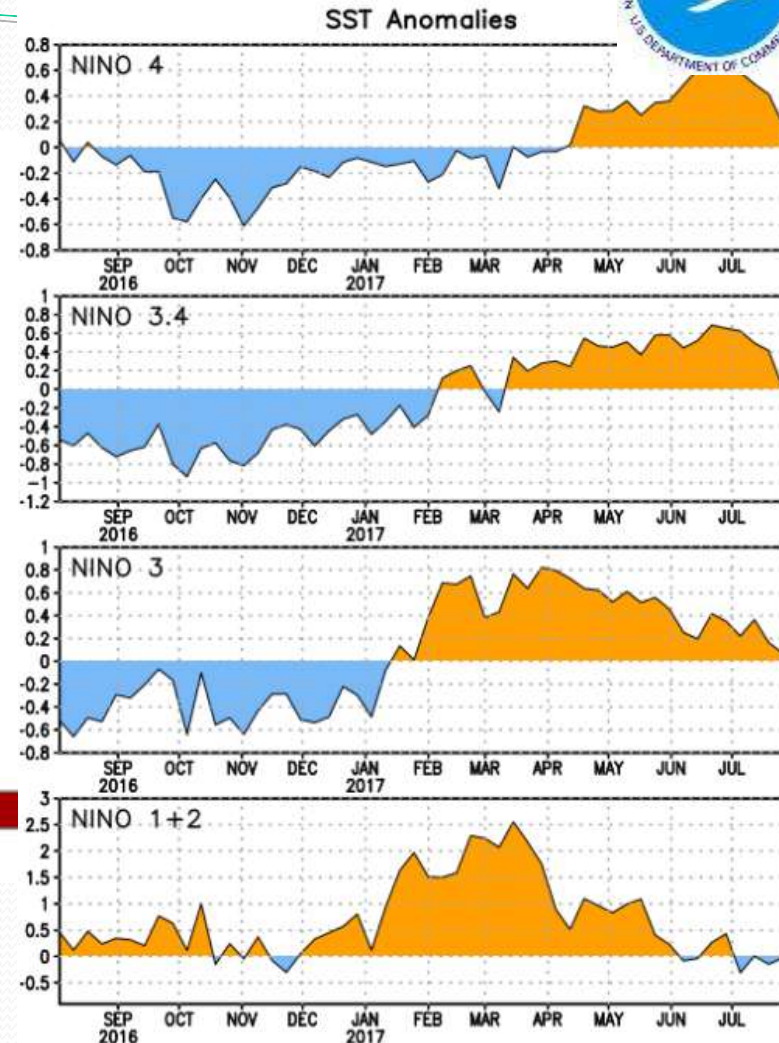
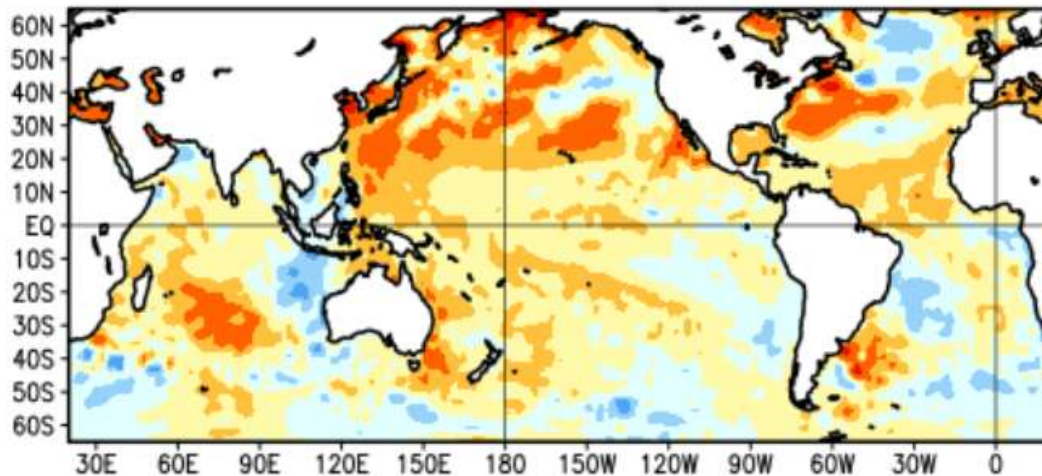
The monthly drought outlook through the end of August from the CPC indicates drought development is not expected in the Northwest. Periods of showers and thunderstorms may help to hold back any drought development. Also, current reservoir levels in the Northwest are in much better shape compared to last year.



ENSO Neutral Conditions Prevail



Average SST Anomalies
2 JUL 2017 – 29 JUL 2017

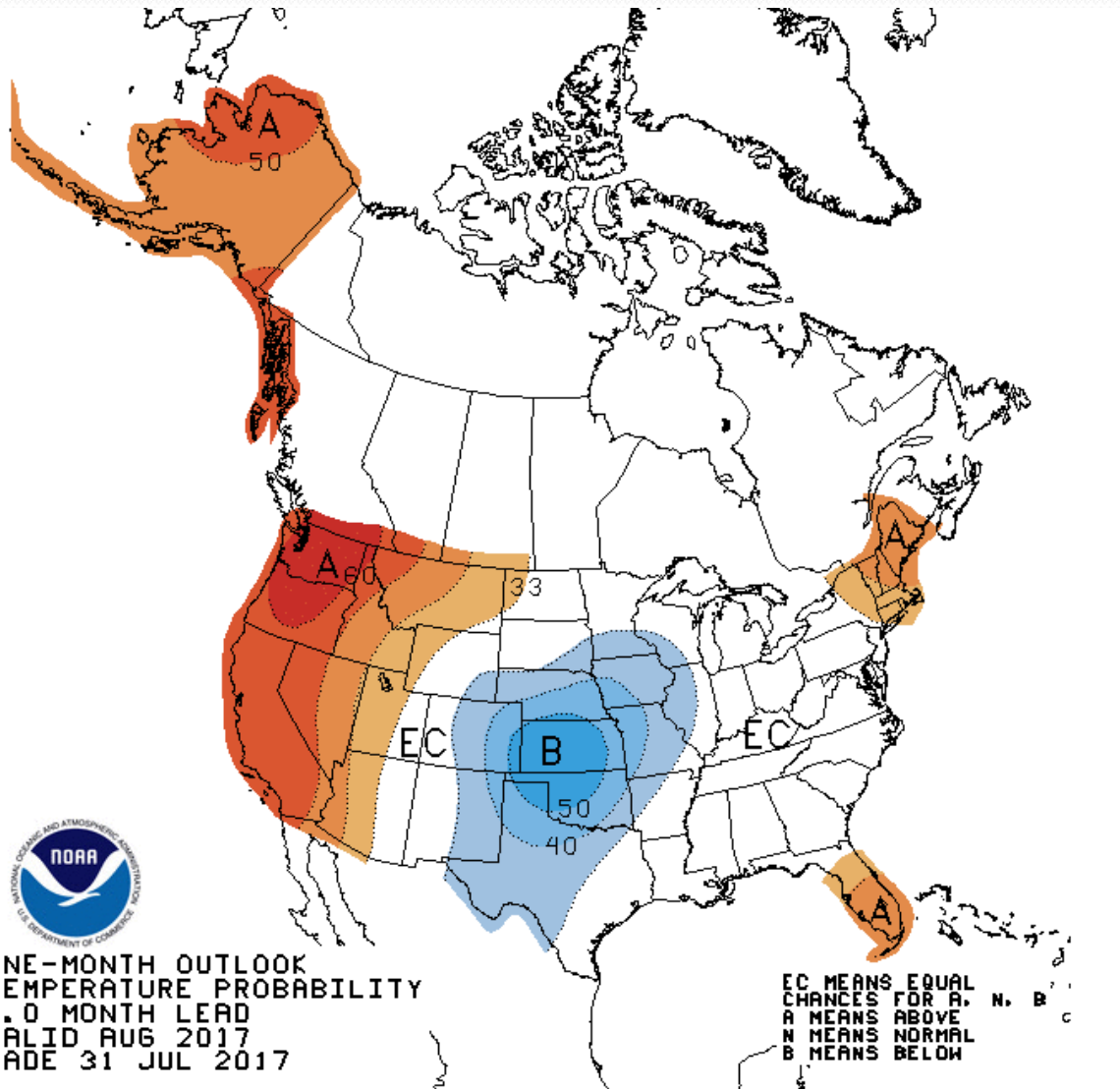


- ENSO-Neutral conditions are present.*
- Equatorial sea surface temperatures (SSTs) are near-to-above average across the central and east-central Pacific Ocean.
- ENSO-Neutral is favored (50 to ~55% chance) into the Northern Hemisphere winter 2017-18.



August Outlook

August Temperature Outlook

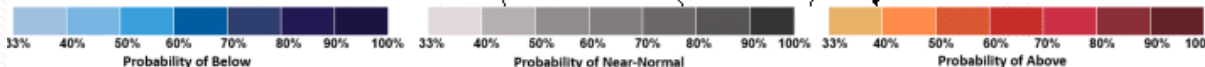


This graphic is issued by the Climate Prediction Center or CPC and is the Temperature Outlook for the month of August. The cool colors indicate a greater chance of below normal temperatures and the warm colors represent a greater chance of above normal temperatures. The time period for the normals runs from 1981-2010.

Odds are tilted toward hotter than average temperatures for the remainder of August across the interior Pacific Northwest. The highest probability of above average temperatures will be over north-central Oregon and Washington through August. The highest chance for below normal temperatures will be in the southern Plains and north Texas.

ONE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.0 MONTH LEAD
VALID AUG 2017
MADE 31 JUL 2017

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

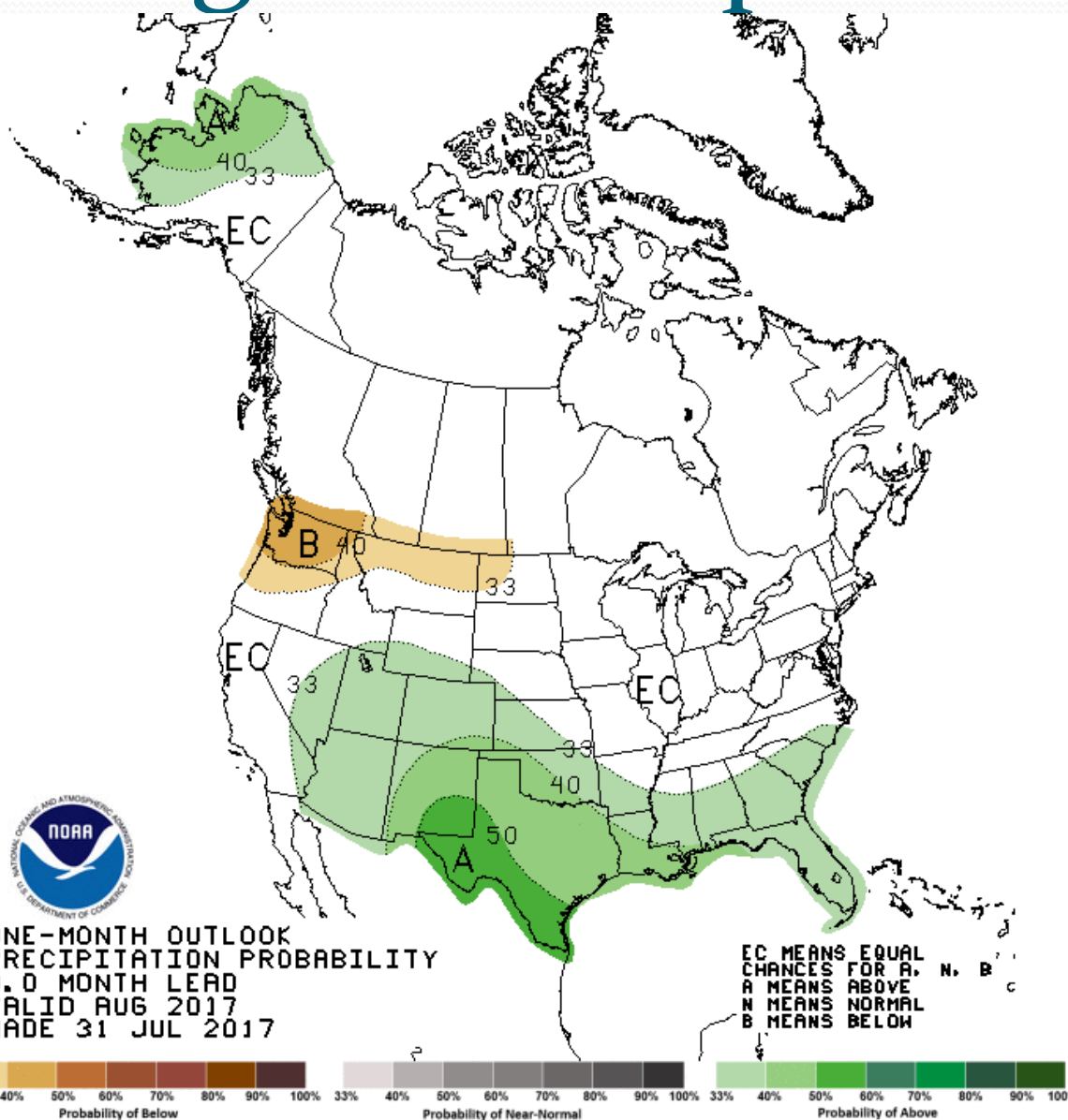


August Precipitation Outlook

This graphic is CPC's Precipitation Outlook for the month of August.

The green colors represent a greater chance of above normal precipitation, and the brown colors represent a greater chance of below normal precipitation.

There are equal chances for above, below or near normal precipitation amounts over southern Oregon. There are high chances for below normal precipitation amounts over northern Oregon and all of Washington through August. The best chance for above average precipitation amounts will be across the southern portion of the US from Arizona to Florida.



ONE-MONTH OUTLOOK
 PRECIPITATION PROBABILITY
 0, 0 MONTH LEAD
 VALID AUG 2017
 MADE 31 JUL 2017



Thank You!