National Weather Service Medford

September 2016 Climate Summary

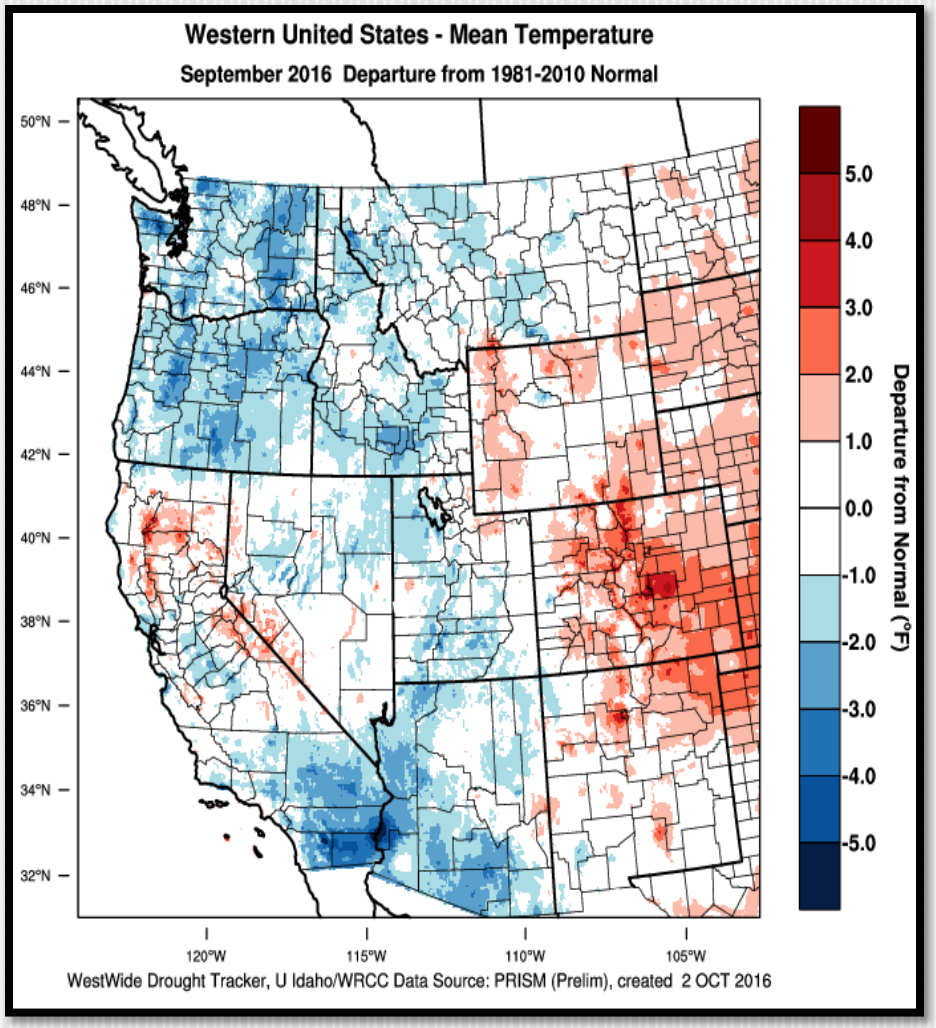
*All data are considered preliminary and are subject to change per quality control standards performed at NCEI.

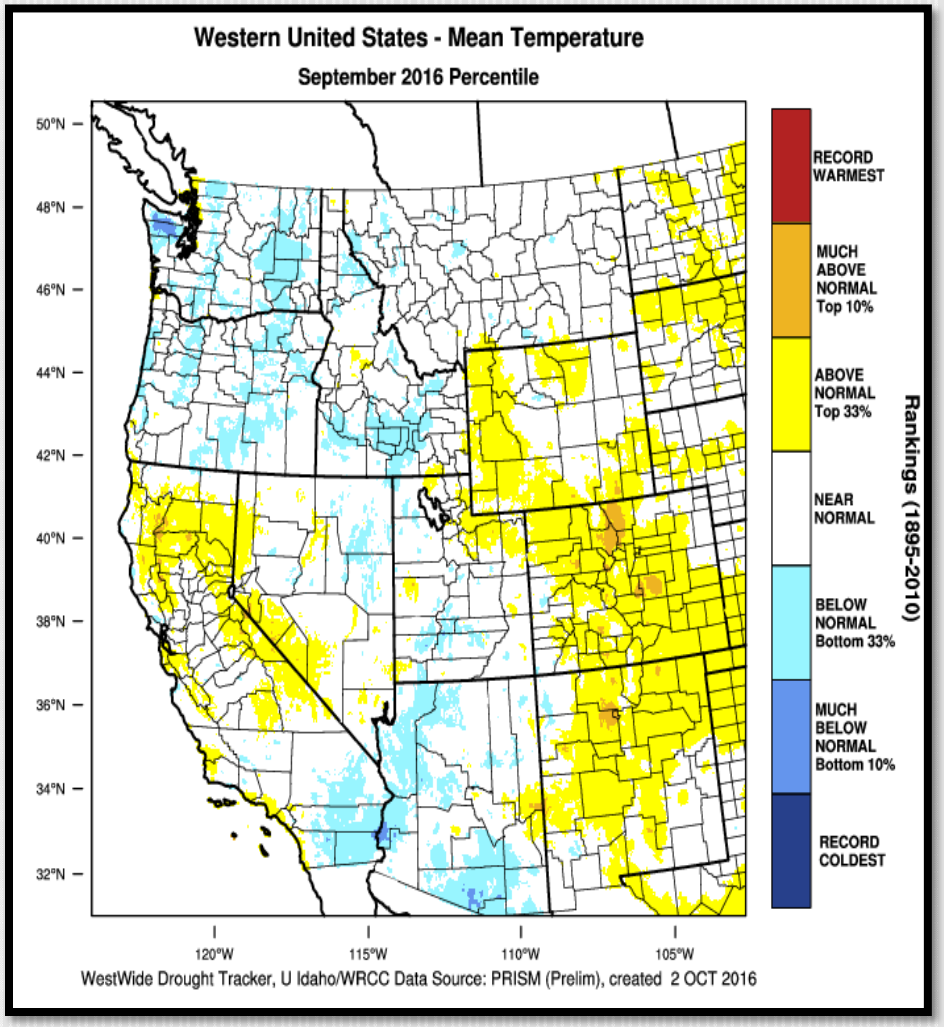
September 2016 Weather Review

September 2016 was fairly quiet in terms of active weather. Most of the systems that moved through during the month only delivered precipitation to the coast and areas north of the Umpqua Divide. These systems however, caused temperatures take a roller coaster pattern with periods of warmer than normal alternating with periods of cooler than normal temperatures.

The month started out on a seasonable note, which was a welcomed break from the very warm temperatures that ended the month of August. Just as we thought fall was here to stay, summer returned with high temperatures rebounding to above normal values once again. Around the third week of the month, an upper low moved through the area, dropping temperatures and ending the dry streak for much of the area. Only 0.01" was recorded with this system in Medford, but this ended the 73 day streak of non-measureable precipitation. The fall-like weather didn't stay long, as summer's last gasp brought us another dose of very warm temperatures for a few more days. During this time, the Chetco effect was in full swing, and Brookings, OR reported 100 degrees on the 25th! As September came to a close, an upper level trough was settling over the area and fall-like conditions returned once again.

September 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	59.2	+1.8	67.5	+2.7	51.0	+1.0
Roseburg	65.7	+0.8	79.8	+1.2	51.7	+0.5
Medford	67.1	+0.3	83.5	0.0	50.7	+0.7
Klamath Falls	55.9	-1.5	75.3	-0.5	36.5	-2.6
Montague, CA	62.6	+0.4	82.2	+0.9	43.0	-0.1
Mt. Shasta City, CA	62.4	+1.9	79.3	+1.3	46.5	+3.5
Alturas, CA	57.1	+0.8	78.5	+0.9	35.8	+0.8

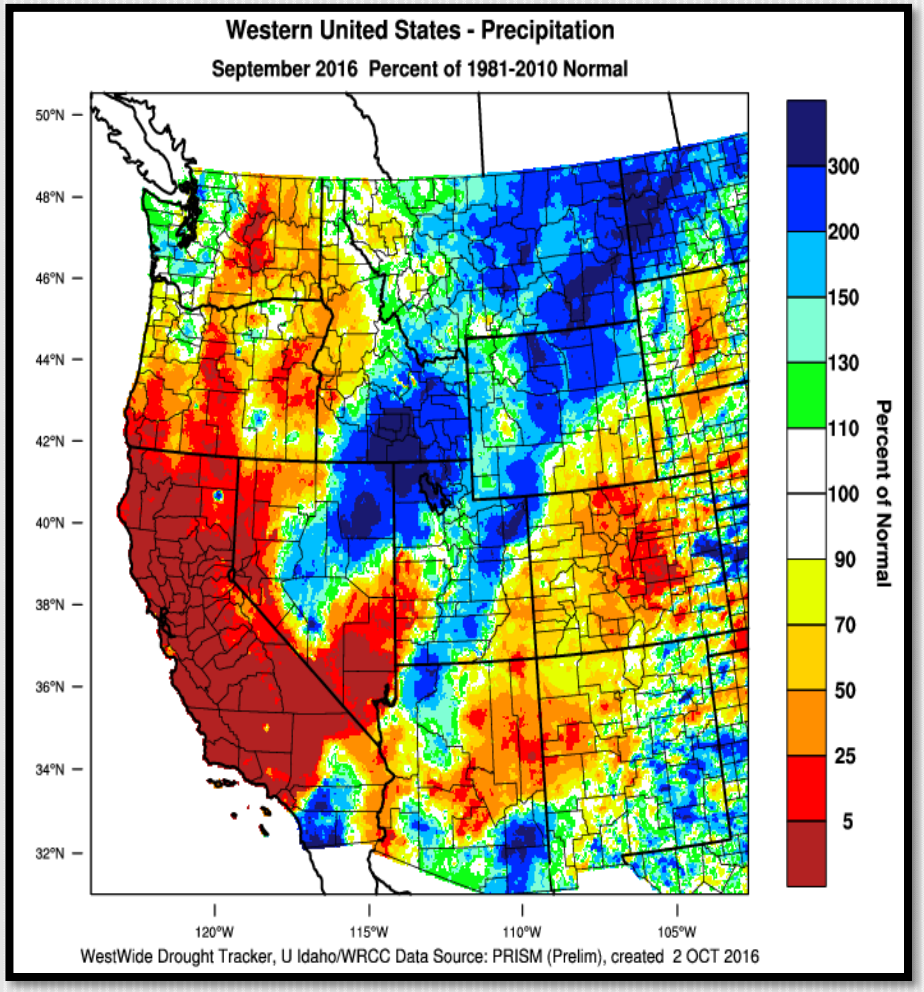
Record *High* Temperatures	Date/ Temperature (°F)
Roseburg	26th / 95°

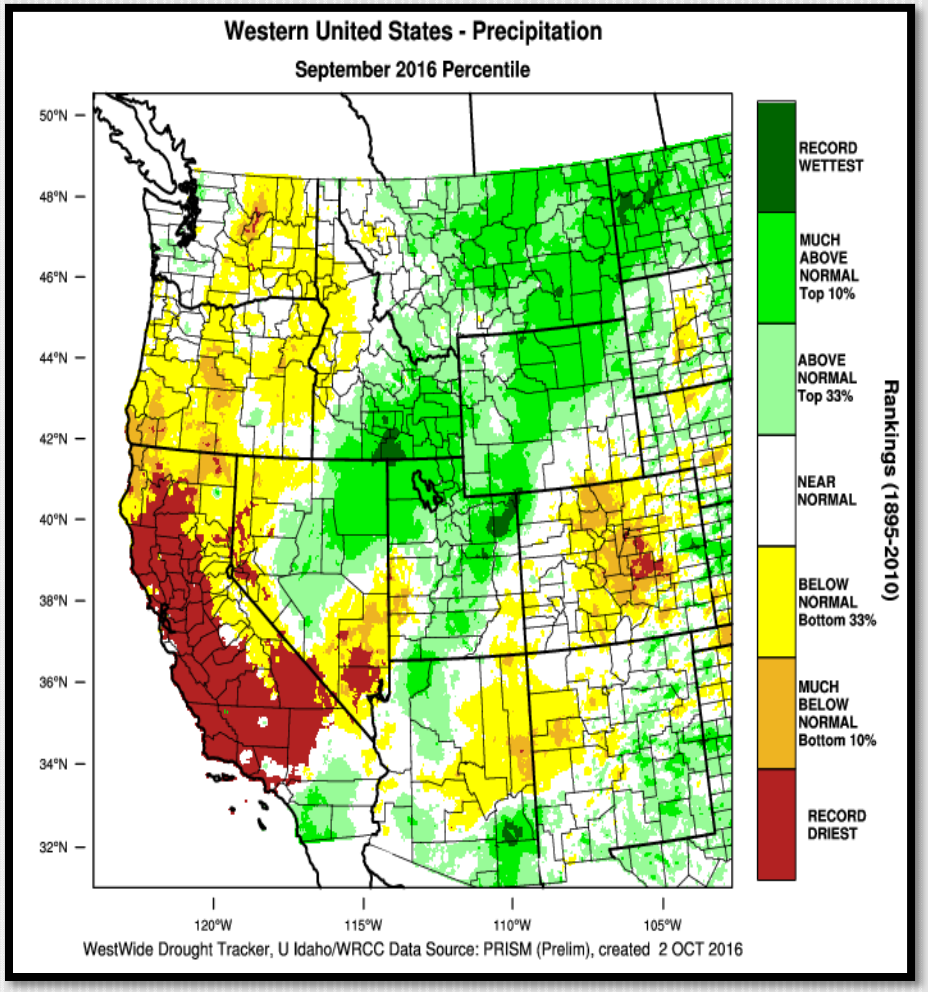
Record *Low* Temperatures	Date/ Temperature (°F)
Klamath Falls	23rd / 26°
Montague	4th / 40°

Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	82°	13th	45°	12th & 13th
Roseburg	95°	26th	46°	12th
Medford	98°	10th & 26th	44°	23rd
Klamath Falls	87°	10th	26°	23rd
Montague, CA	96°	10th	34°	23rd
Mt. Shasta City, CA	93°	10th	37°	23rd
Alturas, CA	91°	10th	24°	23rd

September 2016 Observed Precipitation

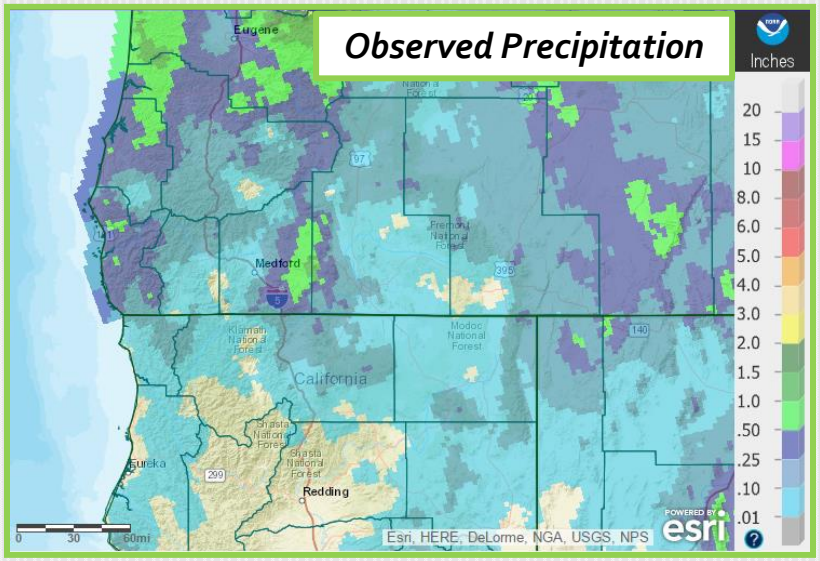


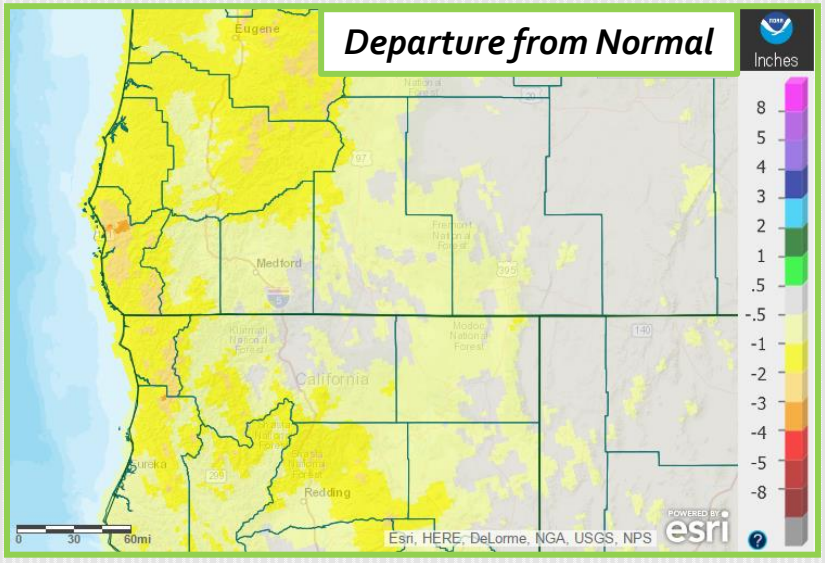


Precipitation

	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.34	-1.24	0.10	23rd
Roseburg	0.07	-0.89	0.04	23rd
Medford	0.01	-0.56	0.01	22nd
Klamath Falls	0.12	-0.41	0.12	22nd
Montague, CA	0.18	-0.46	0.18	21st – 22nd
Mt. Shasta City, CA	0.08	-0.59	0.08	22nd
Alturas, CA	M	-0.49	M	N/A

M=missing data





How Long was the Dry Streak?

	# of dry days	Last date 0.01" or greater was measured	Dry streak ended
North Bend	**41**	7/18	8/29
Roseburg	**53**	7/10	9/2
Medford	**73**	7/10	9/22
Klamath Falls	**75**	7/8	9/22
Montague, CA	**74**	7/8	9/21
Mt. Shasta City, CA	**95**	6/18*	9/22
Alturas, CA	**55**	7/10	9/4

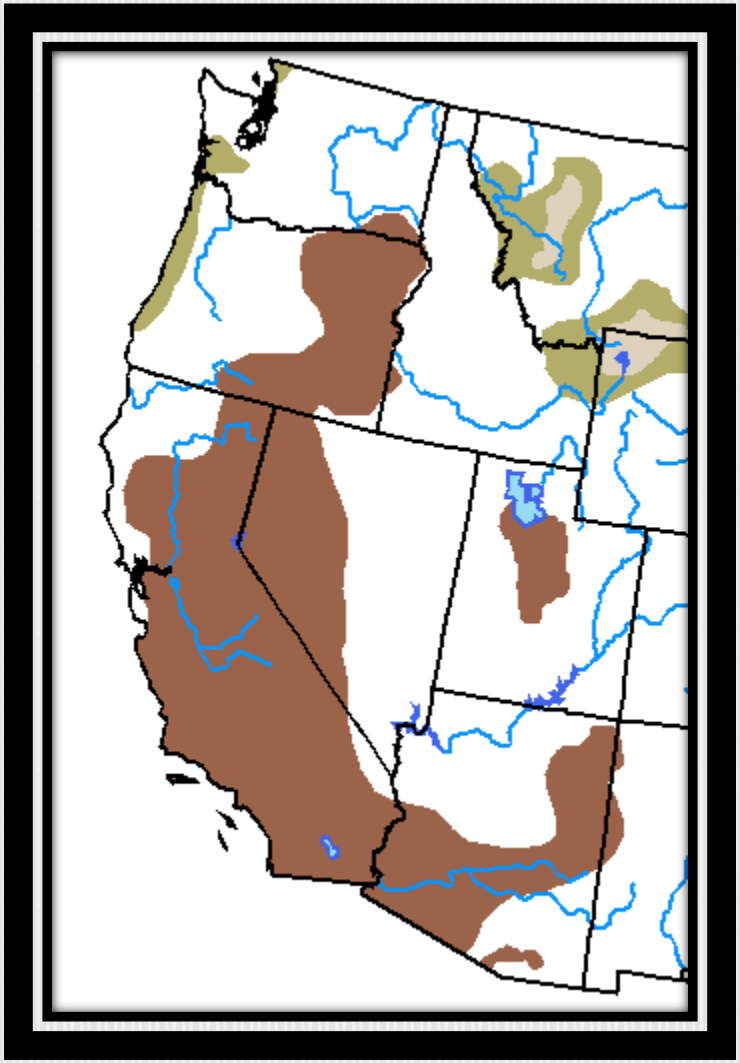
***Traces were measured at Mt. Shasta City with the systems that came through in early July and late August, but it was not enough to be considered "measurable precipitation".**

Crater Lake

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 9/30/16	Highest Max/ Lowest Min
September	*61.0°*	*35.3°*	*0.27″*	*0.0″*	*0″*	*76° on 11th / 27° on 5th*
Normal (1981-2010)	*63.1°*	*36.1°*	*1.98″*	*3.3″*	*N/A*	*N/A*

Image Courtesy: NPS

Drought Outlook: October



Drought persists

Drought remains but improves

Drought removal likely

Drought development likely

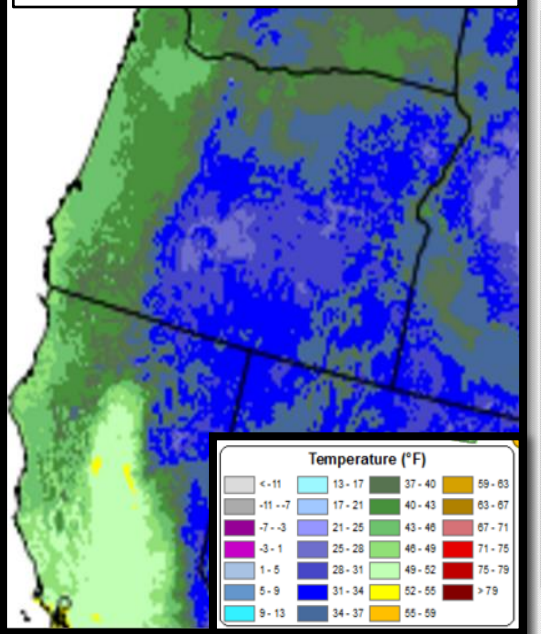
Valid for October 2016
Released September 30, 2016

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

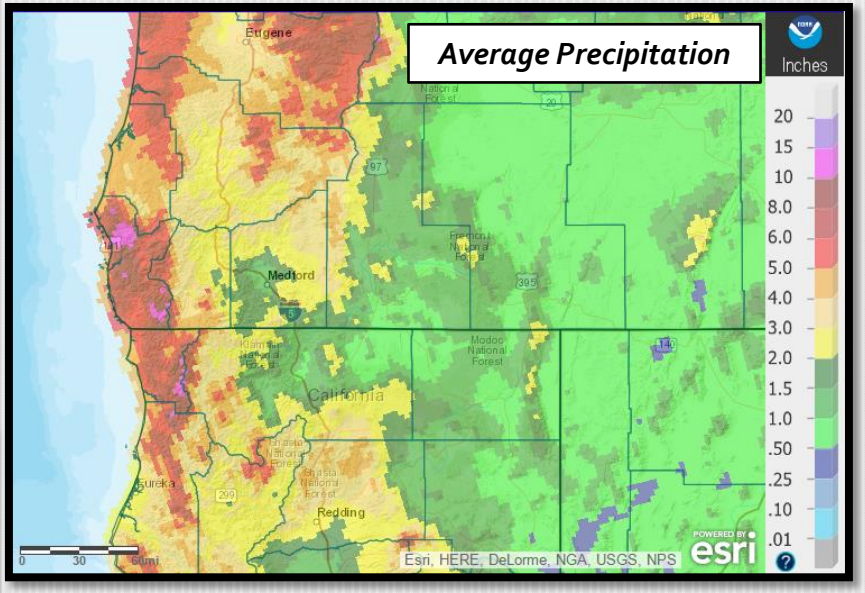
Looking Ahead: Normals for October (1981-2010)

October is when we expect precipitation to become more frequent, such that stream flows begin increasing by the end of the month. If it has not already occurred in September, areas west of the Cascades usually experience their first frost and freeze during the month and snow begins to fall in the mountains. However, from a water supply perspective, October is more of a primer for the wetter months of November, December, and January rather than a significant contributor. Snowpack usually starts to accumulate above about 6500 feet with an average snow depth of 7 inches or less at Crater Lake NP Headquarters. More appreciable snow depth is usually experienced above 8,000 feet. Typical daily high temperatures are in the 50s for the mountains, 60s in valleys east of the Cascades, and in the 65°F-75°F range in the valleys west of the Cascades. Daily low temperatures are in the 20s to lower 30s east of the Cascades, and 40s to lower 50s west of the Cascades. Precipitation is typically half an inch or more for all of the forecast area, with an inch or more for all mountainous areas and from the Cascades westward. What is most notable about precipitation in October, is that the Coastal Mountains typically receive 5 to as much as 15 inches of precipitation during the month. Two inches or more usually occurs in the Cascades and westward, outside of the typical drier valleys of Siskiyou and Jackson Counties.

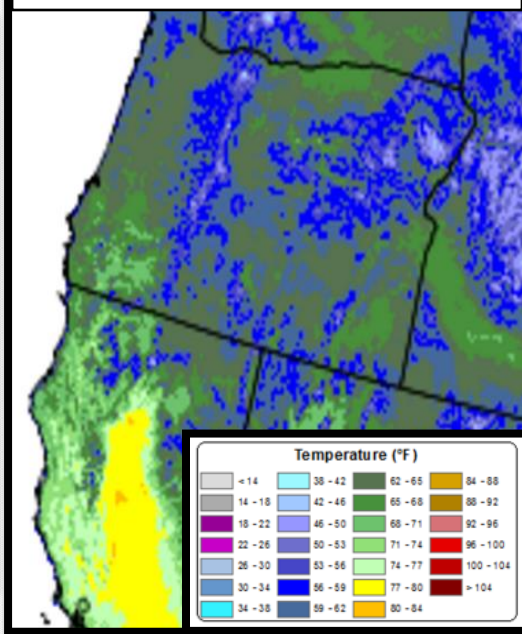
Average Minimum Temperatures



Average Precipitation

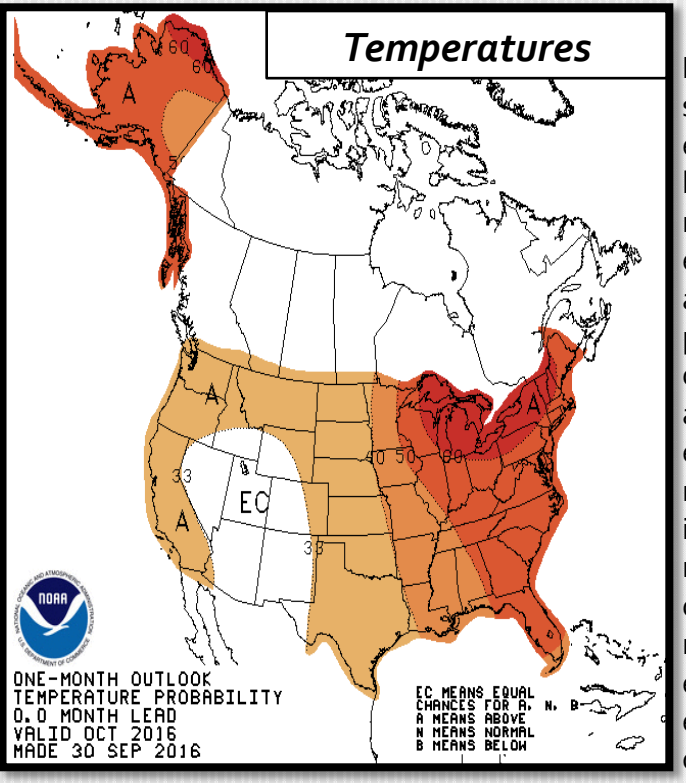


Average Maximum Temperatures



October 2016 Outlook

While the official CPC forecast indicates a slight increase in wetter than normal weather for our Oregon areas during October, there is now very high confidence (>80%) that precipitation will be above normal for most, if not all, of the forecast area this month. A series of storm systems are expected between October 12th and 26th that have subtropical moisture origins and, possibly, some ties to remnant tropical storm activity in the Western Pacific and the Madden Julian Oscillation. These systems are expected to bring at or above normal temperatures and precipitation to the area. Temperatures are generally expected to be at or slightly above normal with warmer than normal overnight lows during the approximate two week rainy period, and highs are expected to be at or above normal outside of that time frame.



Expected Impact, October 2016:

Due to a very wet storm series with subtropical origins, we expect a definitive end to the 2016 Fire Season with a definitive beginning to the 2016-17 Wet Season by mid-month. While mid-October often brings an end to fire season, and, in some years, has already occurred by then, this October's wet period is expected to be on the upper end of climatology. Thus, abnormally dry conditions and moderate drought in a few locations are expected to be removed by the end of the month. Stream flows are expected to increase and water tables are likely to rebound. The growing season is also likely to come to an end, though it is possible that many west side areas could take until the end of the month or even November to experience their first frost and freeze based on current forecast indications.