



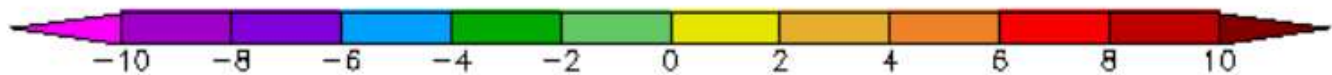
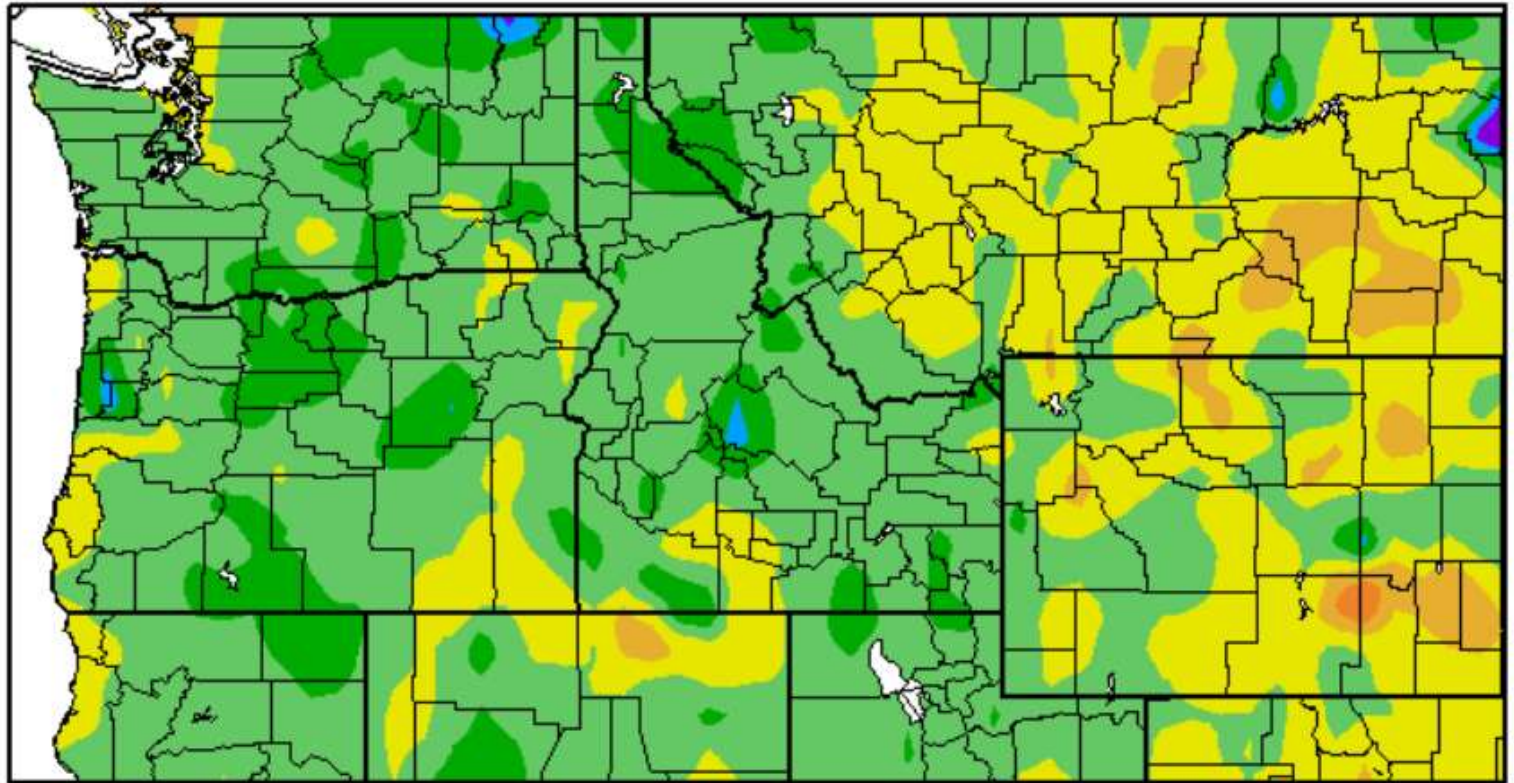
The Month In Review

April 2017

National Weather Service
Pendleton, Oregon

Departure from Normal Temperature (F)

4/1/2017 - 4/30/2017



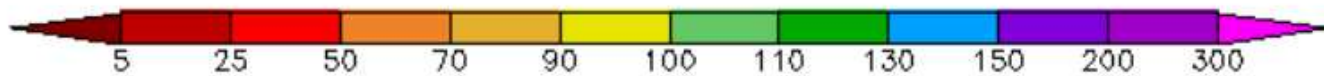
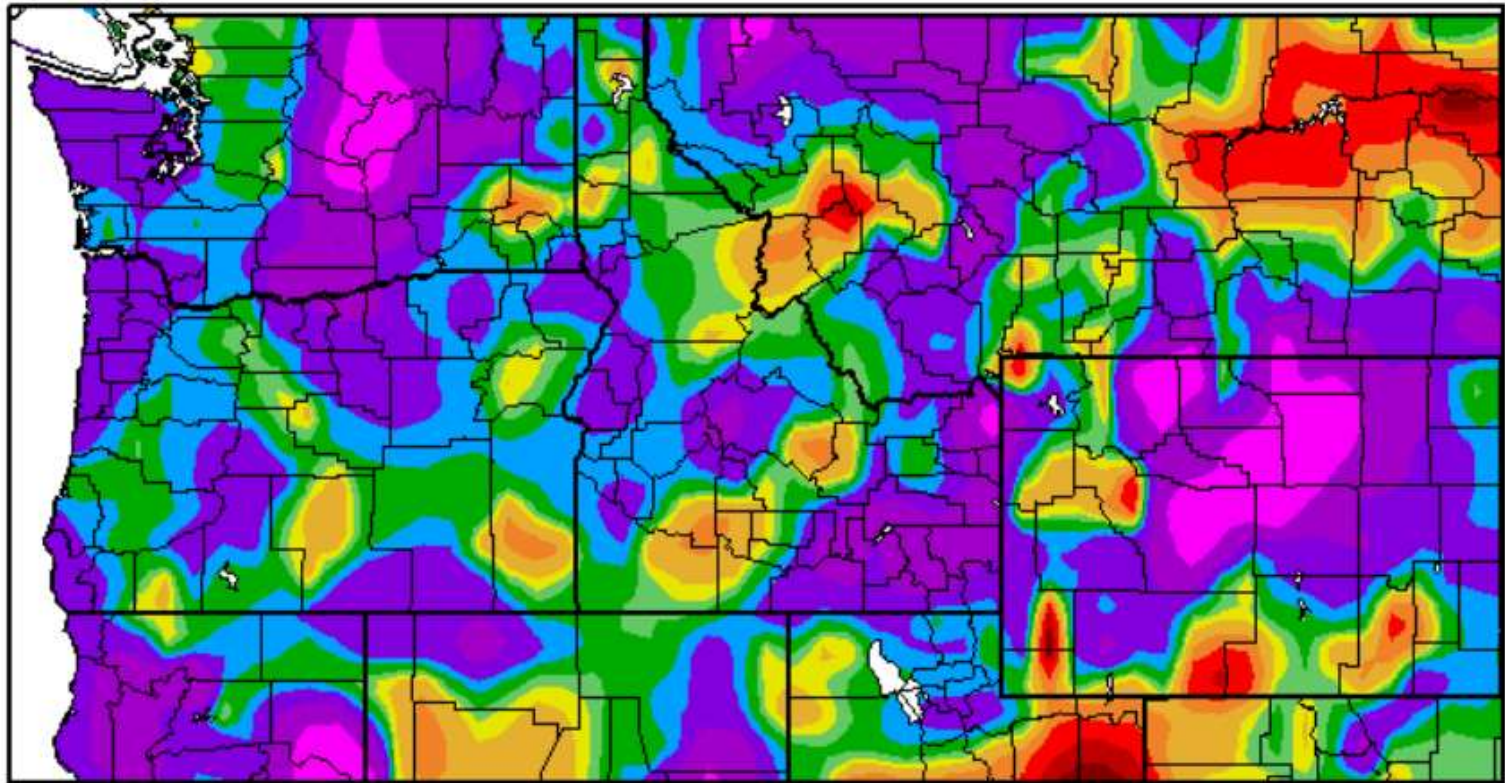
Generated 5/1/2017 at HPRCC using provisional data.

Regional Climate Centers



Percent of Normal Precipitation (%)

4/1/2017 - 4/30/2017



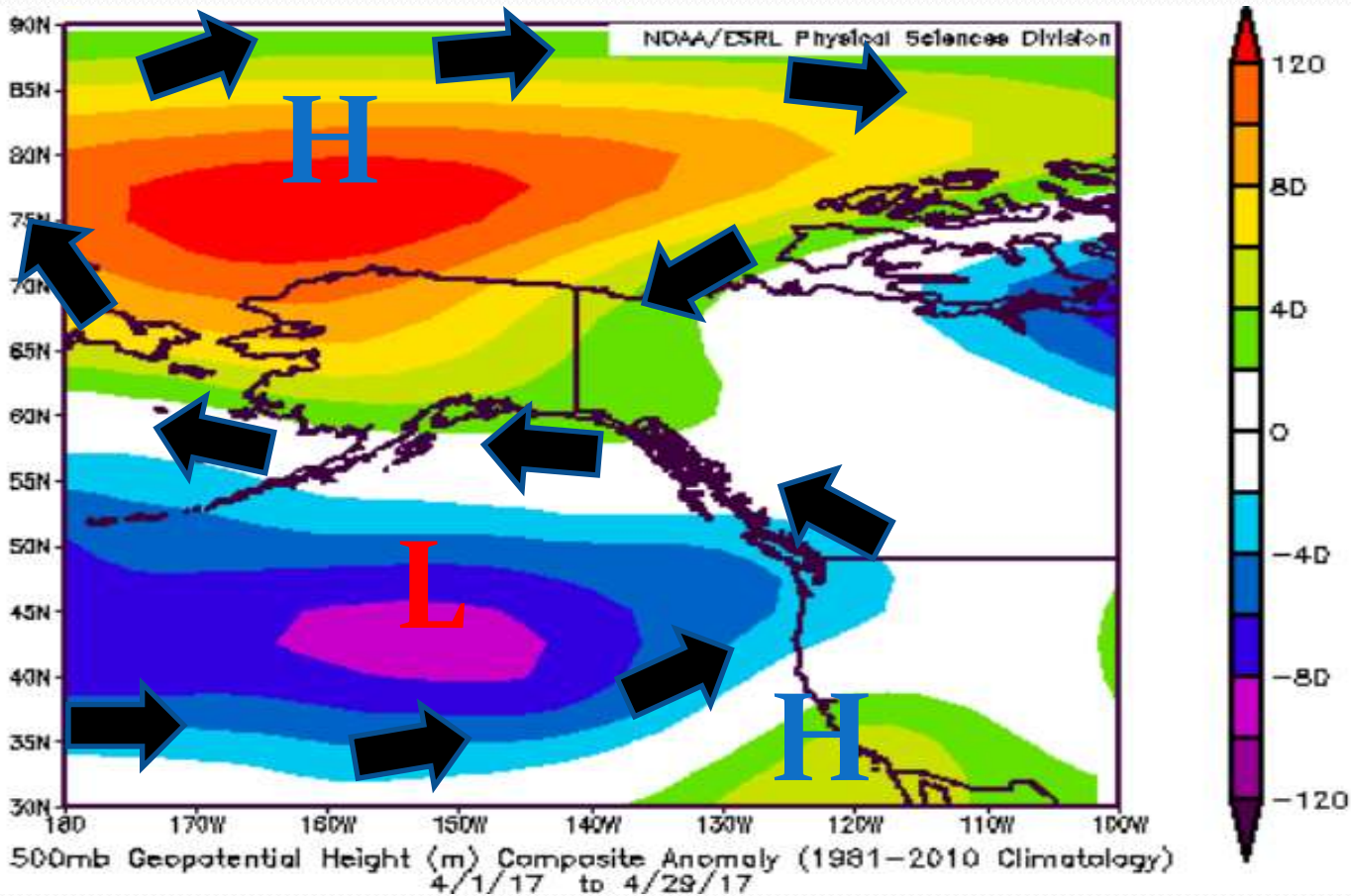
Select April Averages and Departures

	Max T	Max T D	Min T	Min T D	Ave T	Ave T D	PCPN	PCPN D
Yakima	62.9	-0.9	37.6	3.2	50.2	1.1	1.29	0.74
Kennewick	64.7	-1.6	42.5	0.2	53.6	-0.7	1.01	0.45
Walla Walla	62.2	-0.3	43.2	1.2	52.7	0.5	2.10	0.18
The Dalles	61.5	-2.9	41.4	-0.1	51.4	-1.5	1.65	0.86
Redmond	56.9	-2.7	29.8	0.7	43.3	-1.1	0.89	0.16
Pendleton Airport	59.8	-2.3	38.8	-0.4	49.3	-1.4	1.94	0.74
La Grande	56.7	-1.6	34.4	-0.7	45.6	-1.1	1.61	0.03





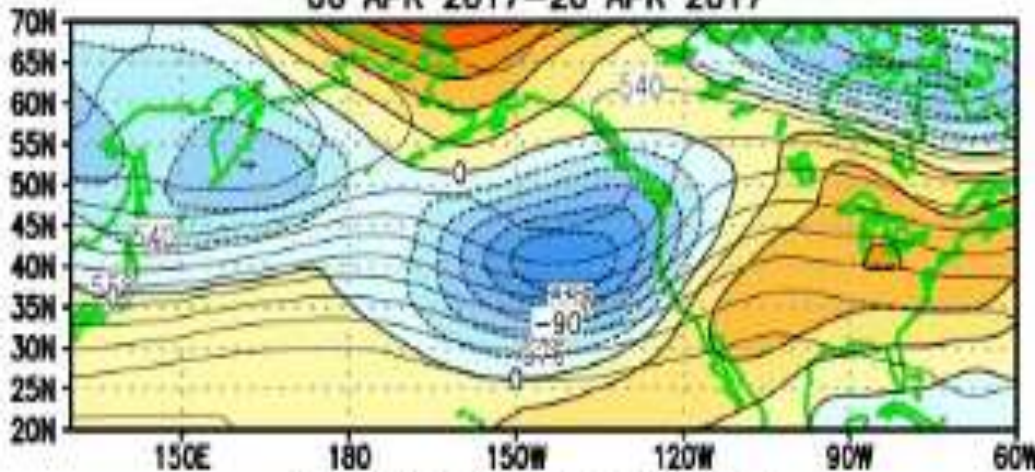
April 2017 Weather Pattern



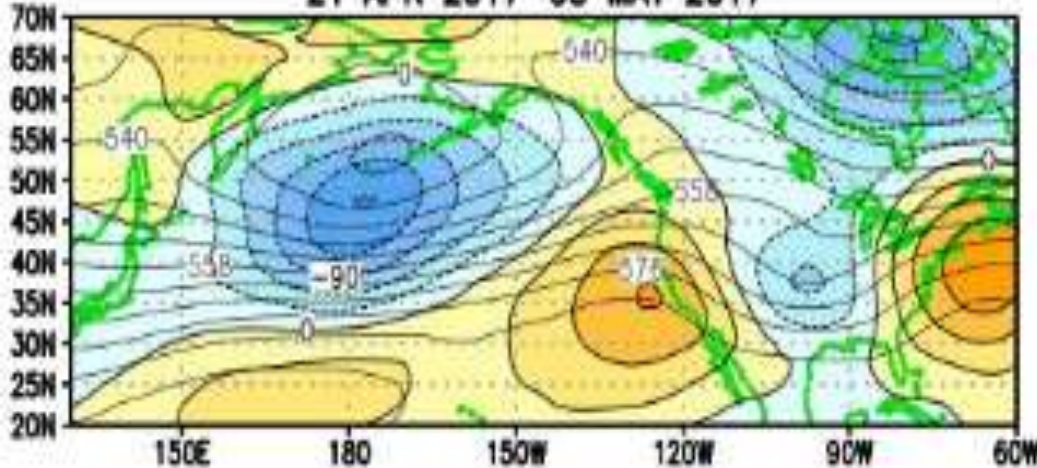
The mean synoptic pattern for the month of April 2017 was characterized by an upper level low pressure system in the southern Gulf of Alaska, which extended into portions of the Pacific NW. A strong area of high pressure remained in place over north-central Alaska. This allowed the Pacific Northwest to be under the influence of a cool, very wet westerly flow on average through the month. April ended with above average precipitation and below average temperatures for much of the area. Mountain snowpack remained well above average through the month as well.

April 2017 Detailed Upper Level Pattern Analysis

06 APR 2017–20 APR 2017



21 APR 2017–05 MAY 2017



- ❖ The first three weeks of April featured a deep upper level trough over the eastern Pacific and into the Pacific Northwest. This kept conditions wet and cool on average.
- ❖ For the last ten days of the month and into the beginning of May a temporary upper level ridge moved along the west coast as the mean trough position retrograded west out of the Pacific. This led to warmer and drier weather by the end of the month.



Daily Record Low Temperatures In April

City	April 2017 Daily Min T	Previous Record Low
Pasco ,WA	27° on 4/11	27° on 4/11/1999
Moro, OR	20° on 4/16	23° on 4/16/1970
Walla Walla, WA	34° on 4/11	34° on 4/11/1954
Pasco, WA	31° on 4/29	31° on 4/29/2014
Sisters, OR	19° on 4/15	19° on 4/15/1983
Baker City, OR	16° on 4/4	17° on 4/04/2001



Daily Precipitation Records In April

City	Daily Precip and Date	Previous Daily Precip Record
Antelope, OR	0.40" on 4/18	0.19" on 4/18/1992
Bickleton, WA	0.64" on 4/13	0.60" on 4/13/1992
Ellensburg, WA	0.79" on 4/13	0.25" on 4/13/2002
Hermiston, OR	0.29" on 4/12	0.06" on 4/12/2005
Pasco, WA	0.42" on 4/17	0.10 on 4/17/2014
Richland, WA	0.49" on 4/17	0.20" on 4/17/1975
Meacham, OR	1.22" on 4/24	0.95" on 4/24/2014
Arlington, OR	0.31" on 4/13	0.30" on 4/13/1937
The Dalles, OR	0.23" on 4/06	0.16" on 4/06/2013



Top 10 April Monthly Precipitation Totals

City	Rank	Apr 2017 Precip	Current or Previous Apr Record Monthly Precip
Ellensburg, WA	#1	1.77"	1.48" in 1941
Boardman, OR	#2	1.68"	2.11" in 1963
The Dalles, OR	#3	1.65"	1.89" in 1990
Mitchell, OR	#3	2.49"	2.74" in 2010
Antelope, OR	#3	2.44"	2.65" in 1983
Arlington, OR	#4	1.55"	3.46" in 1988
Bickleton, WA	#5	1.84"	2.11" in 1963



Top 10 April Monthly Precipitation Totals (Cont'd)

City	Rank	Apr 2017 Precip	Current or Previous Apr Record Monthly Precip
Meacham, OR	#6	4.84"	6.76" in 2011
Yakima, WA	#6	1.29"	1.83" in 1995
Pendleton Exp Sta.	#7	2.84"	3.64" in 1974
Tri-Cities, WA	#8(T)	1.19"	1.85" in 1969
John Day, OR	#8	2.08"	3.19" in 1978
Condon, OR	#9	2.22"	3.68" in 1988
Easton, WA	#10	2.93"	5.26" in 2013

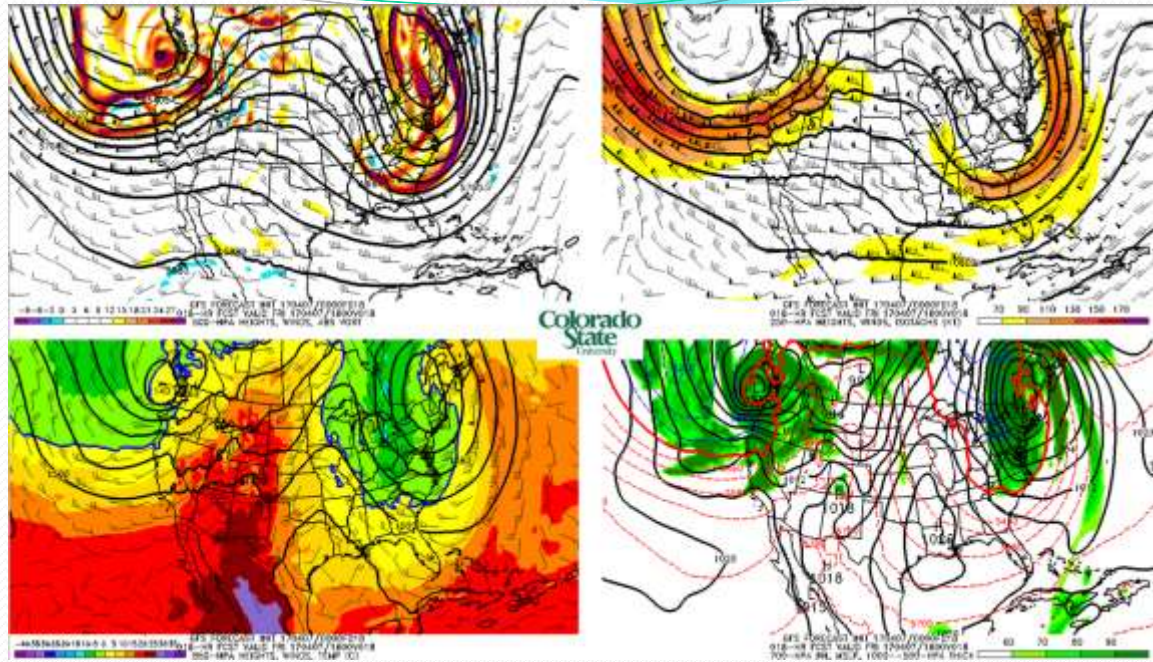


April

Significant Weather

April 7th Strong, Damaging Winds

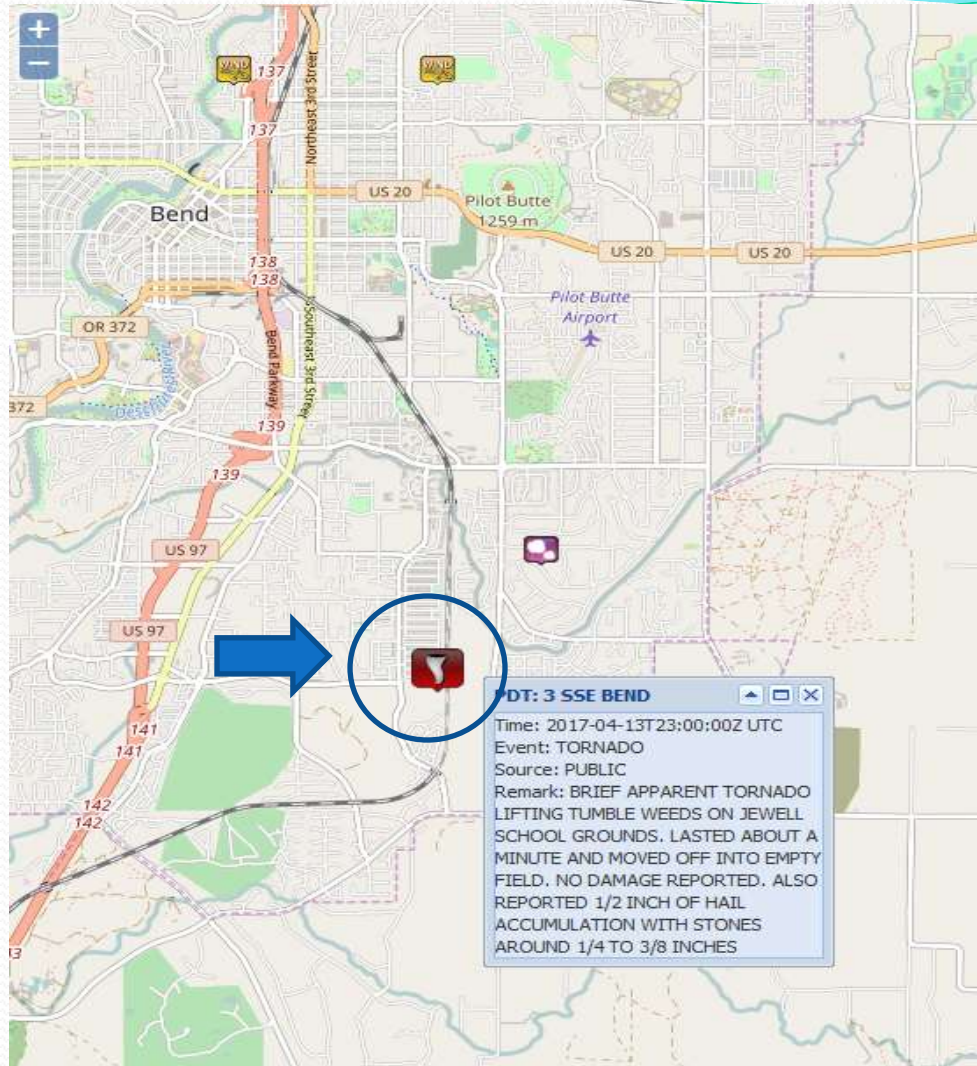
Location	Peak Wind Gusts
Shaniko, OR	77 MPH
Ellensburg, WA	72 MPH
Heppner, OR	65 MPH
La Grande, OR	64 MPH
Pendleton, OR	59 MPH
Walla Walla, WA	59 MPH
Bend, OR	54 MPH
Dayton, WA	53 MPH
John Day, OR	51 MPH
Redmond, OR	51 MPH
Hermiston, OR	49 MPH
Yakima, WA	49 MPH



Tree took down lines with it, blocking Brosterhouse Road near Rolan Avenue in southeast Bend on Friday (Photo: Ben Timson)

A strong low pressure system moved into the area. A tight pressure gradient and strong winds aloft lead to widespread strong wind gusts. Numerous trees were toppled or snapped...especially in Central Oregon. Widespread power outages were reported near Bend, along with some roads being impassable for a time.

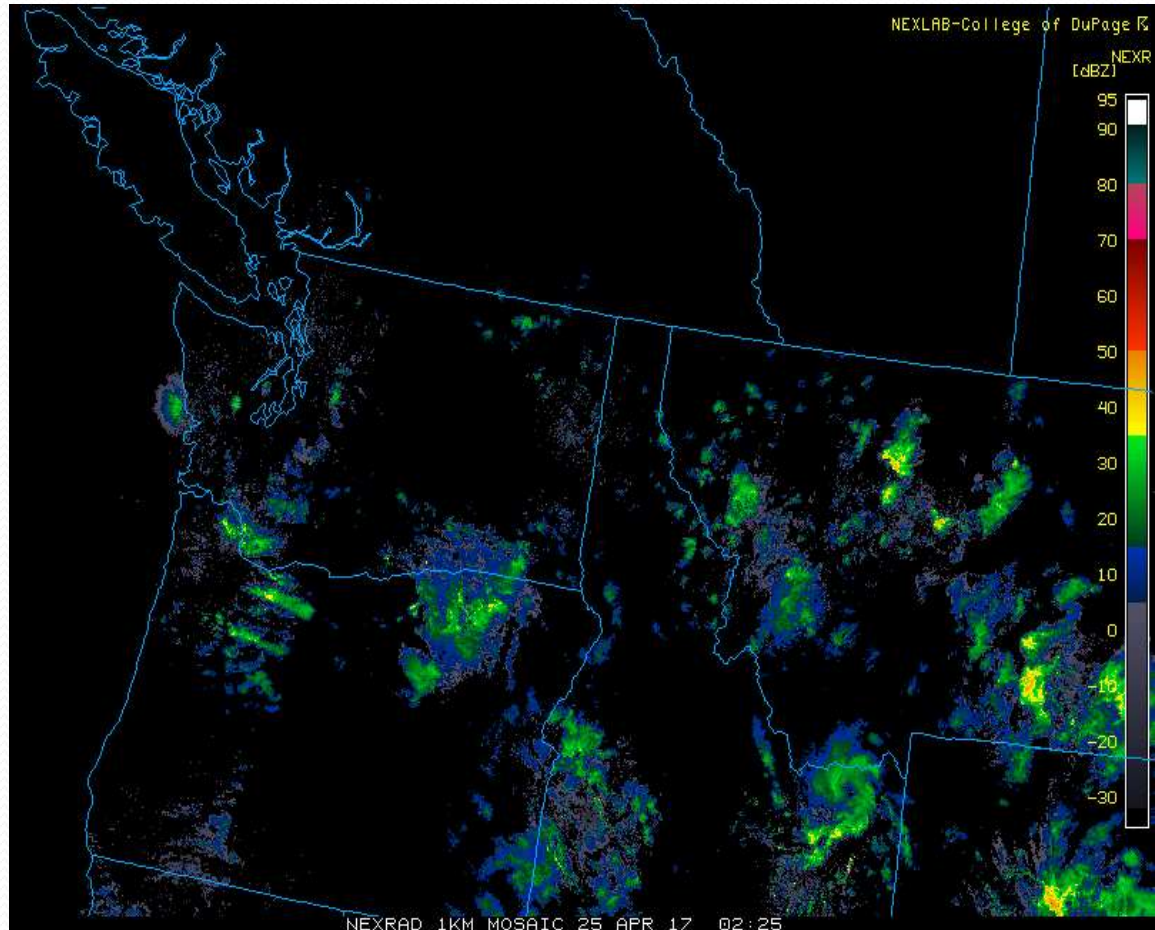
April 13th Weak Tornado Near Bend, OR



BRIEF APPARENT TORNADO LIFTING TUMBLE WEEDS ON JEWELL SCHOOL GROUNDS. LASTED ABOUT A MINUTE AND MOVED OFF INTO EMPTY FIELD. NO DAMAGE REPORTED. ALSO REPORTED 1/2 INCH OF HAIL ACCUMULATION WITH STONES AROUND 1/4 TO 3/8 INCHES. 2 INCHES OF HAIL ACCUMULATED NEARBY.

April 23 – 28th Heavy Rain Event

Location	Rainfall Total
Meacham	2.56"
Trout Lake (WA)	1.13"
Walla Walla	0.99"
Easton	0.90"
Heppner	0.81"
Pendleton	0.67"
La Grande	0.66"
Echo	0.55"
Snowden	0.47"
Mt Adams RS	0.44"
Hermiston	0.41"
Pasco	0.34"
The Dalles	0.21"

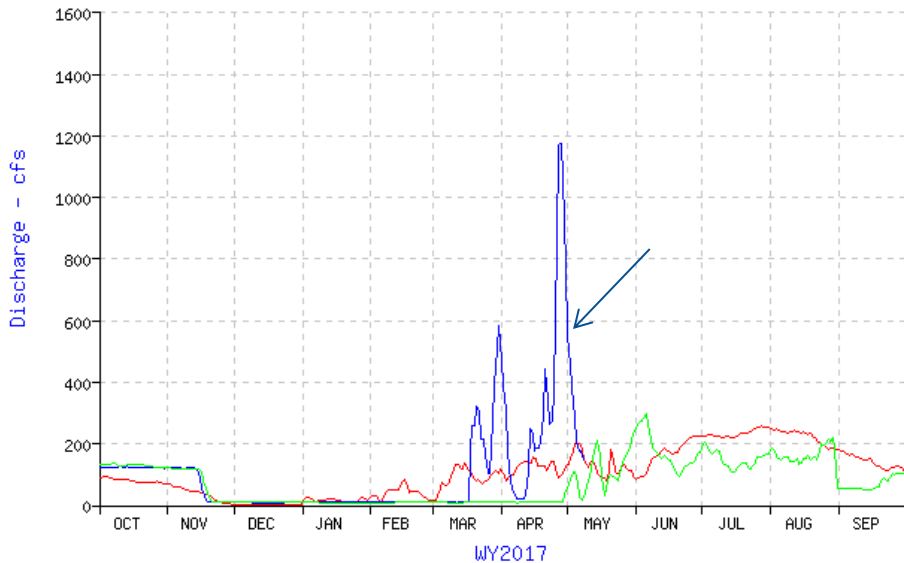


Several frontal systems moved through the area during this time. A few, locally heavy bands of rain setup, especially over the Blue Mountains and the Blue Mountain foothills. Over 2 ½ inches of precipitation was reported at Meacham during this time (it actually started as snow here)

April 25 – 28th Water Rises on McKay Reservoir and Creek

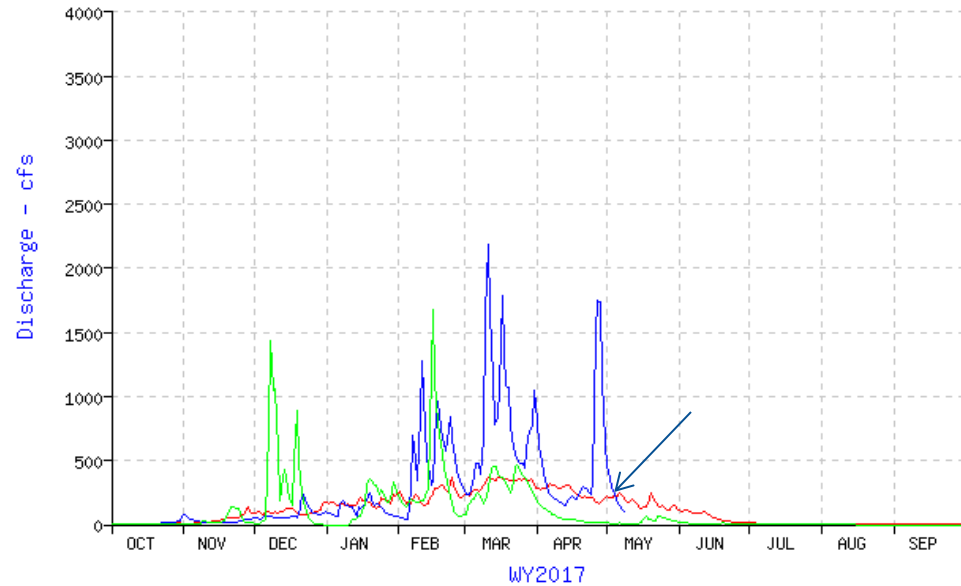
McKay Creek near Pendleton MCKO

- Current Year
- Previous Year
- Average



McKay Creek near Pilot Rock MYKO

- Current Year
- Previous Year
- Average



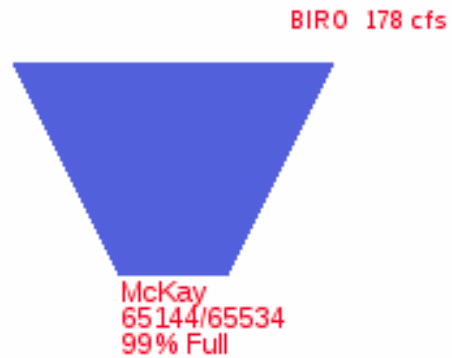
05/08/2017 05:44

Heavy rainfall and some high mountain snow melt caused rapid rises within the upper Umatilla River Basin...specifically on the upper McKay Creek. Officials had no choice but to increase the McKay Creek outflow from the reservoir to 1200 CFS as the reservoir reached near capacity levels. This caused McKay Creek to run at or just above bankfull through the city of Pendleton. Water flowed onto some yards as it went through Pendleton. See photo Right.

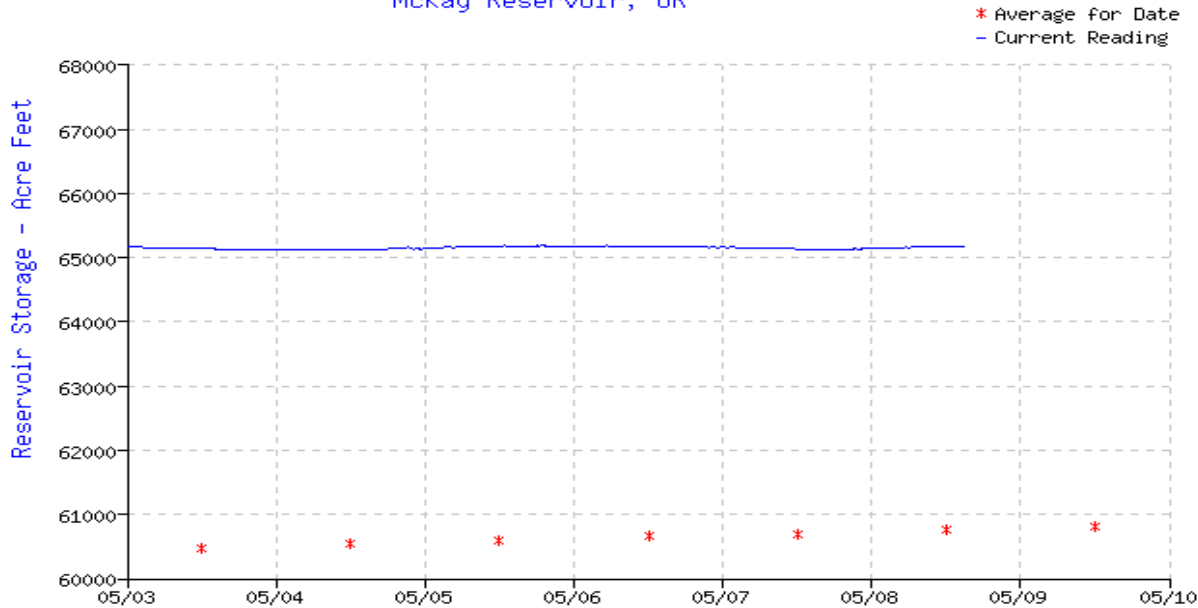


McKay Creek at Community Park, Pendleton, OR
Photo Courtesy of Joe Solomon, NWS PDT

McKay Reservoir Reaches Capacity



McKay Reservoir, OR

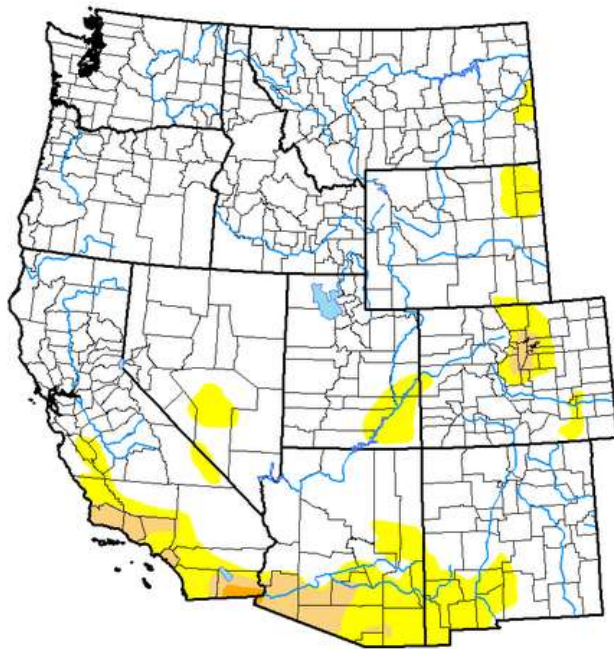


Drought Ends in Pacific NW

U.S. Drought Monitor West

May 2, 2017
(Released Thursday May 4, 2017)
Valid 8 a.m. EDT

Statistics type: Traditional Percent Area Export table: [PNG](#) [CSV](#) [XLS](#)



Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current 2017-05-02	87.17	12.83	2.72	0.16	0.00	0.00
Last Week 2017-04-25	81.90	18.10	3.82	0.16	0.00	0.00
3 Months Ago 2017-01-31	70.84	29.16	13.38	2.83	0.25	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 2016-05-03	43.75	56.25	33.05	13.85	8.71	2.81

Estimated Population in Drought Areas: **14,008,014**

[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):

Brian Fuchs, National Drought Mitigation Center

Download: [PNG](#) [PDF](#) [JPG](#)

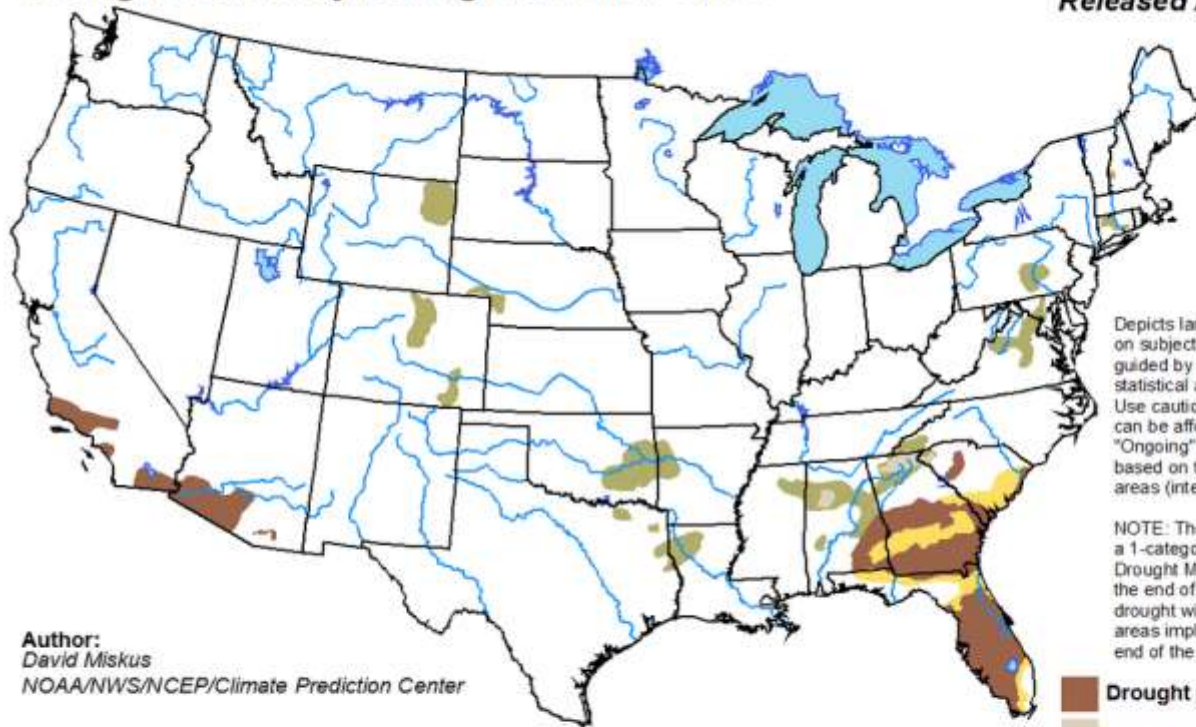
Drought conditions are no longer being reported in either Washington or Oregon at this time. Much of the western US has seen significant improvements since the beginning of the water year. Extreme or exceptional drought conditions no longer exists in the western US at this time. Only a very small area of severe drought remains in Southern California near the Mexican Border.



May Drought Outlook

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





Valid for May 2017
Released April 30, 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).

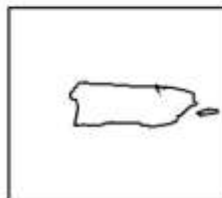
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

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>



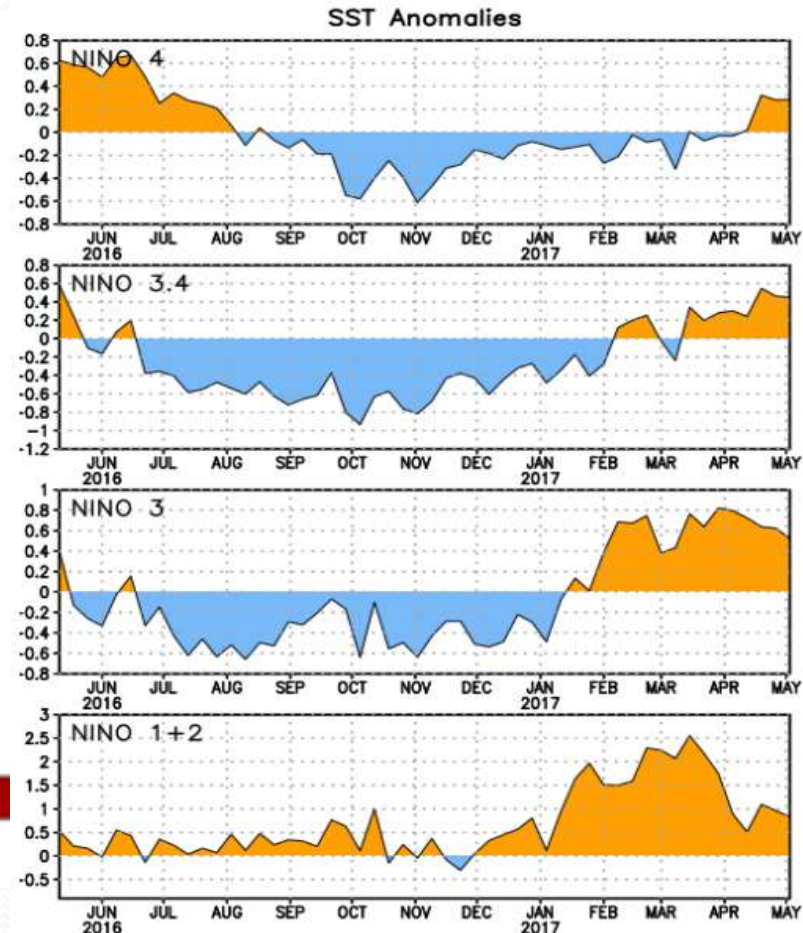
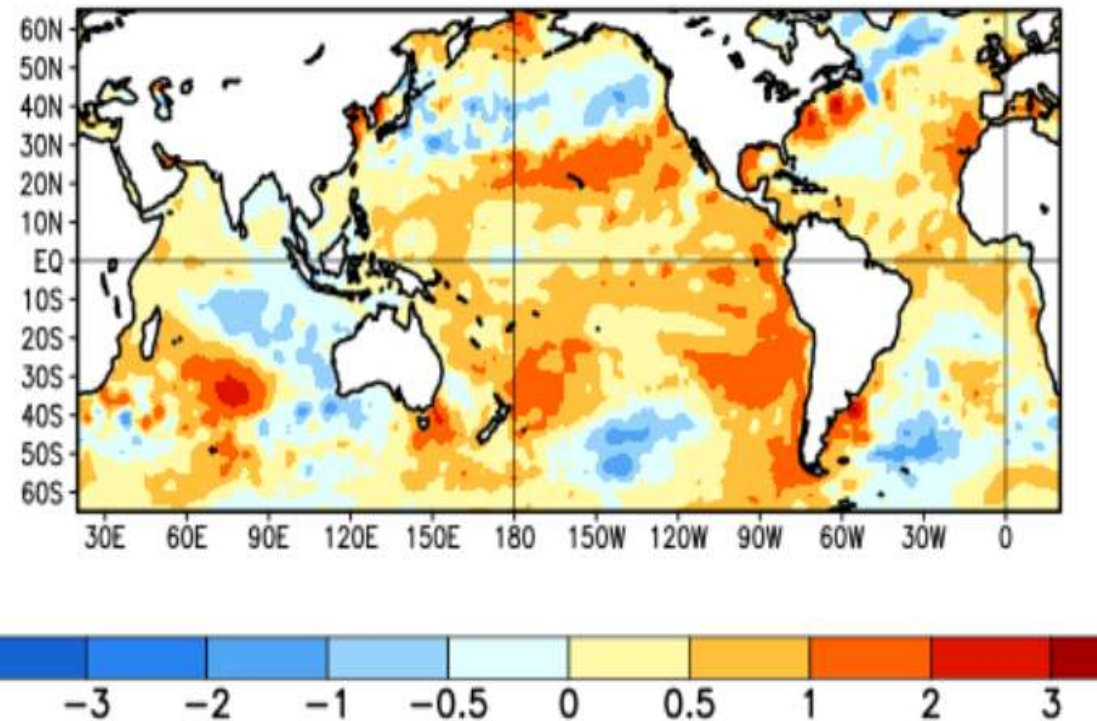
The monthly drought outlook for May from the CPC indicates drought development is not expected in the Northwest through the coming month. A deep mountain snow pack remains in many locations, and this should help to maintain the water supply into the Summer months.



ENSO Neutral Conditions Prevail



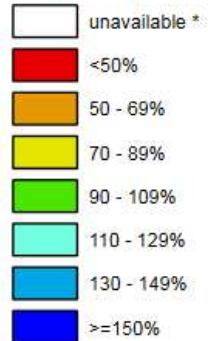
Average SST Anomalies
9 APR 2017 – 6 MAY 2017



ENSO neutral conditions are present. Sea Surface Temperatures (SSTs) are near to slightly above average across the central and east-central Pacific. SSTs are above average in the eastern Pacific. ENSO neutral conditions are favored through the spring months, with increasing chances for El Niño development into the fall.

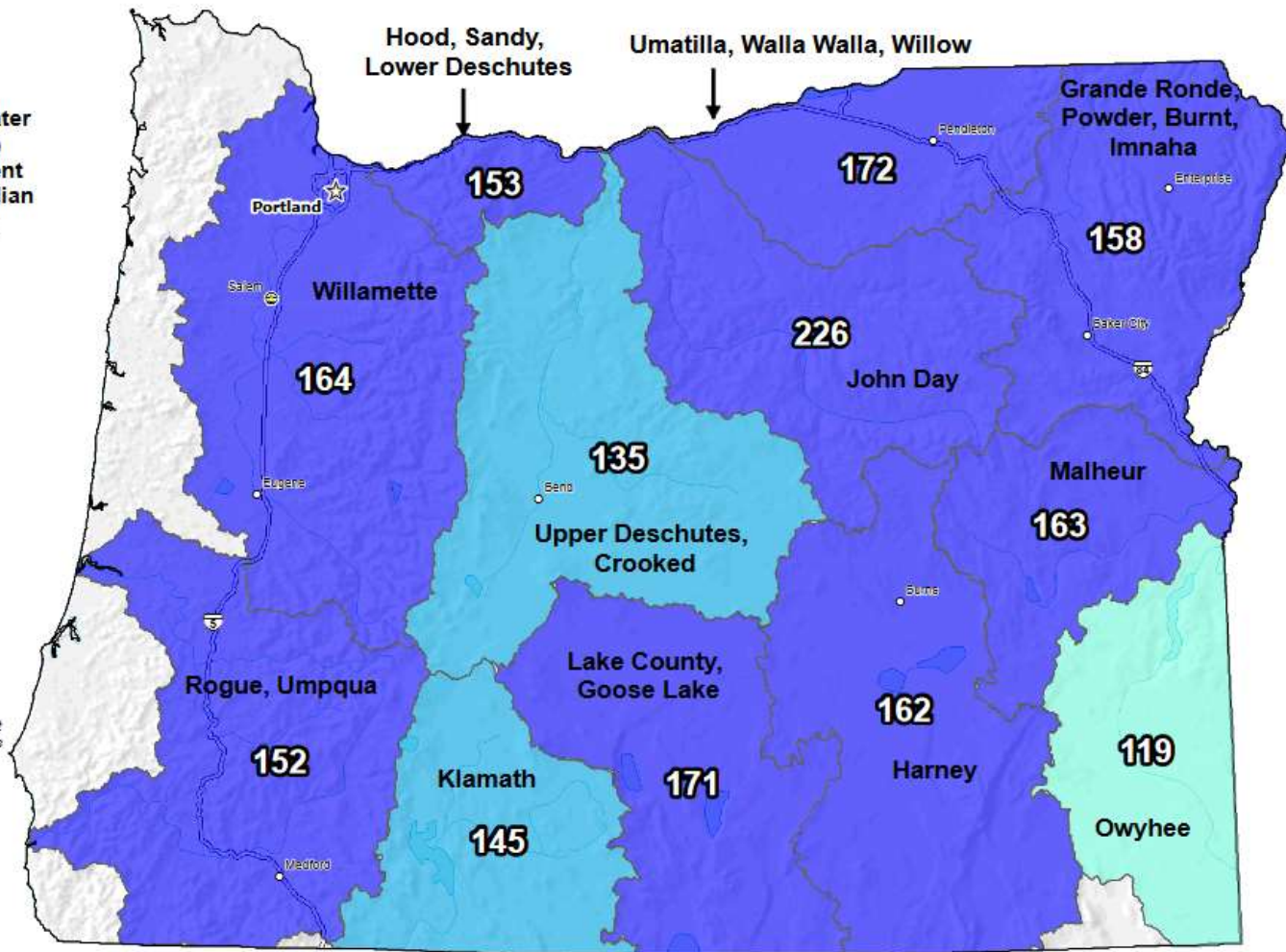
Oregon SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



* Data unavailable at time of posting or measurement is not representative at this time of year

*Provisional Data
Subject to Revision*



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

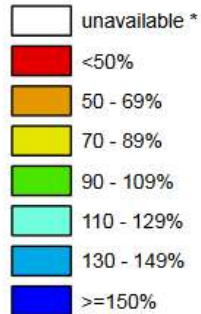
0 10 20 40 60 80 100 Miles

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

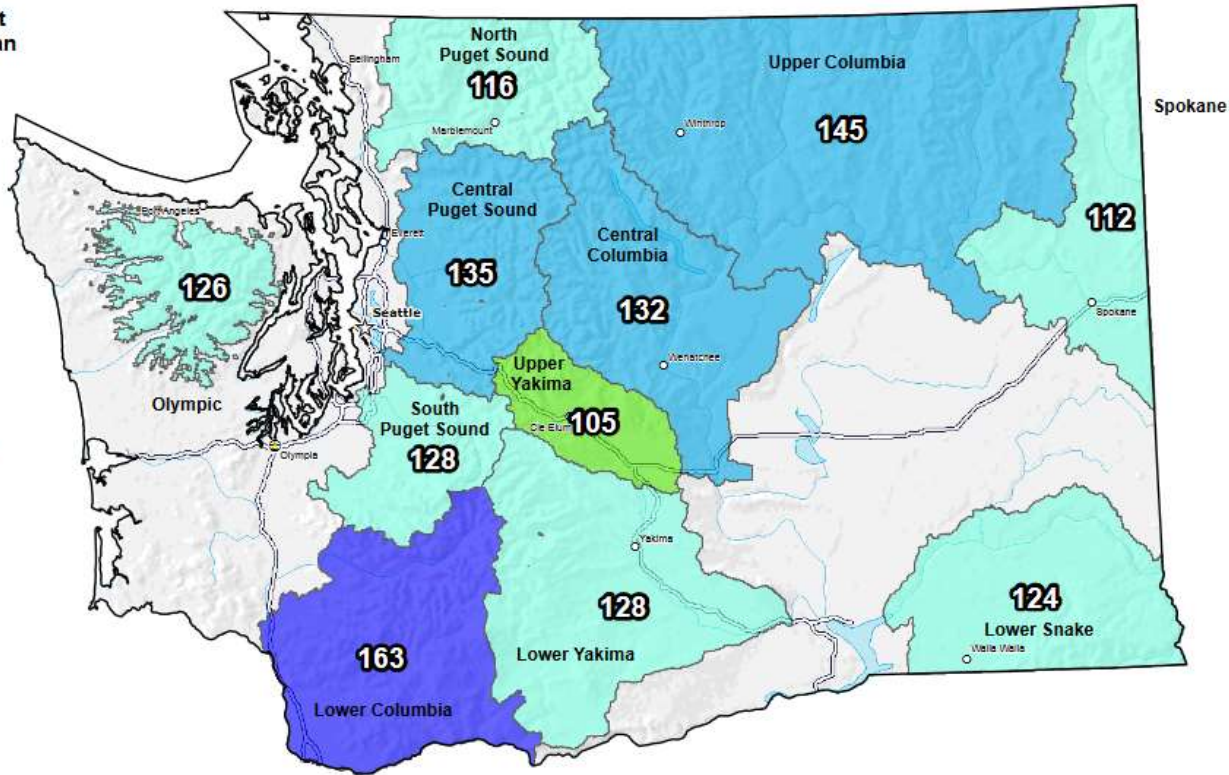
Snow pack is running between about 120 to 230 percent of normal across Oregon as of May 1st 2017. Deep snow remains in the higher mountains across the region. The lower and mid elevation snowpack (up to about 4000 feet) has mainly melted out.

Washington SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



* Data unavailable at time of posting or measurement is not representative at this time of year



Provisional Data
Subject to Revision



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

The snow pack has increased in terms of averages through the month of April. Statewide snow pack is now running between about 105 to 165 percent of normal. Deep snow pack remains above about 3000 feet in most locations. Lower elevations have limited to no snow pack remaining.

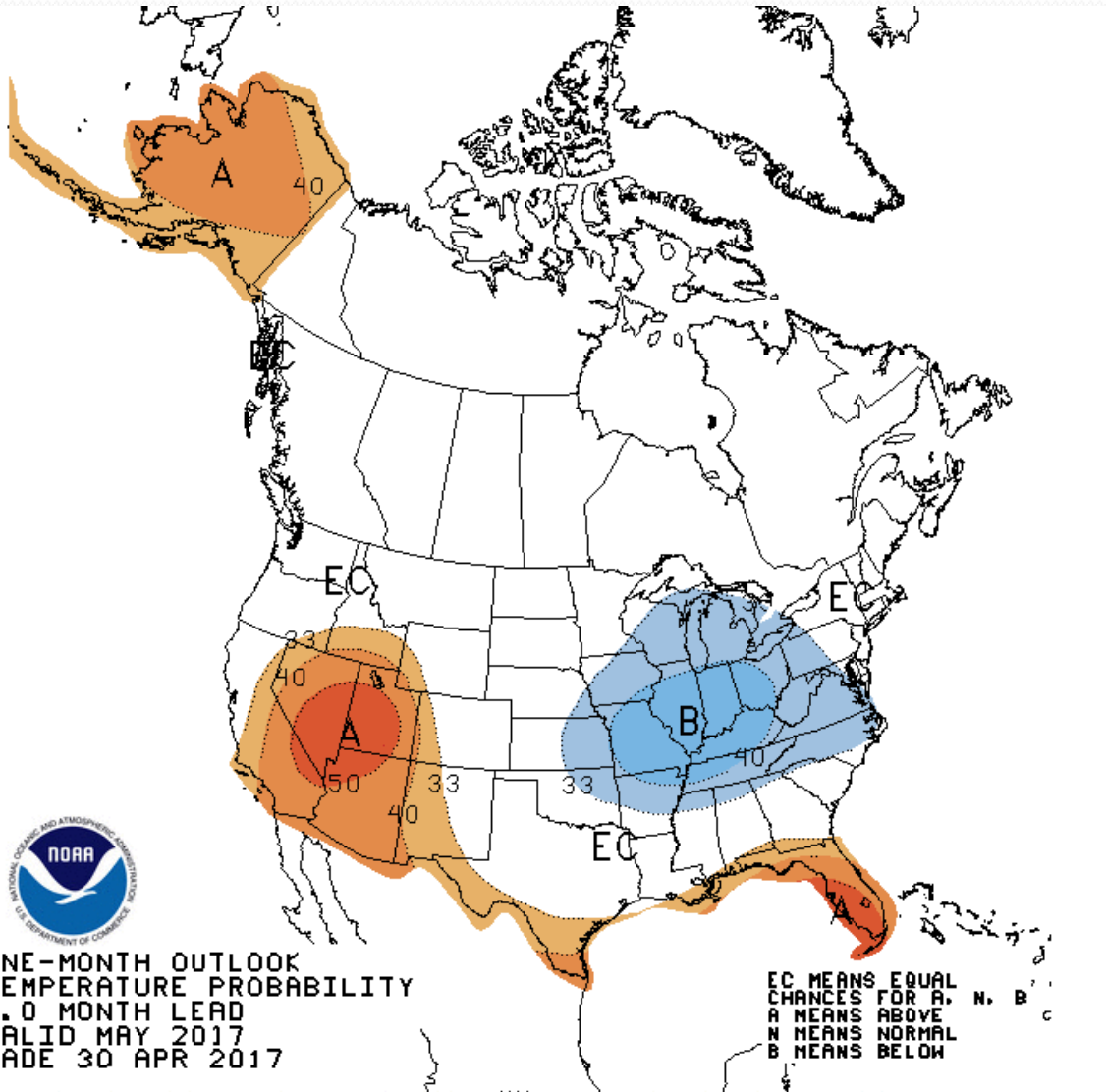


May Outlook

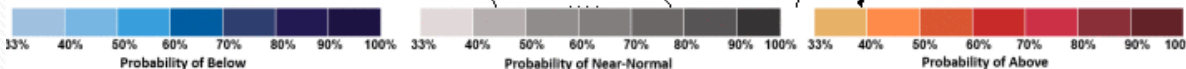
May Temperature Outlook

This graphic is issued by the Climate Prediction Center or CPC and is the Temperature Outlook for the month of May. The cool colors indicate a greater chance of below normal temperatures (none) and the warm colors represent a greater chance of above normal temperatures. The time period for the normals runs from 1981-2010.

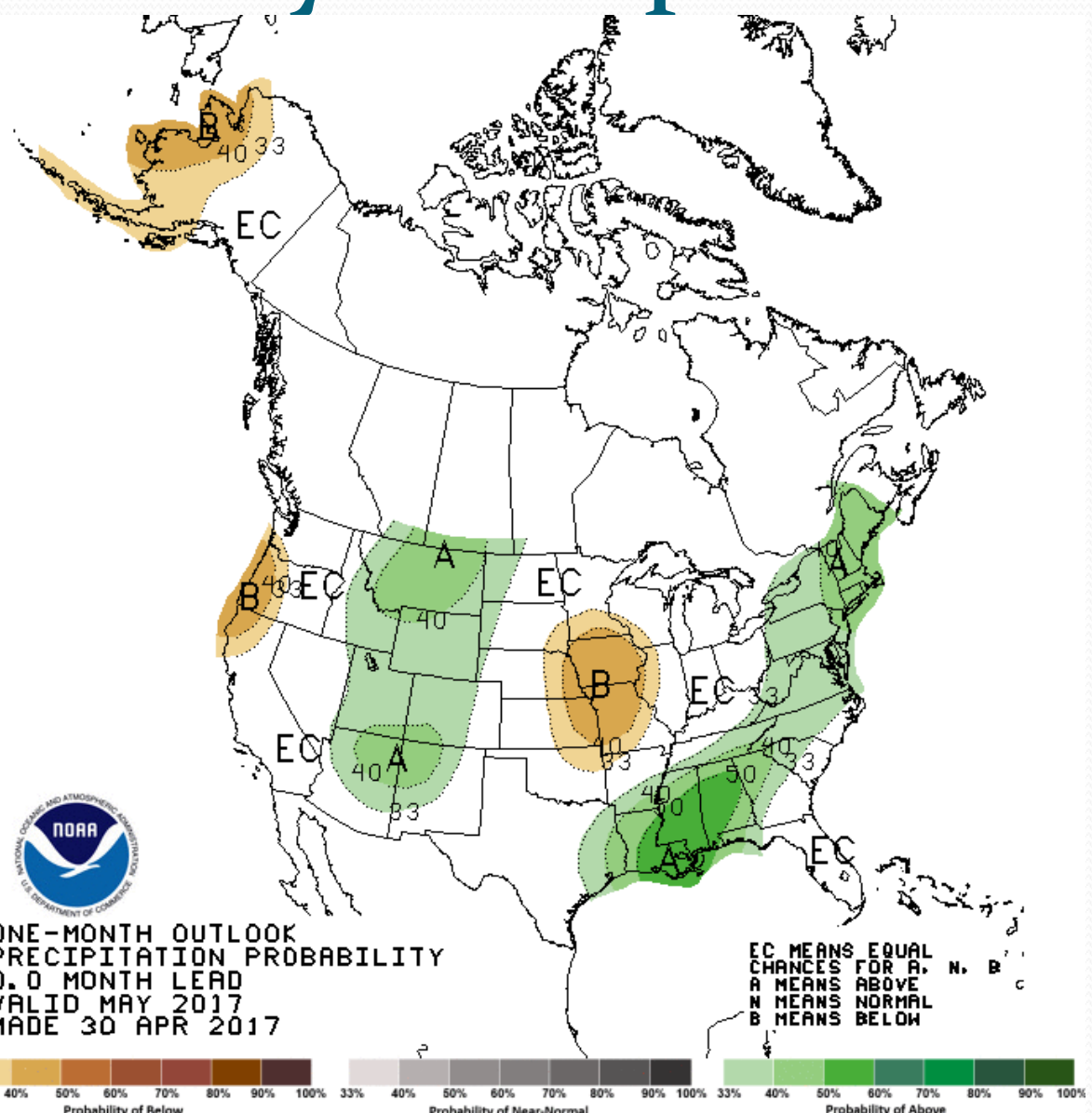
There are equal chances for above, below or near normal temperatures across the Pacific Northwest in May. The Southwest US has higher chances for above normal temperatures, while the Ohio Valley region has higher chances for below normal temperatures through the month of May.



ONE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.0 MONTH LEAD
VALID MAY 2017
MADE 30 APR 2017



May Precipitation Outlook



This graphic is CPC's Precipitation Outlook for the month of May. The green colors represent a greater chance of above normal precipitation, and the brown colors represent a greater chance of below normal precipitation. Over western Oregon there are greater chances for below normal precipitation for the month of May as a whole. For the interior Pacific Northwest, there are equal chances for above, below or near normal precipitation amounts through the month of May. The Rocky Mountains, lower Mississippi Valley, and much of the East Coast have higher chances for above average precipitation totals through May.



Thank You!