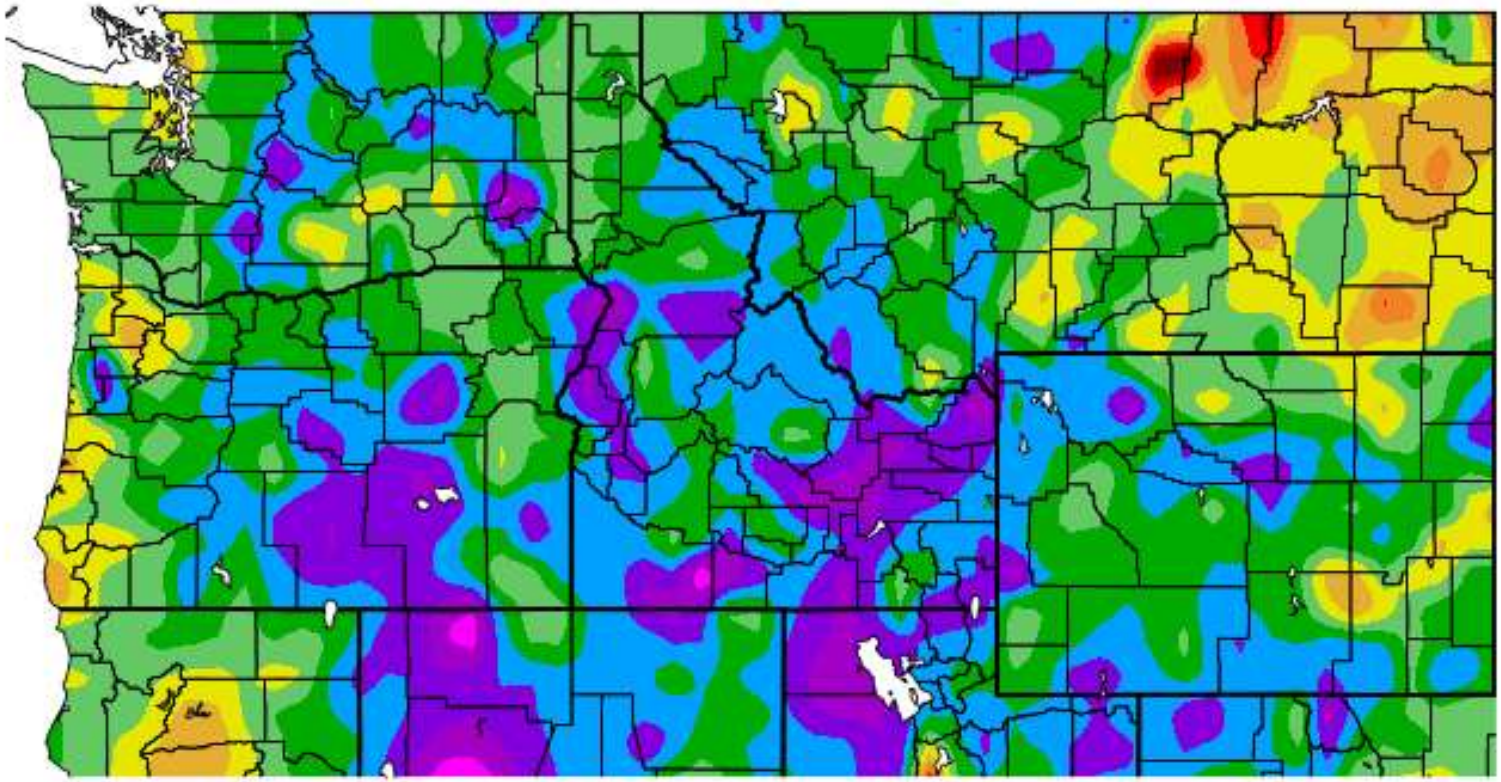
The Month In Review

October 2017

National Weather Service
Pendleton, Oregon

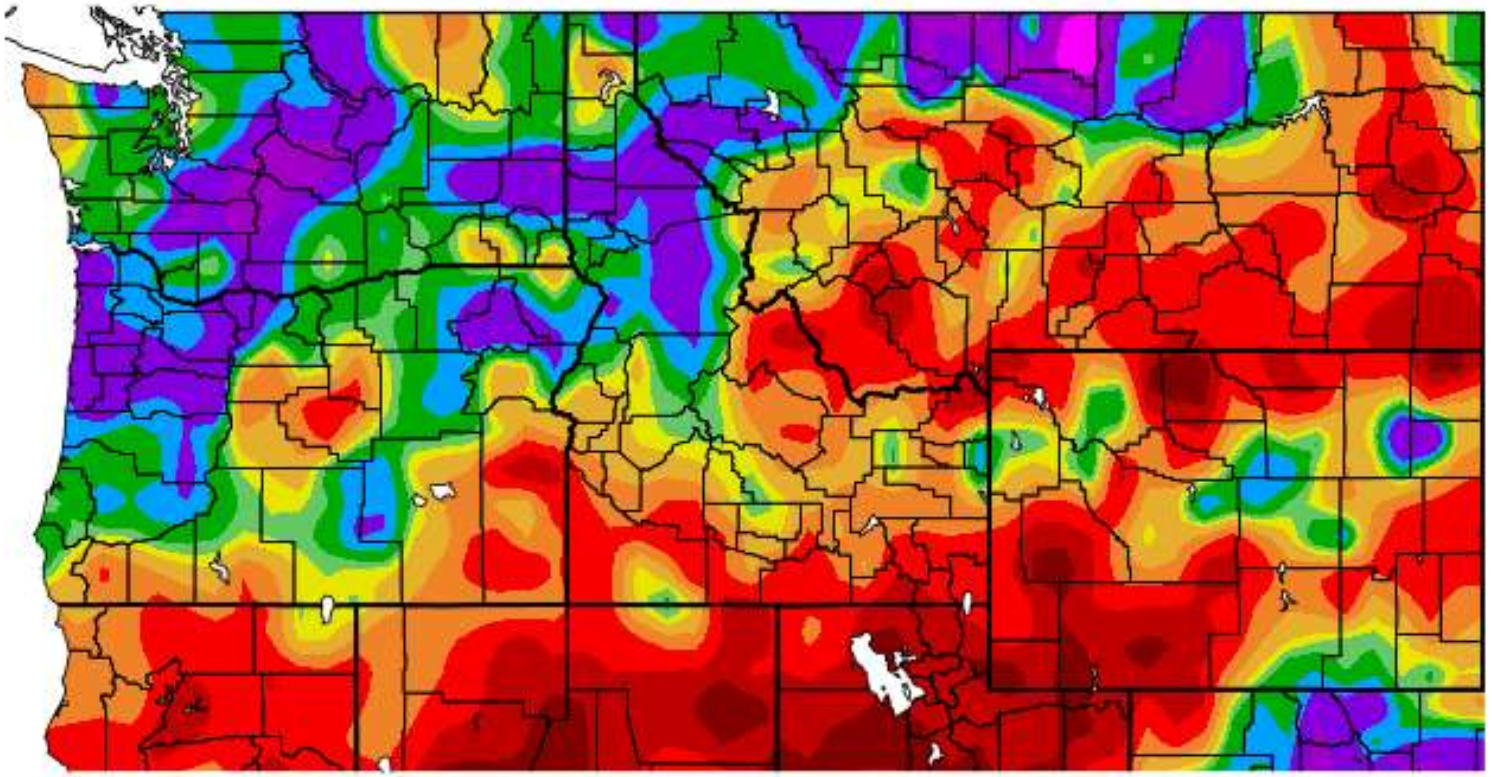
Departure from Normal Temperature (F)
10/1/2017 – 10/31/2017



Generated 11/2/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
10/1/2017 – 10/31/2017



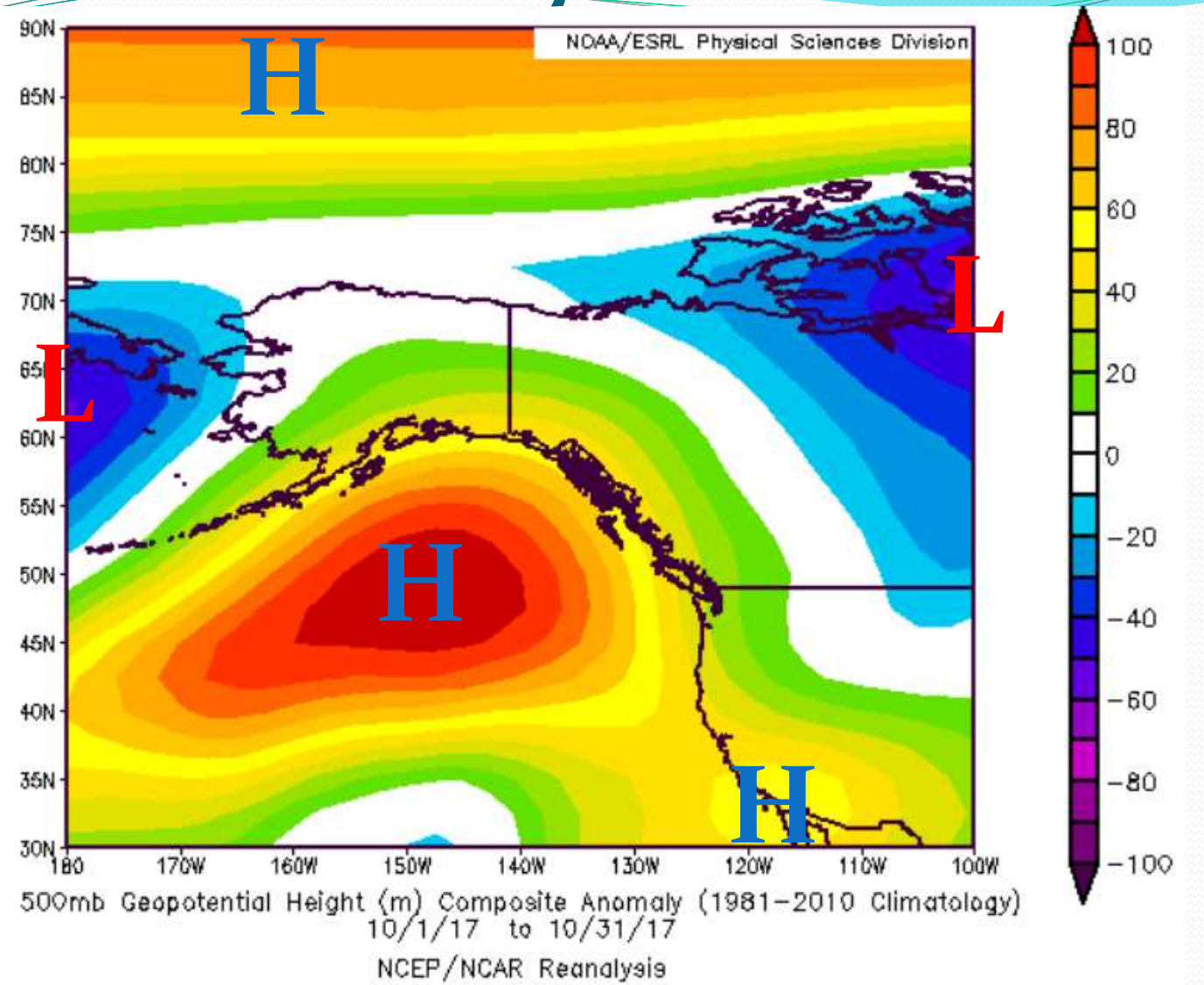
Generated 11/2/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

Select October Averages and Departures

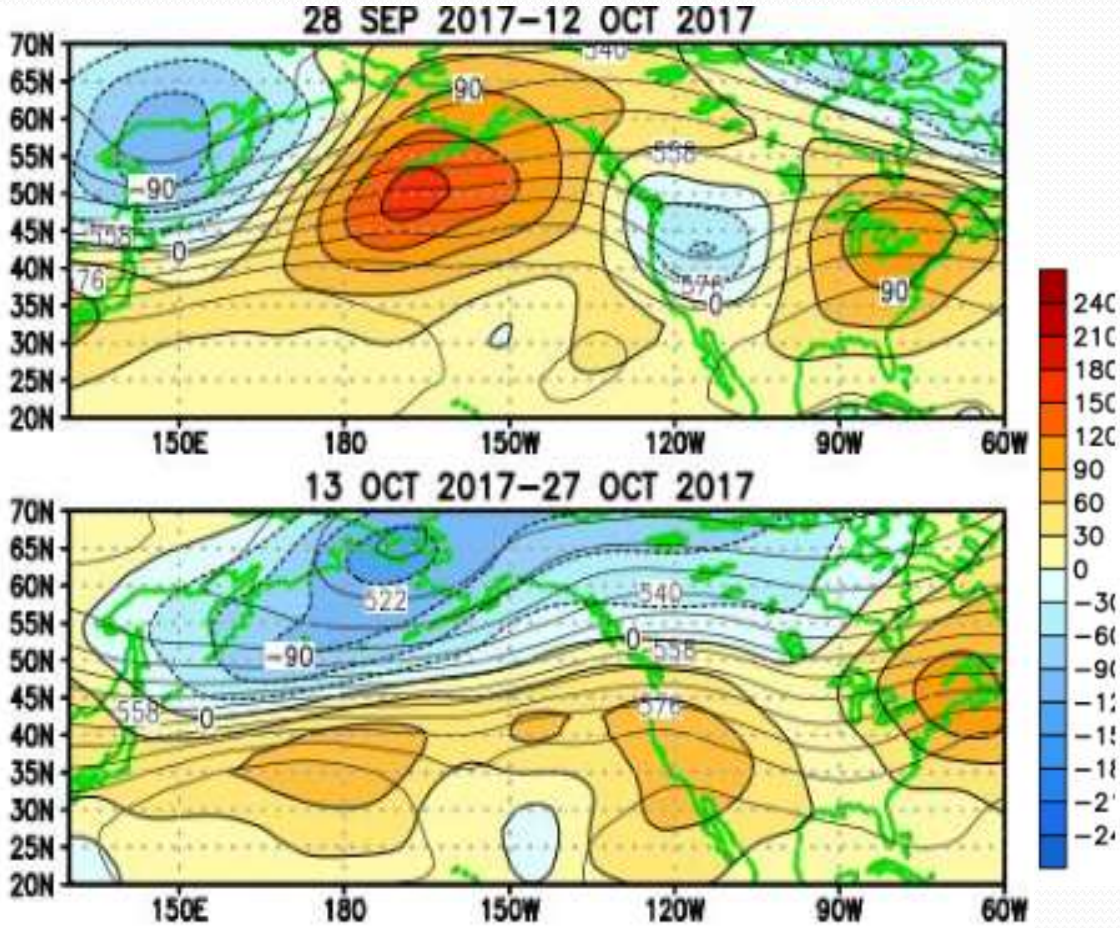
	Max T	Max T D	Min T	Min T D	Ave T	Ave T D	PCPN	PCPN D
Yakima	65.2	1.3	34.7	0.6	50.0	1.0	0.79	0.25
Kennewick	65.3	-0.5	42.9	0.8	54.1	0.2	0.63	0.03
Walla Walla	63.3	-0.2	42.8	-0.3	53.1	-0.3	1.57	-0.11
The Dalles	65.5	-0.2	39.8	-2.5	52.7	-1.4	1.60	0.61
Redmond	62.4	-1.1	29.0	-2.3	45.7	-1.7	0.52	-0.13
Pendleton Airport	63.2	-0.5	38.2	-1.9	50.7	-1.2	1.41	0.40
La Grande	61.1	-1.2	33.4	-1.8	47.3	-1.5	1.86	0.57

October 2017 Weather Pattern



The mean synoptic pattern for the month of October 2017 was characterized by an upper level high pressure system over the central gulf of Alaska, with a large upper level ridge of high pressure over far northern Canada. These higher heights compared to average were also evident along the entire US West coast. This setup allow for near average temperatures, but also for several periods of precipitation over the Northwest.

October 2017 Detailed Upper Level Pattern Analysis



- During the first half of October, an upper level ridge of high pressure was evident over the Gulf of Alaska. Meanwhile a trough of low pressure remained anchored over the Pacific Northwest…keeping our weather cool, with some periods of precipitation.
- The second half of the month featured a pattern reversal. A deep trough of low pressure developed over the Alaska and north-central Canada. A ridge of high pressure developed over the southwest US. This put the Pacific Northwest in a zonal, westerly flow pattern.

Top 10 Coldest October Average Minimum Temperatures

City	Rank	Oct 2017 Avg Min T	Current Record Coldest Avg Oct Min T
Hermiston, OR	#7	36.7°	32.0 in 2002
Pasco, WA	#8	37.5°	31.5 in 2002
Redmond, OR	#8	29.0°	24.3 in 2002
Ellensburg, WA	#9	33.5°	30.9 in 2002
Meacham, OR	#9	29.4°	22.1° in 2002

Daily Max Precip Records

City	Daily Oct Precip Record	Previous Daily Precip Record
Cle Elum, WA	3.16" on 10/23	0.75" in 1985
Satus Pass, WA	1.93" on 10/22	0.56" in 1985
Goldendale, WA	1.10" on 10/22	0.51" in 1957
Meacham, OR	0.89" on 10/21	0.74" in 1975
Ellensburg, WA	0.81" on 10/21	0.22" in 1943
Walla Walla, WA	0.53" on 10/12	0.37" in 2012
Arlington, OR	0.51 on 10/22	0.29" in 1966
The Dalles, OR	0.49" on 10/22	0.37" in 1951
Yakima, WA	0.46" on 10/22	0.38" in 1957
Pendleton, OR	0.46" on 10/19	0.38" in 1979

October
Significant Weather

Rain and Mtn Snow October 12-13th

Location	Precip Total
Pendleton	0.19"
Hermiston	0.15"
Pasco	0.10"
Yakima	0.01"
Ellensburg	0.05"
Walla Walla	0.59"
The Dalles	0.42
Cle Elum	0.59"

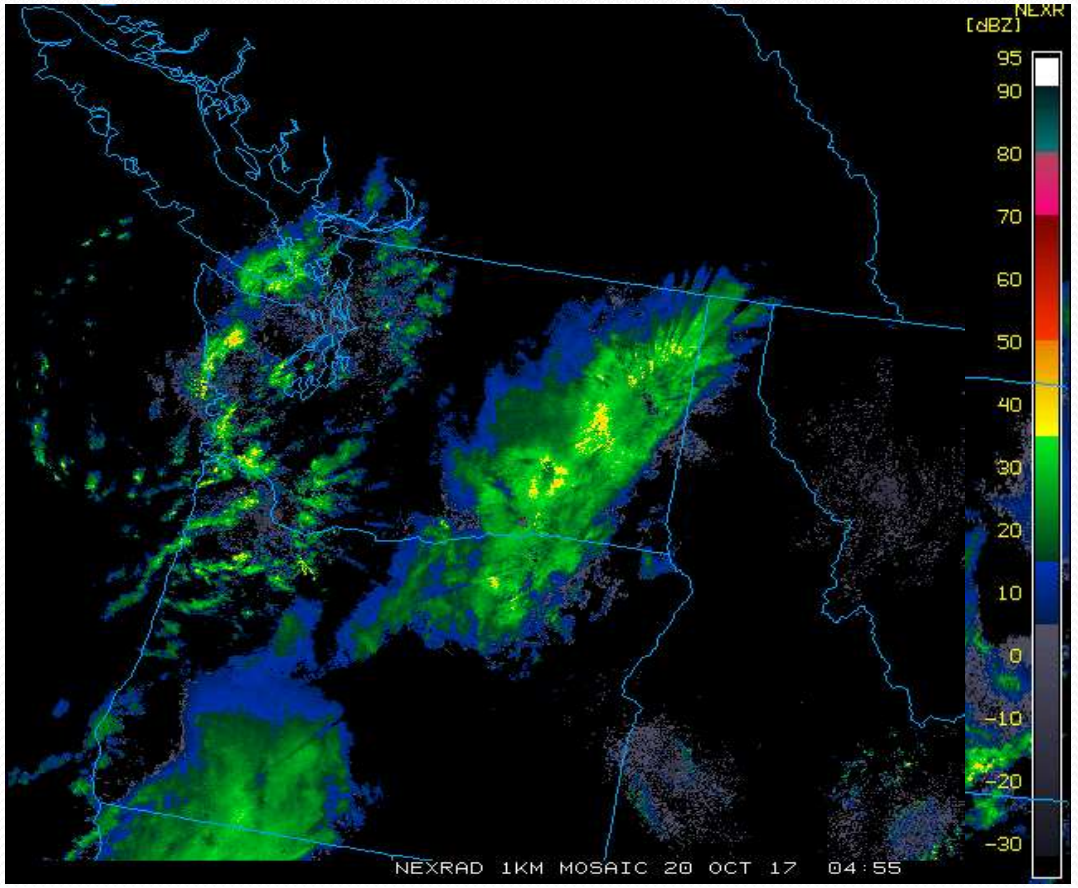
Image Credit: Ski Bluewood Facebook Page, Oct 13, 2017

Winter Weather Advisories and Winter storm warnings were issued for the area mountains. Below are some reported snow totals. Amounts were heavy, above about 5000 feet in the Blue Mountains.

Report Time	County	Location	Event Type	Mag.	Source	Remark
10/13/17 1:00	WALLOWA	9 SW SKI BLUEWOOD	HEAVY SNOW	13.00	MESONET	13 INCHES NEW SNOW IN 12 HOURS AT MILK SHAKES SNOTEL.
10/13/17 6:00	COLUMBIA	2 NNW SKI BLUEWOOD	HEAVY SNOW	10.00	MESONET	TOUCHET SNOTEL SITE. ELEVATION 5530 FEET. 24 HOUR ESTIMATED SNOWFALL.
10/13/17 8:00	UMATILLA	5 SSW SPOUT SPRINGS	HEAVY SNOW	6.00	MESONET	6 INCHES OF NEW SNOW IN 12 HOURS BETWEEN 8PM THURSDAY AND 8AM FRIDAY AT HIGH RIDGE SNOTEL. ELEVATION 4920 FEET
10/13/17 9:07	UMATILLA	10 NNW UKIAH	SNOW	2.00	DEPT OF HIGHWAYS	ELEVATION 4261 FEET
10/13/17 9:07	CROOK	12 WSW MITCHELL	SNOW	2.00	DEPT OF HIGHWAYS	ELEVATION 4730 FEET
10/13/17 9:07	DESCHUTES	10 WSW BEND	SNOW	2.50	COCORAHS	24 HOUR ACCUMULATION. ELEVATION 4705 FEET
10/13/17 10:33	GRANT	13 SSW CANYON CITY	SNOW	3.70	COCORAHS	24 HOUR ACCUMULATION. ELEVATION 4705 FEET
10/13/17 11:00	COLUMBIA	1 WSW SKI BLUEWOOD	HEAVY SNOW	12.00	TRAINED SPOTTER	24 HOUR ACCUMULATION. FROM FACEBOOK POST BY SKI BLUEWOOD. ELEVATION 4545 FEET. THIS CORRECTS PREVIOUS LOCATION OF REPORT
10/13/17 11:00	COLUMBIA	3 ENE DAYTON	HEAVY SNOW	12.00	PUBLIC	24 HOUR ACCUMULATION. FROM FACEBOOK POST BY SKI BLUEWOOD. ELEVATION 4545 FEET

Rainy, Cooler and Windy October 18– 22nd

Location	5 Day Precip	Peak Wind
Easton	6.38”	NA
Ellensburg	1.07”	42 MPH
Yakima	0.78”	45 MPH
Pasco	0.57”	44 MPH
The Dalles	1.18”	37 MPH
Walla Walla	0.85”	51 MPH
Hermiston	0.61”	36 MPH
Pendleton	1.15”	49 MPH
Redmond	0.11”	39 MPH
Meacham	1.78”	20 MPH
John Day	0.50”	39 MPH
Mt Adams RS	3.51”	NA



A series of storm systems brought periods of rain, wind and much cooler temperatures to the Pacific Northwest from Oct 18th – 22nd . There were some flooding concerns near recent burn scars in Yakima & Kittitas Counties.

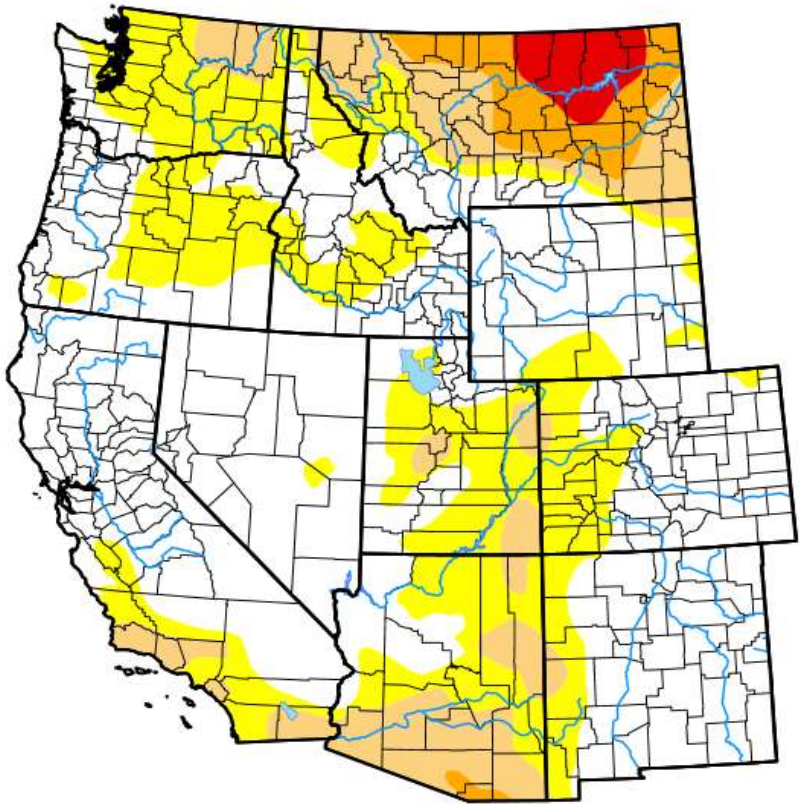
Halloween: Cold Start, Warm Finish

Location	Morning Lows 10/31	Afternoon Highs 10/31
Pendleton, OR	27	62
Redmond, OR	14	67
Pasco, WA	24	65
Yakima, WA	24	57
Walla Walla, WA	33	64
Bend, OR	22	73
Ellensburg, WA	24	71
Hermiston, OR	25	63
John Day, OR	21	51
La Grande, OR	24	54
Prineville, OR	18	57

With an upper level ridge dominating the weather pattern for Halloween the area got off to a very cold start. A widespread freeze occurred area wide. Temperatures warmed up nicely during the afternoon hours, under mostly sunny skies.

Short Term Drought Eases

West



Map released: Thurs. November 2, 2017

Data valid: October 31, 2017 at 8 a.m. EDT

Intensity:

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)

Author(s):

David Miskus, NOAA/NWS/NCEP/CPC

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

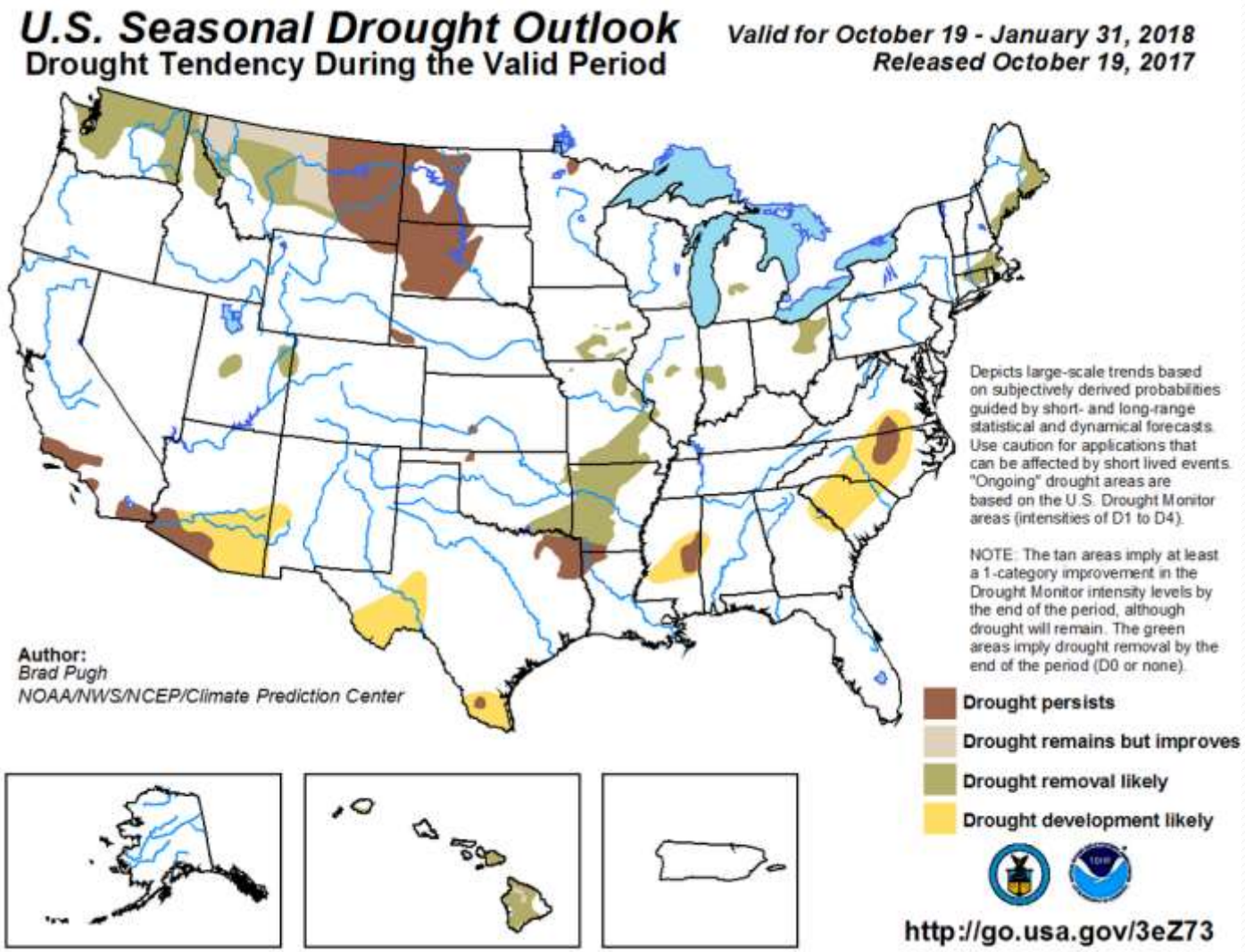
Map Download

Map without text: PNG JPG

Map with legend: PNG PDF JPG

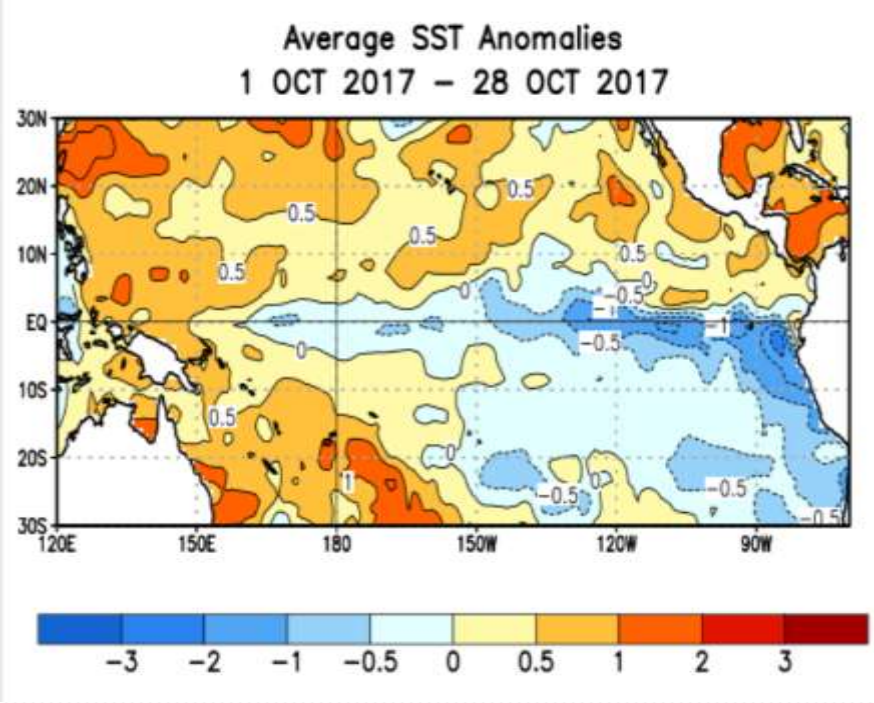
Short term, moderate drought conditions have now retreated from much of Washington and Oregon. Abnormally dry conditions remain for much of the area, after seeing decent precipitation totals this month. Extreme drought remains in eastern Montana, however recent rains/snows are helping here.

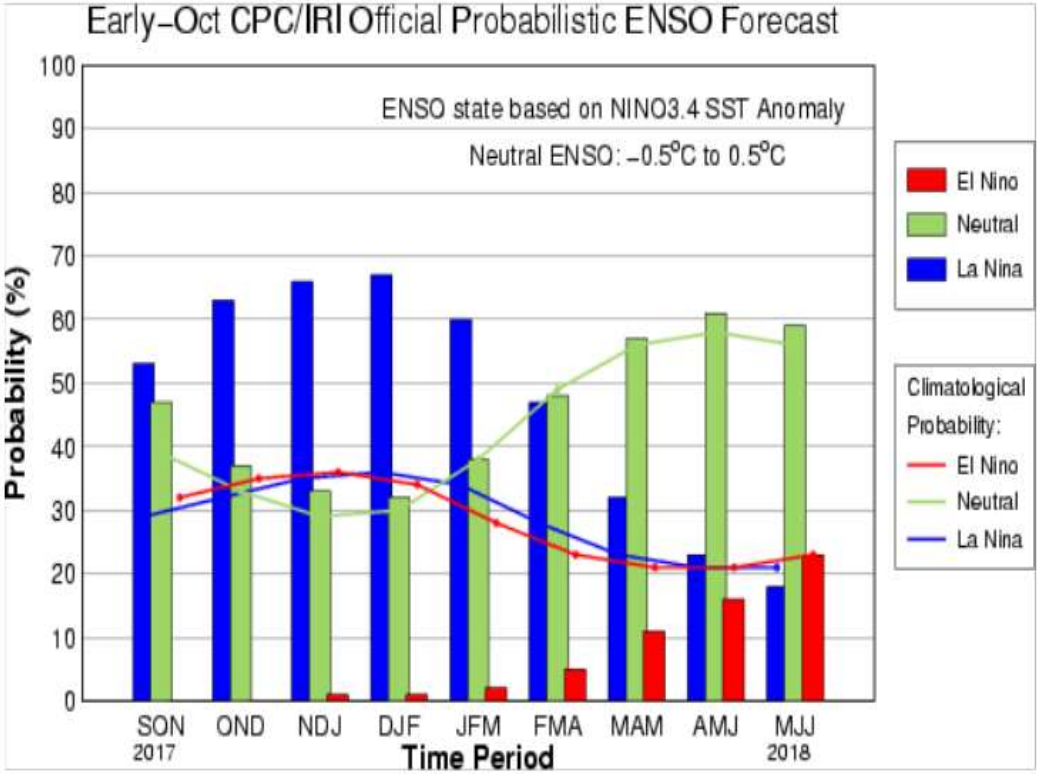
Drought Outlook Through January



The seasonal drought outlook through the end of January from the CPC indicates drought removal is now **<u>expected</u>** in the Northwest. Meanwhile, drought is forecast to persist or develop in parts of southern California, Arizona and the northern Plains.

La Niña Watch Continues

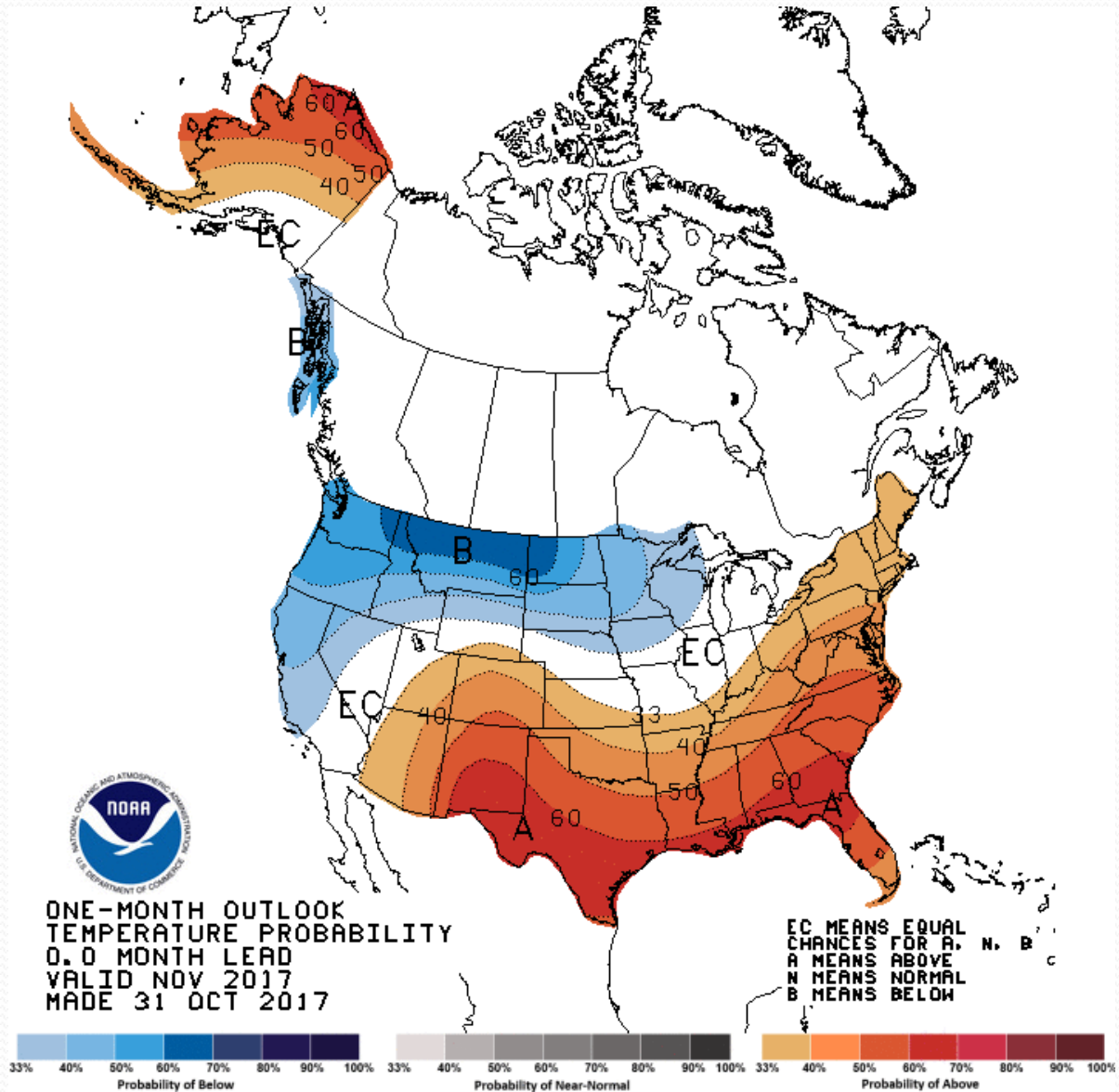




- ENSO-Neutral conditions are present
- Equatorial sea surface temperatures (SSTs) are near-to-below average across the central and east-central Pacific Ocean
- There is an increasing chance (55-65%) of La Niña during the Northern Hemisphere fall and winter months.

November Outlook

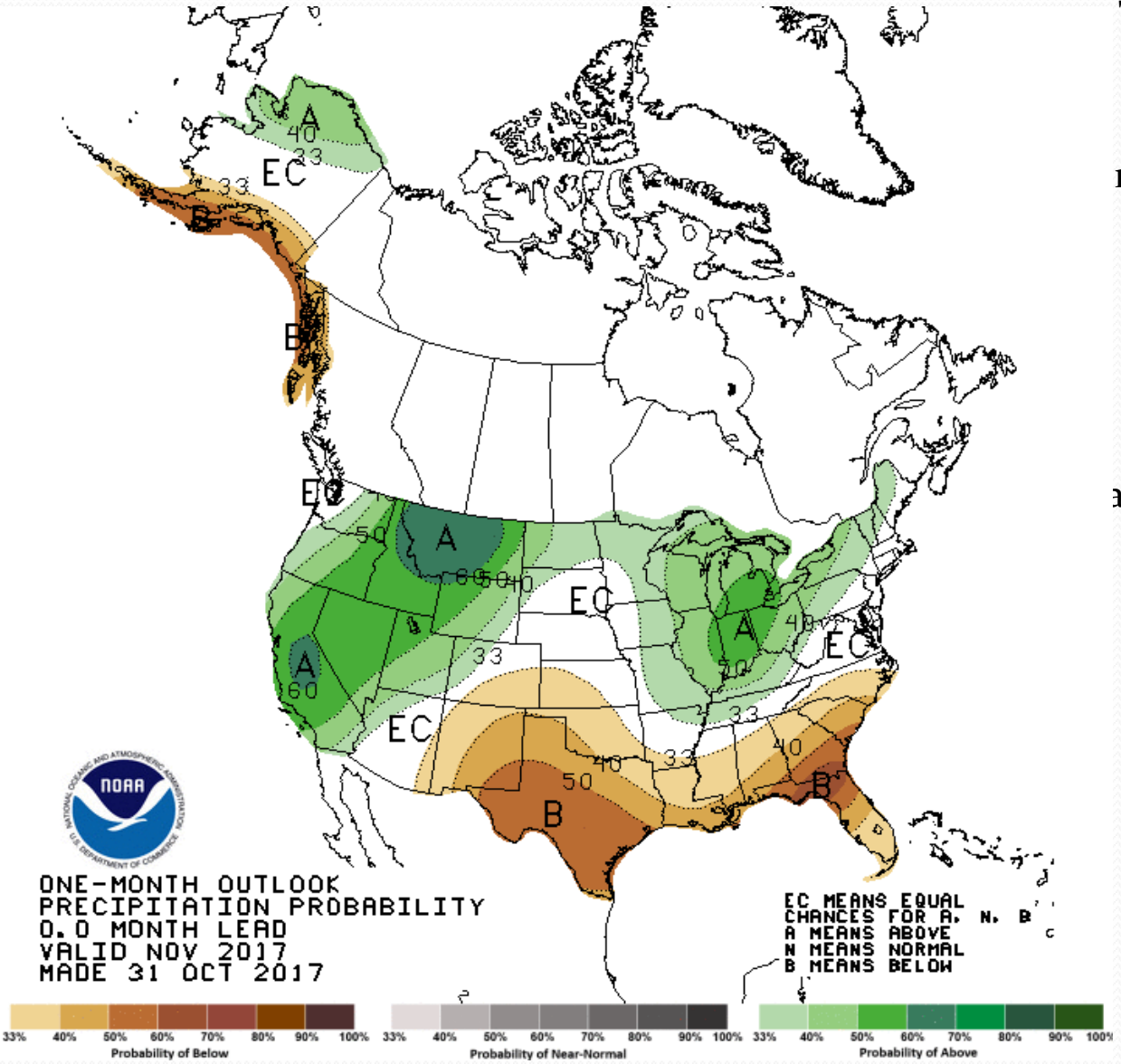
November Temperature Outlook



This graphic is issued by the Climate Prediction Center or CPC and is the Temperature Outlook for the month of November. 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 below average temperatures for the rest of November across eastern Washington and Oregon. The highest probabilities for above average temperatures in November are across the southern portion of the US, and up along the East Coast.

November Precipitation Outlook



This graphic is CPC's Precipitation Outlook for the month of November. 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 Northwest has higher chances for above average precipitation through the rest of November. Across the south-central and southeast US there higher chances for below average precipitation amounts through November.

Thank You!