



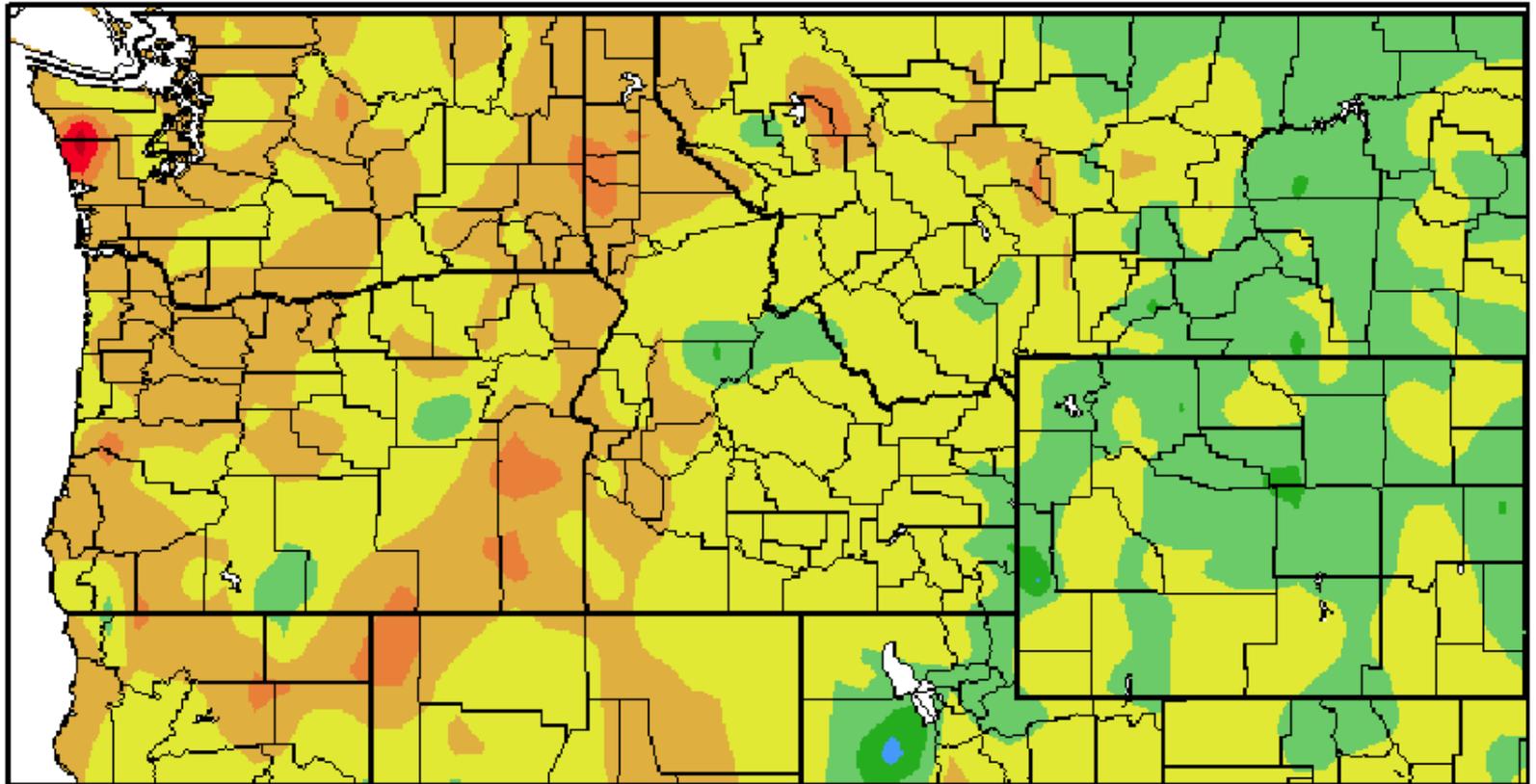
# The Month In Review

August 2015

National Weather Service  
Pendleton, Oregon

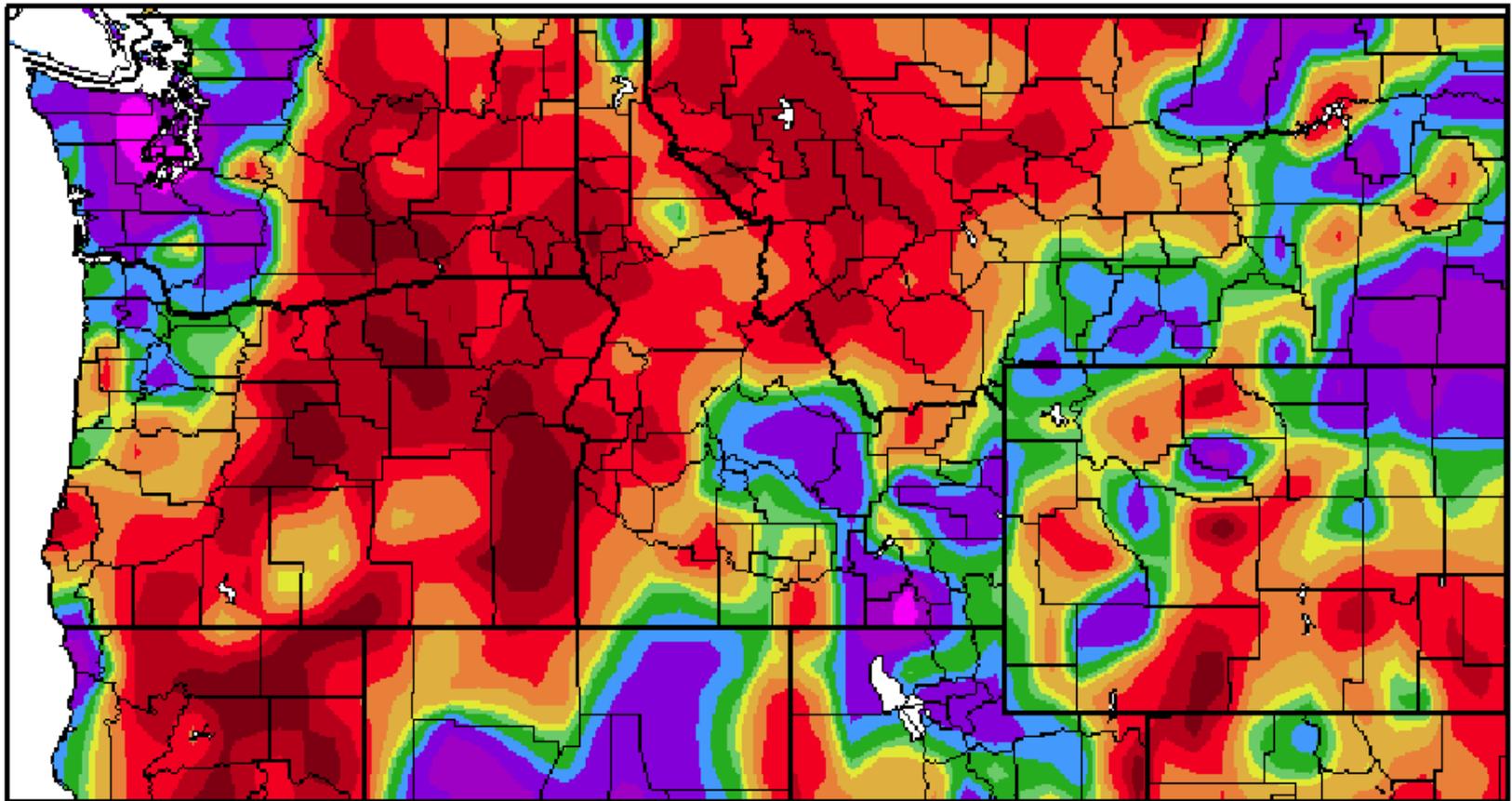
# Departure from Normal Temperature (F)

## 8/1/2015 – 8/31/2015



# Percent of Normal Precipitation (%)

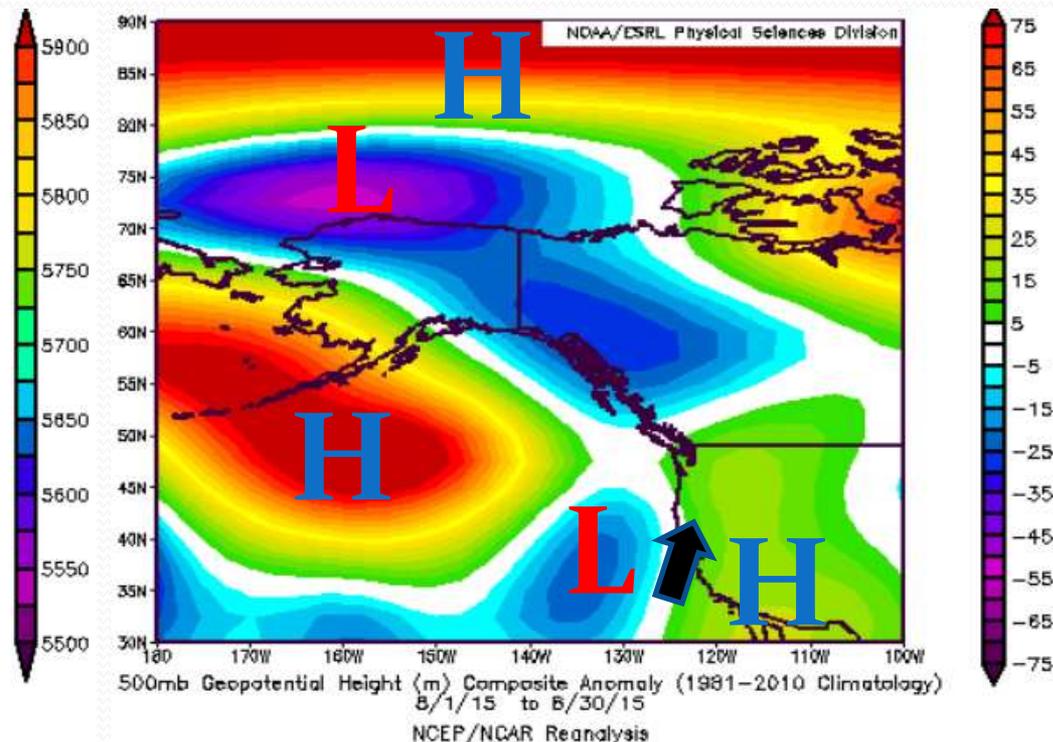
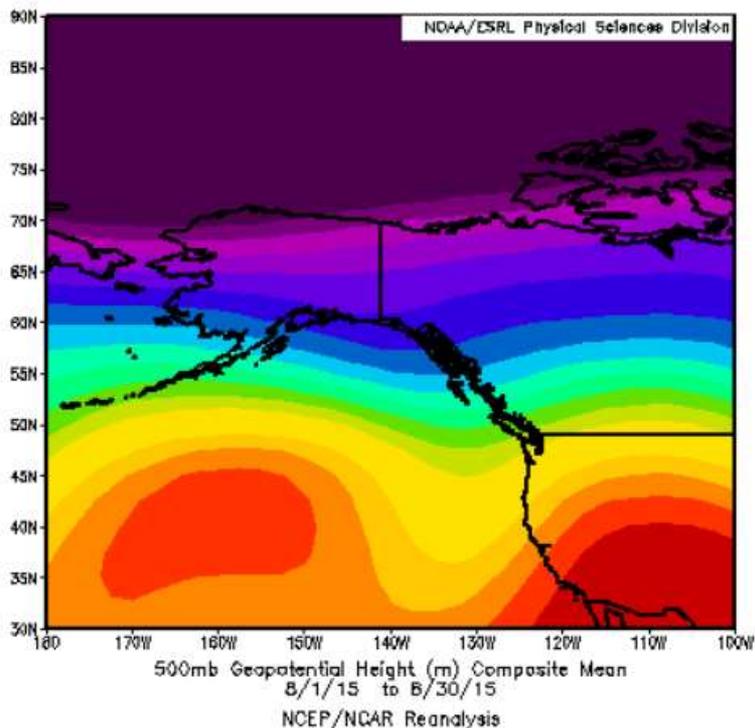
## 8/1/2015 - 8/31/2015





# August 2015

## Synoptic Weather Pattern



The mean synoptic pattern for the month of August 2015 was characterized by an anomalous ridge of high pressure near the Aleutian Islands & western Gulf of Alaska. There was also a strong ridge over the Arctic Ocean with an undercutting trough off the north-central California coast extending westward across the subtropical Pacific and northward into northwestern Canada. A weaker ridge of high pressure was also located over the Western US, helping to increase the southwesterly flow into the Pacific Northwest.



# Top 3 August Record Daily High Temperatures

City	Rank	Aug 2015 Max T	Current or Previous Aug Max T Record
Ellensburg, WA	#1(T)	106 on 8/1	106 on 8/17/2008
Bickleton, WA	#1(T)	102 on 8/2 & 8/14	102 on 8/4/1961
Satus Pass, WA	#1(T)	102 on 8/1	102 on 8/4/1998
Condon, OR	#3(T)	102 on 8/1	103 on 8/8/1972*
Monument, OR	#3(T)	110 on 8/3	115 on 8/1/2009
Long Creek, OR	#3(T)	101 on 8/1	108 on 8/4/1961



# Top 3 Number of 100+ Degree Days So Far in 2015 (Through Aug 31<sup>st</sup>)

City	Rank	Number of 100+ Degree Days 2015	Previous or Current Record Number & Year
Yakima, WA	#1	24 Days	17 Days in 1971
Walla Walla, WA	#1 (T)	17 Days	17 Days in 1985
Ellensburg, WA	#1	18 Days	10 Days in 2014
Hermiston, OR	#1	23 Days	17 Days in 2014
Pasco, WA	#1	23 Days	18 Days in 2014
Bickleton, WA	#1	6 Days	3 Days in 1928
Moro, OR	#1 (T)	8 Days	8 Days in 1998
Moxee City, WA	#1 (T)	10 Days	10 Days in 1971
Prosser, WA	#1	19 Days	16 Days in 1998
Satus Pass, WA	#1	6 Days	5 Days in 2003



# Top 3 Number of 100+ Degree Days So Far in 2015 (Through Aug 31<sup>st</sup>) (Cont'd)

City	Rank	Number of 100+ Degree Days 2015	Previous or Current Record Number & Year
Long Creek, OR	#1 (T)	4 Days	4 Days in 2002
Whitman Mission	#2	17 Days	18 Days in 1967
Meacham, OR	#2(T)	1 Day	2 Days in 1960
Antelope, OR	#2	9 Days	10 Days in 2009
La Grande, OR	#2	6 Days	8 Days in 2003
The Dalles, OR	#3(T)	17 Days	21 Days in 1996
Sisters, OR	#3	6 Days	7 Days in 2003



# Top 10 August Record Warm Minimum Temperatures

City	Rank	Aug 2015 Min T	Previous Warmest Aug Min T
Ellensburg, WA	#1(T)	76 on 8/1	70 on 8/3/2009
Walla Walla, WA	#5(T)	76 on 8/1	78 on 8/10/1984
The Dalles, OR	#5(T)	75 on 8/3	82 on 8/8/1982
Sisters, OR	#6(T)	62 on 8/4	68 on 8/8/1982
Long Creek, OR	#6(T)	62 on 8/3	66 on 8/16/1992
Prosser, WA	#8(T)	70 on 8/14	72 on 8/16/2008
Moxee City, WA	#10	68 on 8/12	72 on 8/16/2008



# New Record Warm Average Low Temperatures for August

City	Rank	Aug 2015 Avg Min T	Aug Avg Min T Record
Walla Walla, WA	#3(T)	64.2	66.5 in 1977
Yakima, WA	#4	56.4	58.3 in 1977
Bend, OR	#4	50.3	50.8 in 2004
Prineville, OR	#4(T)	49.8	52.4 in 1925
Hermiston, OR	#5	57.6	59.0 in 2014



# New Record Warm Average High Temperatures for the Month of August

City	Rank	Aug 2015 Avg Max T	Aug Avg Max T Record
Ellensburg, WA	#4(T)	88.7	90.4 in 2012
Satus Pass, WA	#5	86.3	87.5 in 1998
Long Creek, OR	#6	87.9	89.9 in 1967
Meacham, OR	#7	81.3	84.0 in 1967



# New Record Warm Average Temperatures for the Month of August

City	Rank	Aug 2015 Avg T	Aug Avg T Record
Satus Pass, WA	#1(T)	68.2	68.2 in 2004
Yakima, WA	#3	73.6	74.2 in 1977
Prosser, WA	#4	75.0	76.3 in 2004
Ellensburg, WA	#5	72.8	73.9 in 2004
Long Creek, OR	#5	67.5	68.1 in 2001
Hermiston, OR	#6	74.0	75.3 in 2014
Bend, OR	#6	67.3	67.7 in 1986
Prineville, OR	#7	68.6	71.6 in 1901
Walla Walla, WA	#8	77.1	80.1 in 1967
Sisters, OR	#10	65.3	67.4 in 1977
Moro, OR	#10	71.0	73.2 in 1967



# Top 10 Driest Augusts On Record

City	Rank	August 2015 Precipitation	Lowest August Precipitation
Madras, OR	#1(T)	0.00 Inches	0.00 Inches in 2010*
Prineville, OR	#1(T)	0.00 Inches	0.00 Inches in 1994*
Prosser, WA	#1(T)	0.00 Inches	0.00 Inches in 2012*
Richland, WA	#1(T)	0.00 Inches	0.00 Inches in 2006*
Pelton Dam, OR	#1(T)	0.00 Inches	0.00 Inches in 2012*
Heppner, OR	#1(T)	0.00 Inches	0.00 Inches in 2012*
Pasco, WA	#4(T)	0.03 Inches	0.01 Inches in 2006*
Hermiston, OR	#5(T)	0.01 Inches	Trace in 2011*
John Day, OR	#10	0.05 Inches	0.00 Inches in 1960*



# August Significant Weather

# August 14-15<sup>th</sup> Winds/Blowing Dust & Fire Weather

Location	Peak Wind Gust (MPH)	Minimum Visibility	Minimum Humidity
Ellensburg	49 MPH	10.00 Miles	38%
Yakima	43 MPH	1.50 Miles	31%
Tri-Cities	48 MPH	2.00 Miles	24%
Pendleton	45 MPH	2.00 Miles	31%
The Dalles	38 MPH	10.00 Miles	29%
Redmond	33 MPH	10.00 Miles	34%
La Grande	40 MPH	1.75 Miles	11%
Bend	31 MPH	10.00 Miles	17%
John Day	45 MPH	7.00 Miles	8%



A push of cooler marine air moved into the area during the morning hours on August 14<sup>th</sup>. This helped to dramatically increase westerly winds across most of the area as well. This also created widespread blowing dust over much of the Basin, locally reducing visibility to 1 mile or less at times. Although this did create hazardous travel conditions the potential for blowing dust was well forecasted several days in advance. Fires, such as the Canyon Creek Complex, made significant advances and unfortunately destroyed many homes along with other infrastructure.

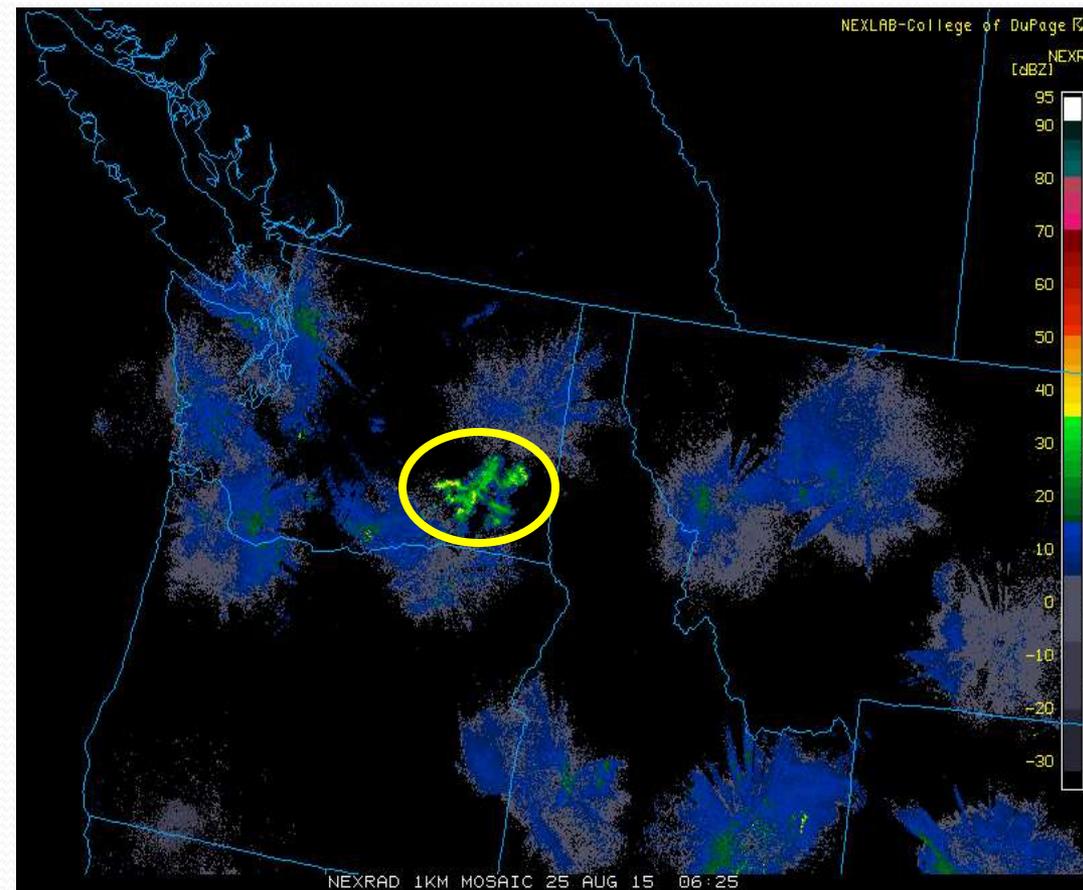
# August 20-21st Winds/Blowing Dust & Fire Weather

Location	Peak Wind Gust (MPH)	Minimum Visibility	Minimum Humidity
Ellensburg	46 MPH	10.00 Miles	19%
Yakima	31 MPH	10.00 Miles	21%
Tri-Cities	29 MPH	10.00 Miles	17%
Pendleton	36 MPH	3.00 Miles	4%
The Dalles	41 MPH	10.00 Miles	17%
Redmond	25 MPH	10.00 Miles	11%
La Grande	26 MPH	10.00 Miles	14%
Bend	25 MPH	10.00 Miles	11%
John Day	29 MPH	0.50 Miles (Smoke)	8%



Although not as severe as the August 14-15<sup>th</sup> event winds again increased behind a cold front helping to kick-up dust and spread wildfires. Relative humidity levels were rather low during this event which acted to exacerbate the fire weather issues further.

# August 24-25<sup>th</sup> Evening & Overnight T'storms



*(Above) Radar image from 11:25 PM Aug 24<sup>th</sup> showing t'storms over Southeast Washington moving northeastward into east-central Washington.*

Elevated instability combined with a weak northward moving disturbance to initiated evening & overnight thunderstorms on the 24<sup>th</sup> into the 25<sup>th</sup>. The t'storms mainly affected parts of Wheeler, Gilliam, Morrow, Umatilla, Benton, Franklin and Walla Walla counties. They occurred mainly from 7PM through about 4 AM before exiting the area into north-central Washington. These thunderstorms were very “dry”...producing only a trace of rain at Hermiston and 0.03” at Pasco. Multiple cloud to ground lightning strikes ignited grass and wild fires across these areas. For this reason a short fused Red Flag Warning was issued just prior to the event.

# August 29-31<sup>st</sup> Windy, Blowing Dust, Fire Weather, Rain Showers & Cooler Weather

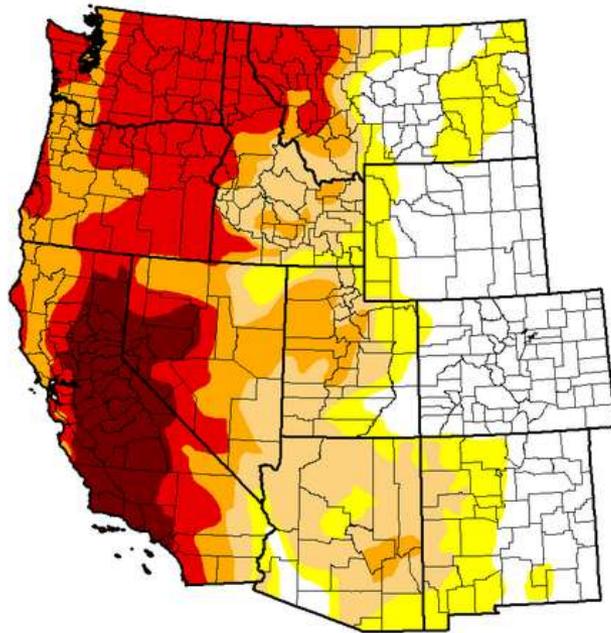
Location	Peak Wind Gust (MPH)	Minimum Visibility	Minimum Humidity	Rainfall (Inches)	Coolest Max T	Coolest Min T
Ellensburg	39 MPH	10.00 Miles	30%	0.05"	72°(8/30)	52° (8/31)
Yakima	44 MPH	0.125 Miles	31%	0.01"	78°(8/30)	49° (8/31)
Tri-Cities	37 MPH	2.00 Miles	22%	Trace	78°(8/30)	59° (8/31)
Pendleton	45 MPH	2.00 Miles	27%	0.01"	73°(8/30)	48°(8/30)
The Dalles	29 MPH	10.00 Miles	30%	0.03"	76°(8/30)	54° (8/31)
Redmond	32 MPH	8.00 Miles	25%	0.01"	70°(8/30)	35° (8/31)
La Grande	36 MPH	5.00 Miles	22%	0.10"	68°(8/30)	43°(8/30)
Bend	36 MPH	7.00 Miles	25%	Trace	66°(8/30)	37° (8/31)
John Day	45 MPH	7.00 Miles	16%	Trace	70°(8/30)	46° (8/31)

# Ongoing Drought Conditions

## U.S. Drought Monitor West

**August 25, 2015**  
(Released Thursday August 27, 2015)  
Valid 8 a.m. EDT

Statistics type:  Export table:   



Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current <a href="#">2015-08-25</a>	25.90	74.10	59.37	42.52	27.60	7.62
Last Week <a href="#">2015-08-18</a>	26.53	73.47	58.91	42.01	23.69	7.62
3 Months Ago <a href="#">2015-05-26</a>	25.37	74.63	57.03	35.92	17.59	7.94
Start of Calendar Year <a href="#">2014-12-30</a>	34.76	65.24	54.48	33.50	18.68	5.40
Start of Water Year <a href="#">2014-09-30</a>	31.48	68.52	55.57	35.65	19.95	8.90
One Year Ago <a href="#">2014-08-26</a>	27.50	72.50	58.91	41.45	20.62	8.90

Population Affected by Drought: **58,650,851**

[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):

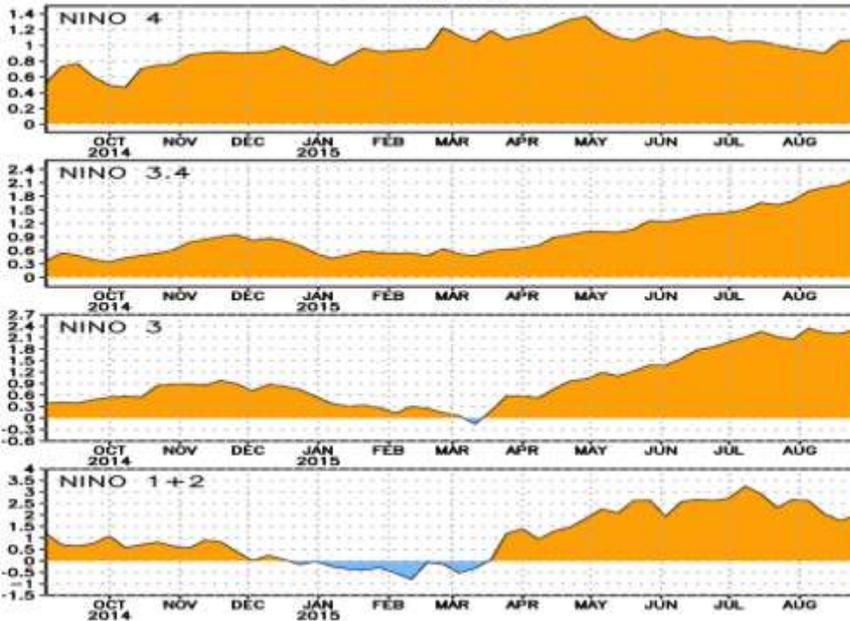
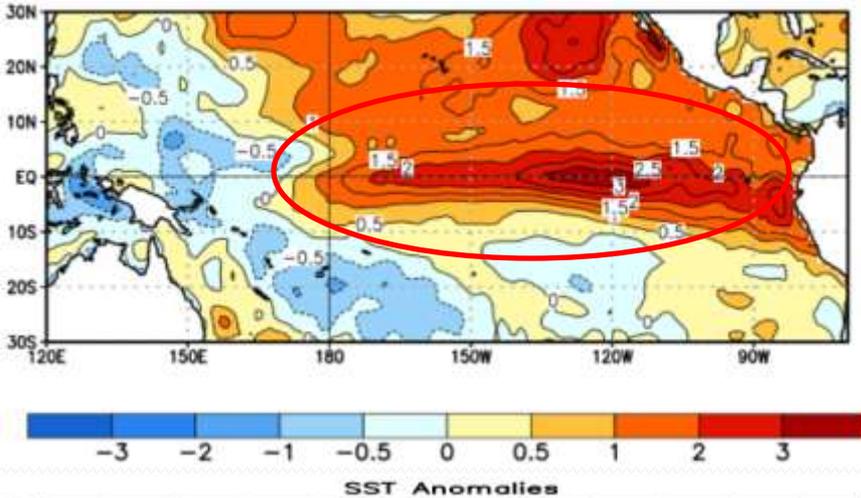
Anthony Artusa, NOAA/NWS/NCEP/CPC

Download:   

Extreme drought (D3) continues over much of Northeastern Oregon and Southeastern Washington, which was exacerbated by another abnormally dry month. Parts of Deschutes & Crook Counties continue with D2 (severe drought) status.

# El Niño Advisory Continues

Average SST Anomalies  
2 AUG 2015 – 29 AUG 2015



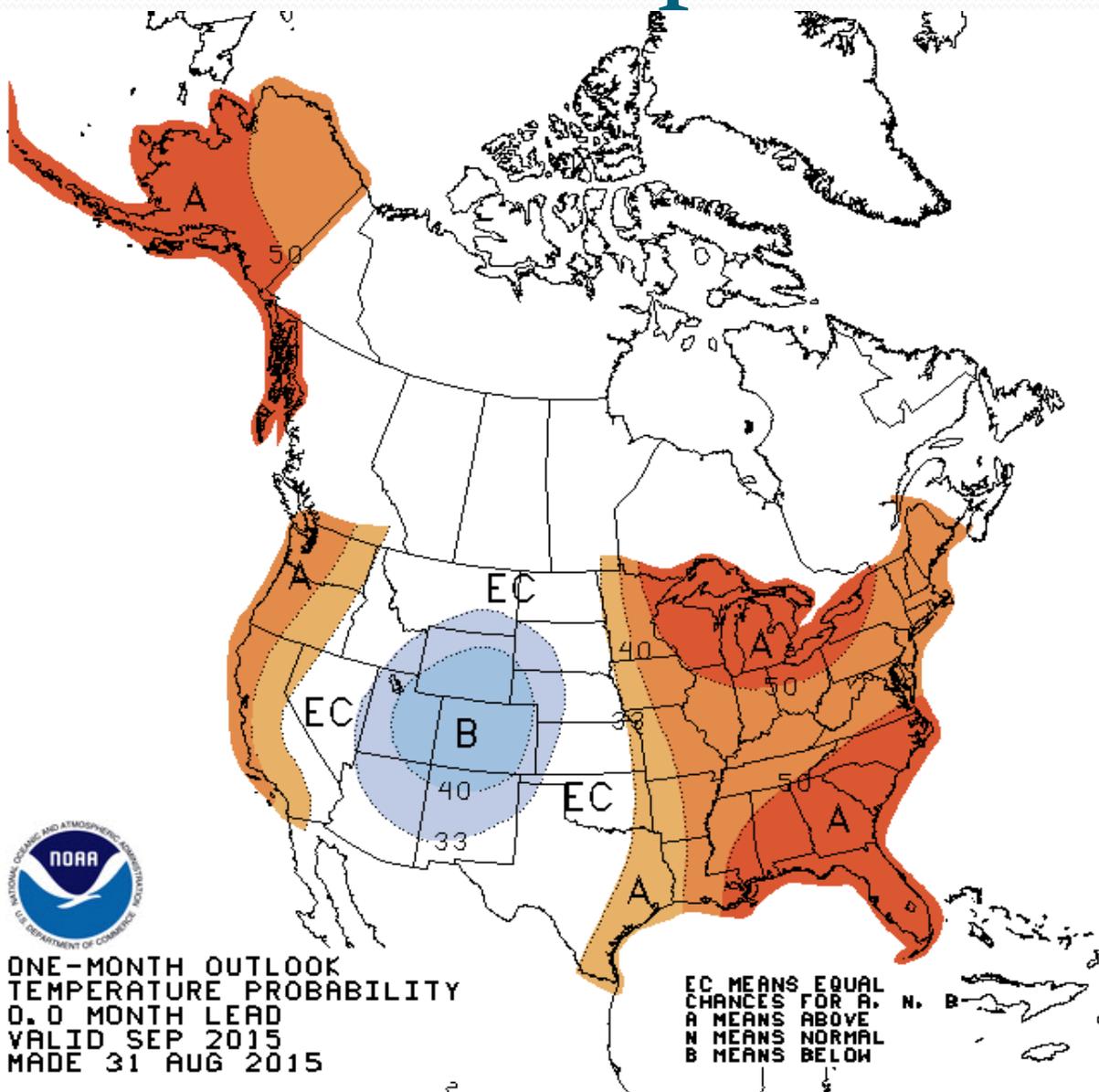
❖ An El Niño Advisory has been issued by the Climate Prediction Center, with the warmest temperatures noted off the South American coast along the Equator. **\*\*El Niño conditions are present\*\***

❖ The Climate Prediction Center has stated that there is a greater than 90% chance that El Niño conditions will continue through the Northern Hemisphere winter and an 85% chance through early Spring 2016.



# September Outlook

# September Temperature Outlook



This graphic is issued by the Climate Prediction Center or CPC and is the Temperature Outlook for the month of September. 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. Most of the Inland Pacific Northwest has a 33-40 percent chance for above average in the month of September.

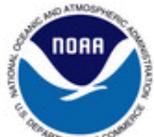
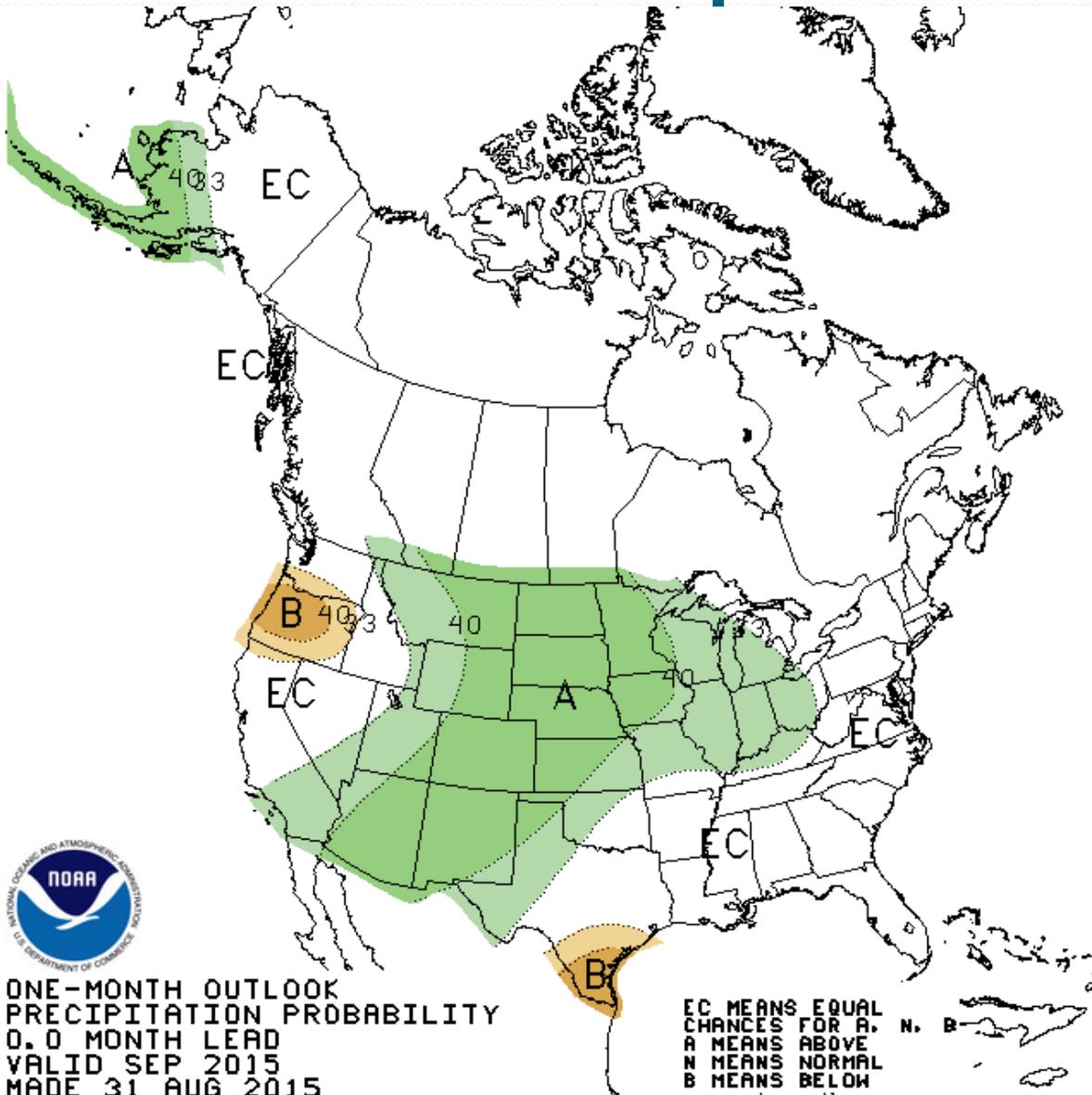
NOAA  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
U.S. DEPARTMENT OF COMMERCE

ONE-MONTH OUTLOOK  
TEMPERATURE PROBABILITY  
0.0 MONTH LEAD  
VALID SEP 2015  
MADE 31 AUG 2015

EC MEANS EQUAL  
CHANCES FOR A.  
N. B.  
A MEANS ABOVE  
B MEANS BELOW

# September Precipitation Outlook

This graphic is CPC's Precipitation Outlook for the month of September. The green colors represent a greater chance of above normal precipitation, and the brown colors represent a greater chance of below normal precipitation. Much of the Pacific NW has a 33-40 percent chance of seeing below normal precipitation amounts. Please remember that these are probabilities of averages, and that the day-to-day weather will still vary for the month of September.



ONE-MONTH OUTLOOK  
PRECIPITATION PROBABILITY  
0, 0 MONTH LEAD  
VALID SEP 2015  
MADE 31 AUG 2015

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



Thank You!