National Weather Service Medford

October 2016 Climate Summary

DN. EATHER OF

*These data are preliminary and have not undergone final QC by NCEI. Therefore, these data are subject to revision. Final and certified climate data can be accessed at the <u>National Centers for Environmental Information (NCEI)</u>.

October 2016 Weather Review

October 2016 began with a quiet weather pattern but quickly turned active halfway through the month. The first week was quite cool with a few weak storms followed by a dry period with above normal temperatures for the second week. The weather pattern changed dramatically at the midpoint of the month with back to back significant storms. The second storm in this series contained remnants of Typhoon Songda. The leftover moisture and energy from this typhoon brought copious amounts of rain to the area along with hurricane force wind gusts to coastal locations and over the marine waters. Strong winds inland also brought numerous power outages and downed trees. Winds were strong enough on Sexton Summit to blow over a semi-truck which caused long delays on Interstate 5. These winds also caused a tree to fall on a house in Harbor located on the coast. While it was windy for the majority of the area, the Medford area was spared the brunt of the winds thanks to the sheltering nature of the Rogue Valley. The rainfall from this system delivered October's normal *total* monthly precipitation in a matter of a few days for most areas. However, considering this was the first significant rainfall after the dry season, there was no flooding of main stem rivers. However, urban flooding and standing water on city streets did occur from this storm.

The storm track remained over southern Oregon for the rest of the month bringing a nearly continuous series of storms that were more typical for October. Temperatures in the last half of October were generally just below normal.

October 2016 Observed Temperatures





Average & Record Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	57-5	+4.1	63.2	+2.3	51.9	+5.9
Roseburg	57.5	+2.0	64.7	-1.6	50.3	+5.5
Medford	55-4	-0.6	64.5	-5-4	46.3	+4.3
Klamath Falls	46.0	-1.0	57.6	-5-3	34-4	+3.4
Montague, CA	51.0	-0.8	62.8	-4.8	39.1	+3.1
Mt. Shasta City, CA	49.8	-1.4	59-9	-6.1	39.7	+3.2
Alturas, CA	48.3	+1.6	61.4	-3.8	35.2	+6.9

Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	70°	9 th	46°	22 nd & 31 st
Roseburg	78°	8 th	42°	28 th
Medford	83°	8 th & 9 th	40°	23 rd
Klamath Falls	76°	9 th	23°	1 st & 2 nd
Montague, CA	82°	9 th	31°	6 th & 19 th
Mt. Shasta City, CA	80°	8 th	30°	1 st
Alturas, CA	79°	8 th	21°	2 nd

October 2016 Observed Precipitation



Precipitation

	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	13.98″	+9.25″	3.52″	13 th
Roseburg	8.89″	+6.22″	1.64″	13th – 14 th
Medford	5.49″	+4.36″	1.81″	13 th – 14 th
Klamath Falls	2.48″	+1.43″	0.54″	13th – 14 th
Montague, CA	4.18″	+2.98″	0.83″	15 th
Mt. Shasta City, CA	11.87″	+9.59″	2.16″	29 th – 30 th
Alturas, CA	1.47″	+0.46″	0.41″	15 th





Daily Rainfall Records*

	10/13	10/14	10/15	10/16
North Bend	3.52" Old record: 2.10" in 1935			
Roseburg	1.5" <u>Old record:</u> 1.01" in 1935			1.35" <u>Old record:</u> 0.75" in 1969
Medford	1.33″ <u>Old record:</u> 0.47″ in 1980			1.12" Old record: 0.56" in 1969
Klamath Falls		0.42″ <u>Old record:</u> 0.39″ in 1962		
Montague, CA			0.83″ Old record: 0.23″ in 1951	0.57" <u>Old record:</u> 0.32" in 1969
Mt. Shasta City, CA			1.85" <u>Old record:</u> 0.90" in 1924	

October 2016: One of the Wettest Octobers on Record*

Station:	October 2016 Ranking:	#1:
North Bend	1 st	New Record
Roseburg	2 nd	12.53" in 1950
Medford	4 th	9.16" in 1950
Klamath Falls	3 rd	4.68" in 1962
Montague, CA	1 st	New Record
Mt. Shasta City, CA	2 nd	13.88" in 1950
Alturas, CA	5 th	2.90" in 2004

*A note about Period of Record (POR)

When looking at record setting events, it's important to consider the length and completeness of the site's period of record (POR). For example, a site may have records back to the early 1900's, but if there is a significant portion of the record missing, it's possible that the POR is not encompassing another significant event that may have surpassed the event in question. Therefore, "record setting" should be considered relative to the completeness/length of POR. To help keep records in context, the POR for each climate site is listed below:

- North Bend: 1/1/1902 Present
- <u>Roseburg</u>: 4/1/1900 Present
 - ✤ Missing:
 - ▶ 05/1900-01/1901
 - ➢ 03/1901-06/1902
 - ➢ 08/1902-12/1930
 - ▶ 10/1965-06/1997
- <u>Medford</u>: 3/11/1911 Present
- <u>Klamath Falls</u>: 1/1/1948 Present
 - Missing:
 - ▶ 08-10/1970
 - 1971-10/1997

- Montague, CA: 7/1/1948 Present
 - ✤ Missing:
 - ▶ 08-09/1952
 - ▶ 02/1953-06/2000
- Mount Shasta City, CA: 4/15/1948 Present
 - ✤ Missing:
 - ➢ 10/1984-01/1985
 - ▶ 10/1985-03/1986
 - ➢ 09/1986-07/1997
- <u>Alturas, CA</u>: 6/1/1998 Present
 - ✤ Missing:
 - ▶ 08/1998

Crater Lake

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 10/31/16	Highest Max/ Lowest Min
October	41.7°	29.5°	14.78″	39.6″	4″	59° on 9 th / 21° on 19 th
Normal (1981-2010)	52.0°	30.0°	4.42″	18.3″	N/A	N/A



Drought Outlook: November





Valid for November 2016 Released October 31, 2016

http://www.cpc.ncep.noaa.gov/products/expert_assessment/ month_drought.png

Looking Ahead: Normals for November (1981-2010)

November is a key month for the wet season and results in the second greatest single month precipitation totals across the area, on average. Snowpack usually starts to accumulate, and the historic snow depth is 7 inches, on average, at Crater Lake NP Headquarters at the beginning of the month and 29 inches by the end of the month. More appreciable snow is usually experienced above 7,000 feet. Typical daily high temperatures are in the 30s and 40s in the mountains, in the 40s for valleys east of the Cascades, and in the 50 to 60 degree range in the valleys west of the Cascades. Daily low temperatures are in the 20s from the Cascades eastward, and in the 30s and 40s from the Cascades westward. Precipitation is usually an inch or more for most of the forecast area, with 8 inches or more for all mountainous areas from the Cascades westward. Valleys west of the Cascades generally get 2-8 inches of water, while the valleys east of the Cascades doubles areas the Cascades generally get 2-8 inches of precipitation.



November 2016 Outlook

The official CPC forecast calls for increased chances of above average temperatures and increased chances for above average precipitation. Recent trends however, indicate precipitation is more likely to be near normal with temperatures above normal. During the first 10 days of the month, appreciable frontal systems are expected, especially for the areas along and near the coast and west of the Cascades. Expansive high pressure is then expected to bring a halt to the storm track for about the middle 10 days of the month. Ensemble model forecast trends indicate an unusual amount of uncertainty for late November, but generally indicate a trend toward normal or even cooler than normal conditions for the last 10 days of the month. Precipitation is expected to return during the final week of the month.



Expected Impact, November 2016:

After an unusually wet and mostly cool October, mainly due to cloud cover and cooler than normal high temperatures, November looks to be mild and more typical of Autumn in the Pacific Northwest. Altogether, we normally expect that west side areas that have not yet experienced frost and freeze to receive their first frost and freeze in November. In recent years late November has brought the first real cold weather outbreak of the season and first east side valley and mountain pass impacting snowfall. While there is significant uncertainty for the latter half of November, overall expectations are for continued hydrologic benefits, including some snow accumulation in the mountains and the beginning of the season snowpack for some elevations under 7kft. At this time we do not see any storm series that look like flood producers. Altogether, the milder than normal conditions expected will be a bit of a reprieve from the cooler weather experienced in October.

