National Weather Service Medford

2021: November Climate Summary



*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>.



November 2021 Weather Review

Compared to October, November 2021 was a much quieter month in terms of active weather. As such, precipitation totals for the month ended up below normal with temperatures above normal for much of the region outside of valleys west of the Cascades.

The active weather from the end of October continued into the first half of November as several systems, some of which were atmospheric rivers, moved through the region. Strong winds associated with a few of these systems limited precipitation amounts in the areas that typically experience downsloping, like the Rogue Valley. The strongest and most impactful of these systems occurred on the 8th, when the Medford Airport recorded a peak wind gust of 48 mph. While the Rogue Valley experienced downsloping under these strong winds (only 0.03" of rain was recorded that day), upslope flow was enhanced in the Shasta Valley and this brought the first snowfall of the season to the Mt Shasta City area. After this, the progressive pattern really slowed down and the storm track gradually shifted northward during the middle of the month.

After one last moderate front passed through the region on the 15th, high pressure became the dominant weather driver for the remainder of the month. Under this pattern, strong valley inversions developed, leading to nightly occurrences of valley fog and low clouds that persisted into the morning hours. These inversions were responsible for the near normal temperatures in western valleys while the remainder of the region experienced above normal temperatures during the month. A few weak systems moved over the ridge, but much of the precipitation associated with them were limited to the coast and north of the Umpgua Divide. These systems also aided in the erosion of valley fog and low clouds. In fact, it wasn't until the last few days of the month that west side valleys remained socked in throughout the day. The relatively quiet weather during the last half of the month made for easy holiday travel.



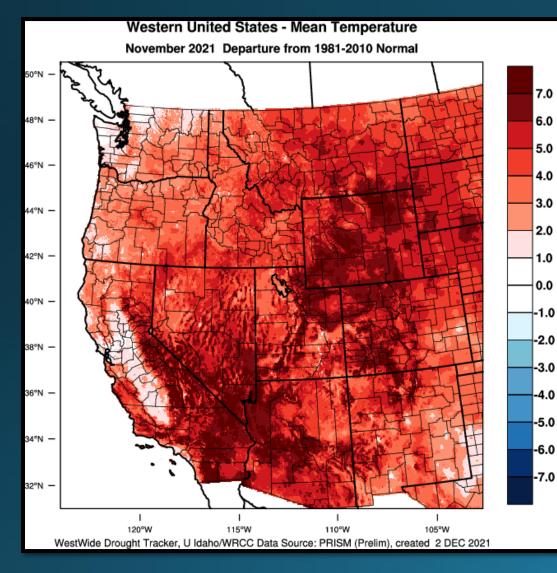
November 2021 Observed Temperatures

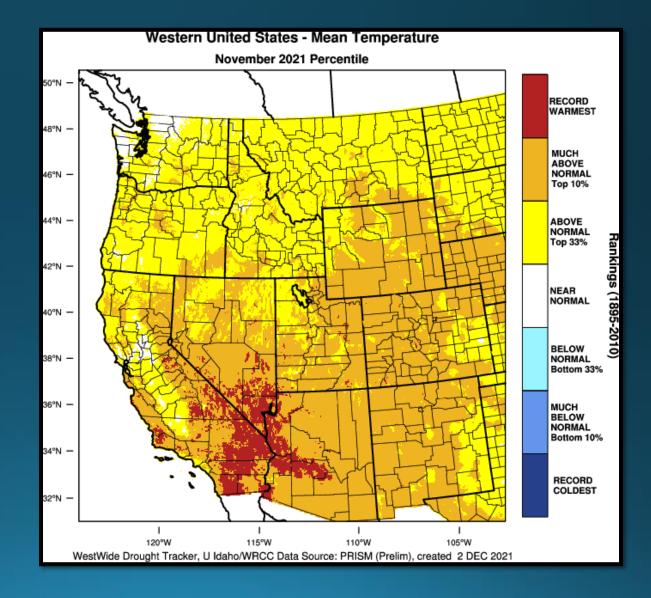
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Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	52.5	2.3°	59.8	3.0°	45.1	1.6°
Roseburg	50.0	2.6°	58.2	4.0°	41.8	1.2°
Medford	47.0	1.8°	54.5	0.5°	39.5	3.1°
Klamath Falls	39.1	2.1 °	52.1	3.0°	26.0	1.1°
Montague, CA	42.7	0.8°	53.2	-1.0°	32.2	2.6°
Mt. Shasta City, CA	43.8	2.9°	55.2	4.7°	32.4	1.0°
Alturas, CA	39.8	2.1 ⁰	56.3	5-5°	23.2	- 1 .3°



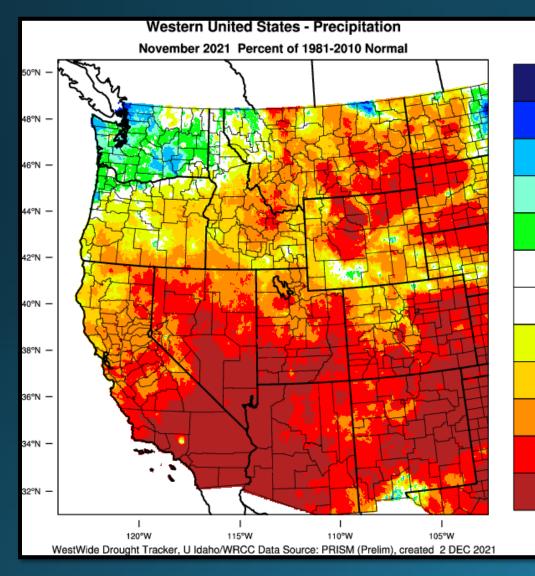
Monthly Max & Min Temperatures

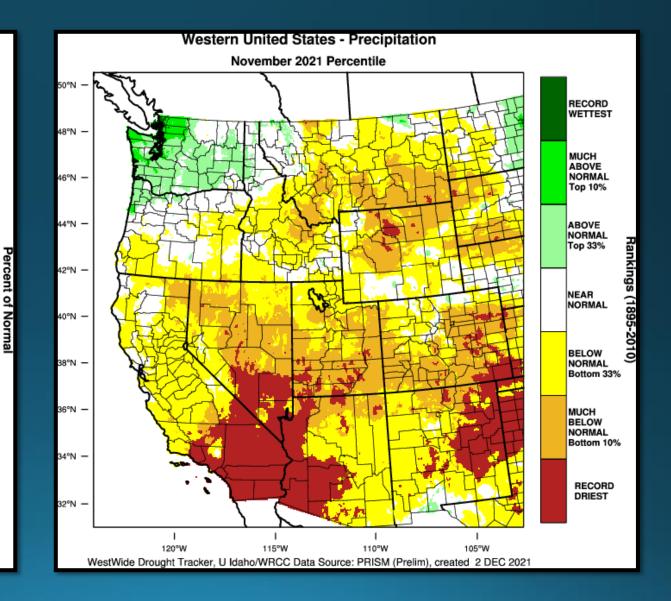
	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	69°	3 rd	34°	21 st
Roseburg	72°	3 rd	32°	17 th & 22 nd
Medford	70°	3 rd	27°	24 th
Klamath Falls	62°	14 th & 28 th	12°	24 th
Montague, CA	68°	3 rd	20°	22 nd & 24 th
Mt. Shasta City, CA	66°	11 th & 14 th	24°	22 nd & 24 th
Alturas, CA	69°	14 th	9°	24 th

	Record High	Date	Old Record/Year
Klamath Falls	59 °	27 th	Ties with 2014
Nidilidui Falis	62°	28 th	60°/1904
Roseburg	65°	27 th	64 ° / 1932
Mt Shasta City	65°	28 th	64°/1959



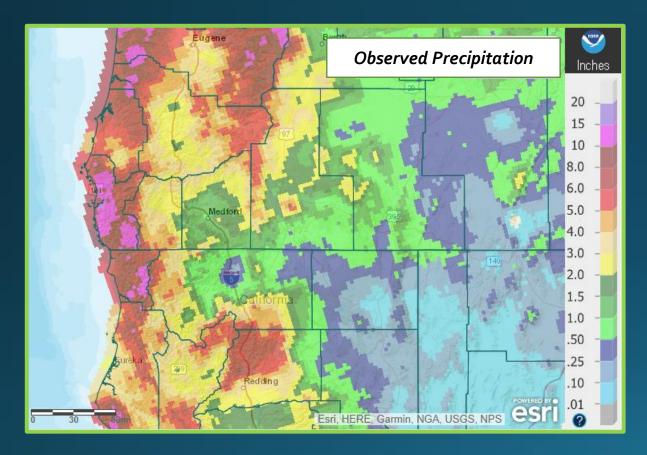
November 2021 Observed Precipitation



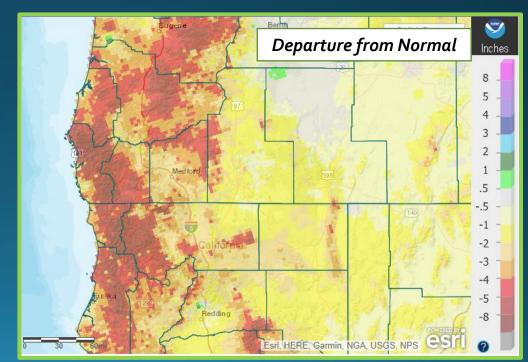




November Precipitation

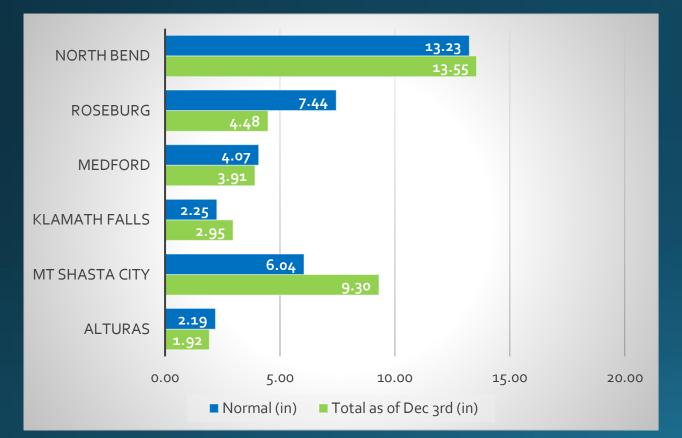


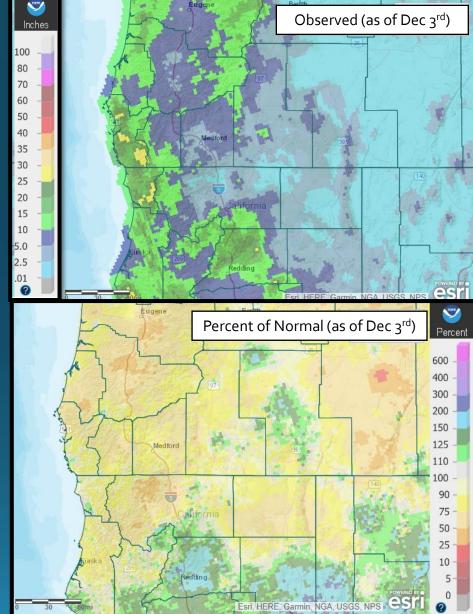
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	7.16″	-1.14″	1.78″	3 rd – 4 th
Roseburg	2.10″	-2.62″	0.45″	3 rd
Medford	1.04″	-1.57″	0.37″	8 th – 9 th
Klamath Falls	0.64″	-0.74″	0.19″	5 th
Montague, CA	0.20″	-1.14″	0.08″	8 th – 9 th
Mt. Shasta City, CA	3.11″	-0.52″	1.38″	8 th – 9 th
Alturas, CA	0.05″	-1.15″	0.03″	8 th – 9 th





2021-2022 Water Year Status (as of Dec 3rd)

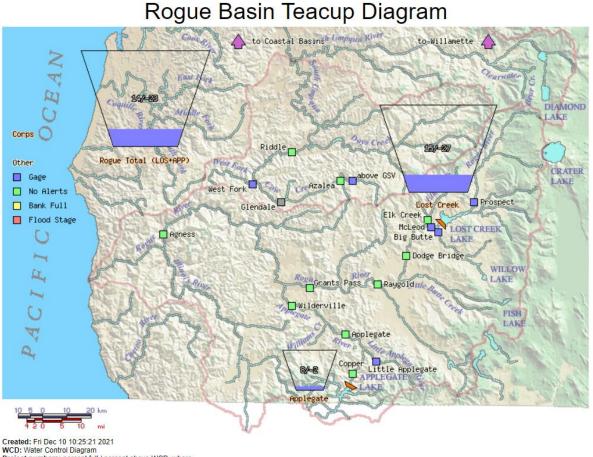






Reservoir Status

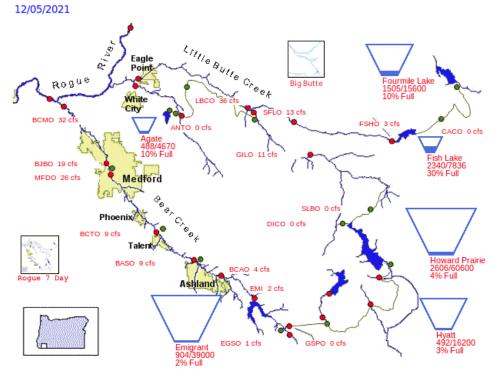
Data courtesy of <u>US Army Corps of Engineers</u>



Project numbers: percent full / percent above WCD, where

percent full = (current storage - minimum conservation storage) / (maximum conservation storage - minimum conservation storage) percent above water control diagram = (current storage - WCD storage) / (maximum conservation storage - minimum conservation storage) Data courtesy of <u>Bureau of Reclamation</u>

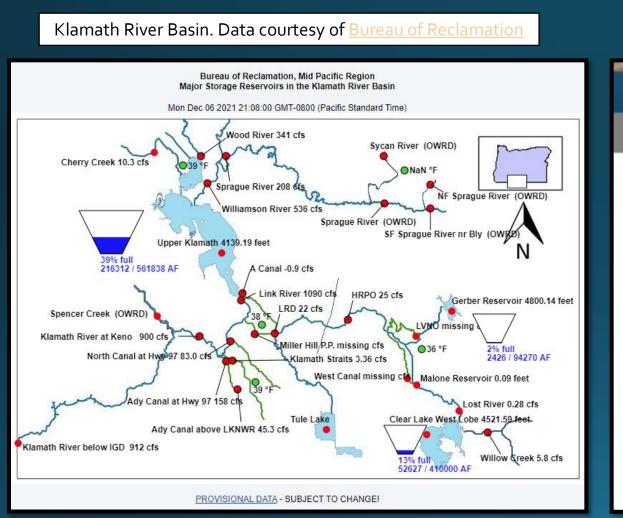
US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins



PROVISIONAL DATA - SUBJECT TO CHANGE!



Reservoir Status



Northern California. California Data Exchange Center

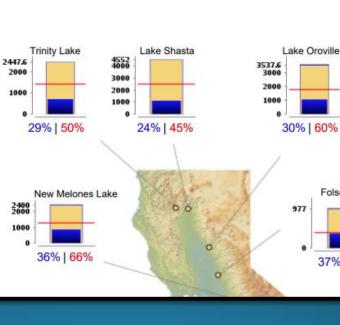
CURRENT RESERVOIR CONDITIONS

Folsom Lake

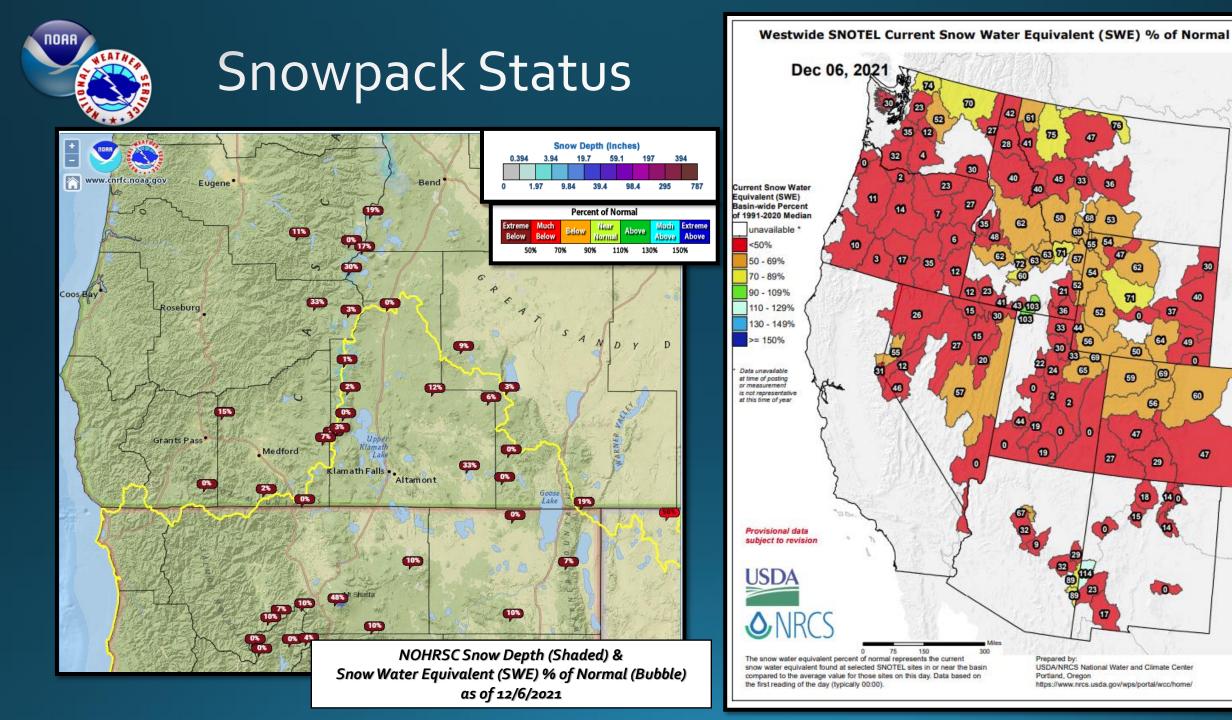
37% | 93%

SELECTED WATER SUPPLY RESERVOIRS

Midnight: December 5, 2021

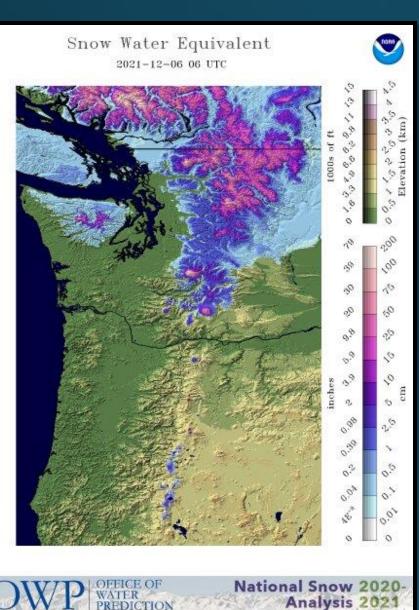


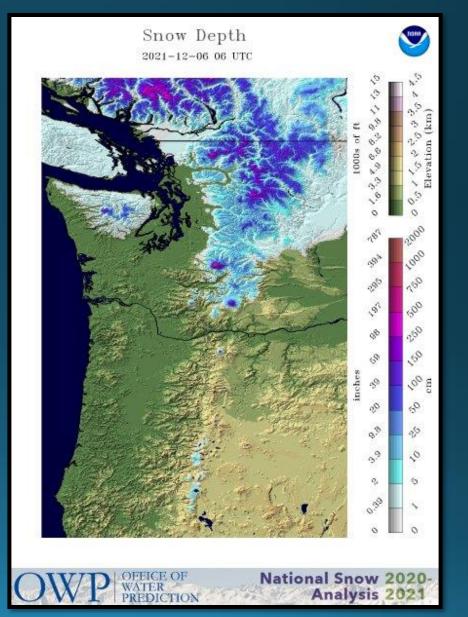
LEGEND Red Line: Historic level for date Gold Bar: Total Reservoir Capacity Blue Bar: Storage Level for date Historical Avg Mark (TAF) % of Capacity | % of Historical Average



PacNW SWE & SD as of 12/6/2021

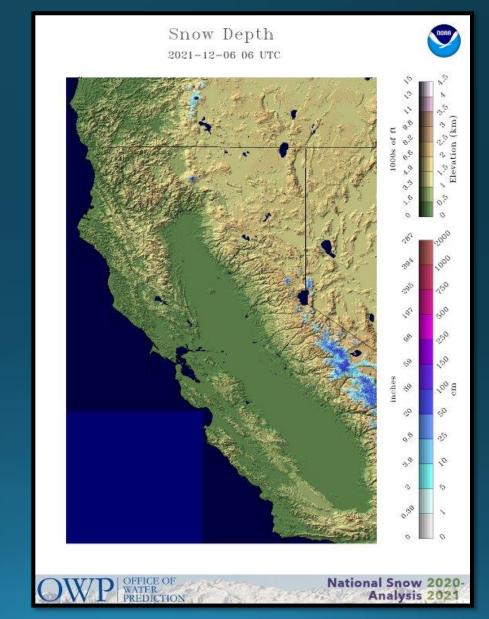


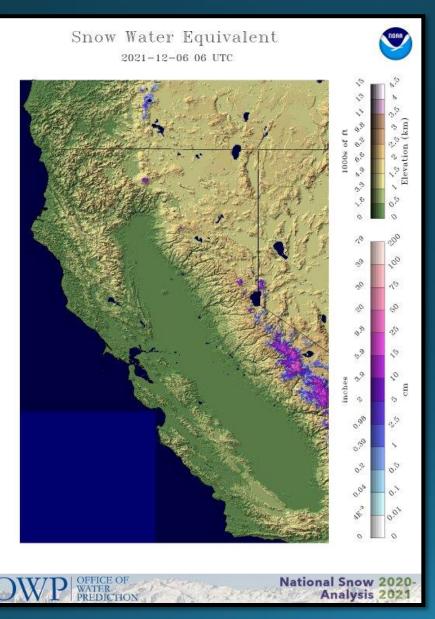




California SWE & SD as of 12/5/2021







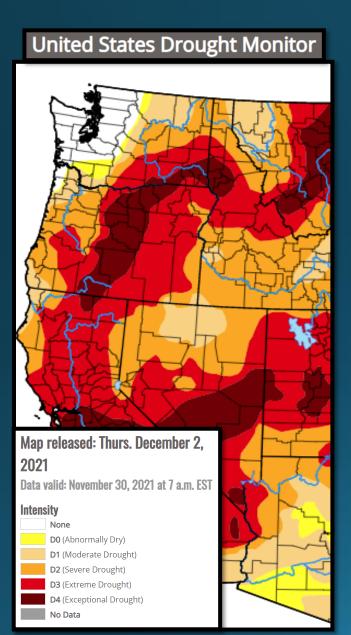
Crater Lake

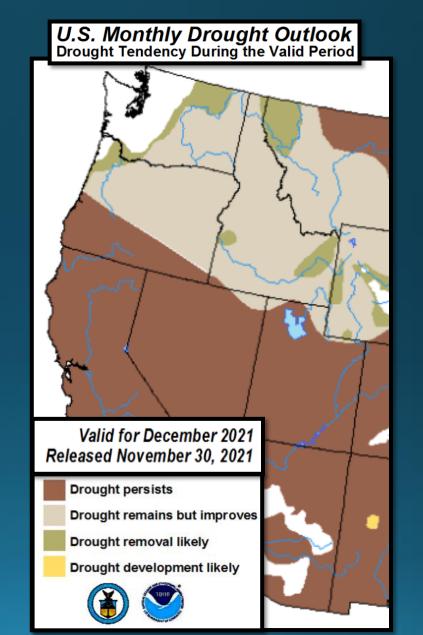
Image Courtesy: NPS

а		Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 11/30/21	Highest Max/ Lowest Min
A CONTRACTOR OF THE PARTY OF TH	November	41.2°	27.8°	7.95″	24.9″	1″	53° on 15 th / 15° on 24 th & 26 th
	Normal (1991-2020)	38.0°	23.2°	9.60″	59·3″	26″	N/A

NOA

Drought Monitor (Current) & Outlook (December)







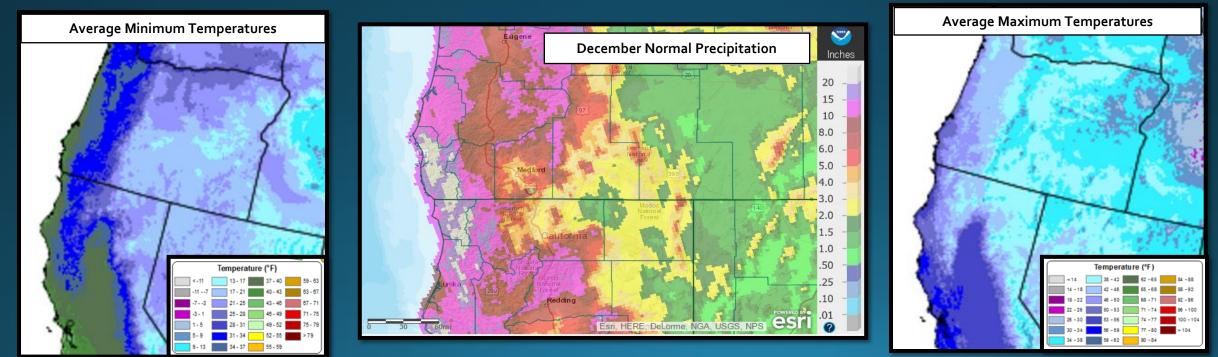


Looking Ahead: Normals for December (1981-2010)

December is typically the wettest month of the year, collectively, for southwest Oregon and far northern California. The driest locations of Lake County average only a half inch to an inch of water. Most valleys east of the Cascades typically receive 1-4 inches of water, while the mountains east of the Cascades typically see 3-9 inches of water. For the Cascades and Mount Shasta area, typical December totals are 8-15 inches. The drier West Side Valleys, like the Bear Creek drainage of the Rogue Valley and the Shasta and Scott Valleys in California, usually receive 2-5 inches. The remainder of the West Side receives 5-15 inches, although the wettest portions of the Umpqua Basin, the Coast and the Coast Range get 15-20+ inches during an average December.

Much of this water often falls as snow above 4,500 feet MSL. For instance, the 1981-2010 average December snowfall for Crater Lake National Park Headquarters is 92.6". Snow depth there usually is 35.4" on December 1st and 67.5" on December 31st based on the same average period.

Typical daily high temperatures are 30°F to near 40°F in the mountains above 5000 feet and across the East Side and in the mid 40s to mid 50s west of the Cascades. Normal low temperatures are in the mid teens in the coldest locations on the East Side and on Mount Shasta to the upper 20s in and near the Cascades. West of the Cascades to the coast lower 30s to mid 40s are most typical from east to west.





*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 might have records dating 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 might 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:

- <u>North Bend</u>: 01/1902 Present
- <u>Roseburg</u>: 04/1900 Present
 Missing:
 - ▶ 05/1900-01/1901
 - ▶ 03/1901-06/1902
 - ▶ 08/1902-12/1930
 - ▶ 10/1965-06/1997
- <u>Medford</u>: 03/11/1911 Present
- <u>Klamath Falls</u>: 12/1897 Present

- Montague, CA: 07/1948 Present
 Missing:
 - ▶ 08-09/1952
 - ▶ 02/1953-06/2000
- <u>Mount Shasta City, CA</u>: 04/1948 Present
- <u>Alturas, CA</u>: 05/1935 Present