National Weather Service Medford

2022: October Climate Summary





October 2022 Weather Review

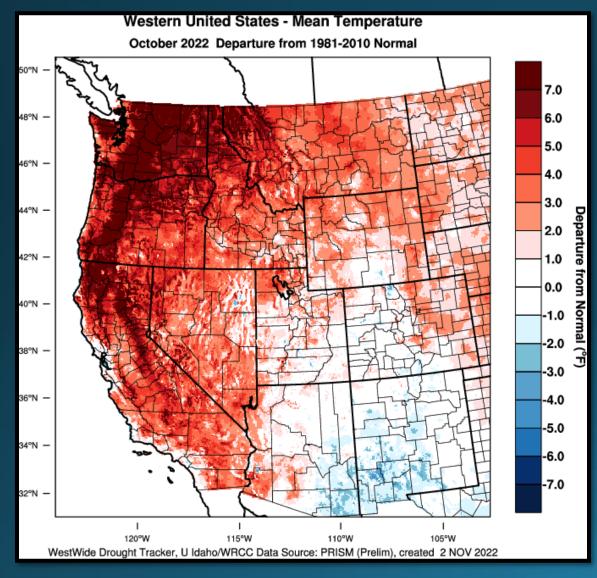
A persistent upper level high pressure system, which carried over from the end of September, brought unusual warmth to the region and allowed the growing season to extend much longer than would otherwise be expected in October. High pressure also maintained the super deficits we've become accustomed to with respect to rainfall these days. With high pressure blocking the storm track, and any potential season ending rainfall, fire season carried well into the month and gradually died a slow death. The end of the 2022 fire season came more as a result of shortened burn windows due to lower sun angles and fewer daylight hours. Thankfully, the rains in September extinguished many of the wildfires in the region. The Cedar Creek fire in Lane County, however, burned on despite the rain and wildfire smoke from this fire to blow into southern Oregon at times.

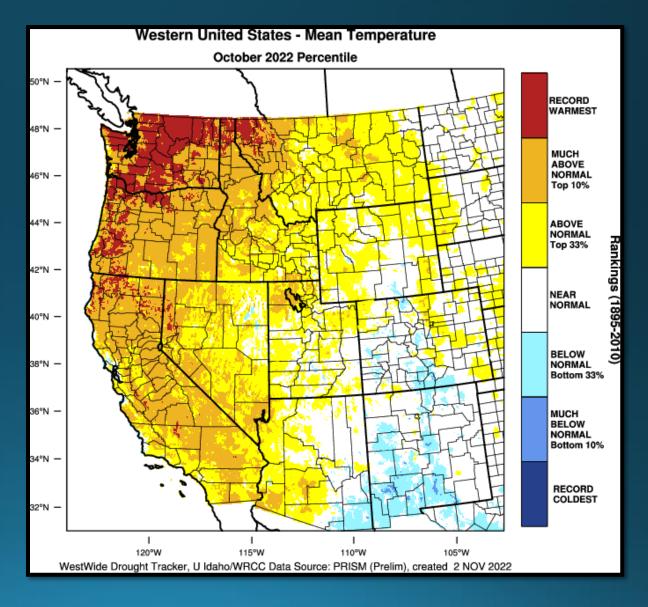
It was a hot first three weeks of October region wide, and numerous daily high temperatures were set at multiple climate sites. Additionally, many areas recorded their warmest or top 5 warmest first 20 days of October as far a average maximum temperatures are concerned.

The weather pattern changed though, and fall finally made it's appearance, beginning on the 21st when the dry stretch of 20 to 30 consecutive precipitation-free days ended with the first measurable rainfall of the month across the region. After this date, the next six days were cooler and below normal with some much-needed additional rainfall. Though the last five days of the month were dry, temperatures were far closer to normal than they had been during the first three weeks of the month, and averaged slightly above normal.



October 2022 Observed Temperatures







Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	56.1	1.2°	63.0	0.2°	49.1	2.1°
Roseburg	60.4	4.3°	73.0	6.1°	47.7	2.5°
Medford	62.0	5.9°	78.4	8.3°	45.5	3.4°
Klamath Falls	50.8	3.4°	71.6	7.4°	30.0	-0.7°
Montague, CA	58.6	5.8°	78.8	9.2°	38.4	2.4°
Mt. Shasta City, CA	57.4	6.3°	75.5	10.8°	39.2	1.7°
Alturas, CA	49.6	2.1°	72.9	7.2°	26.3	-3.0°

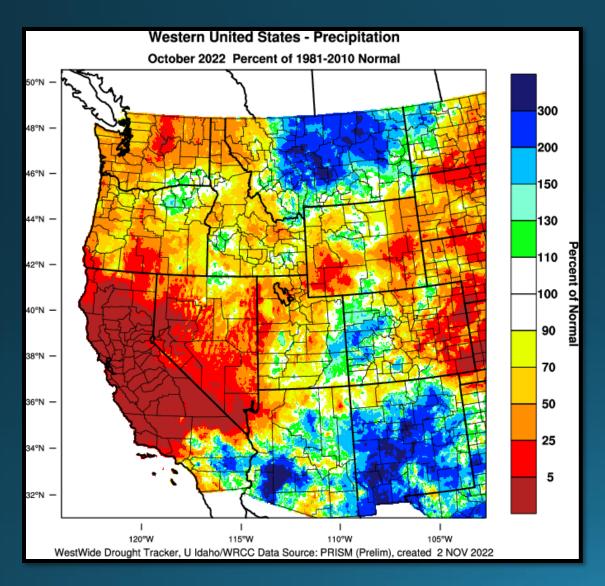


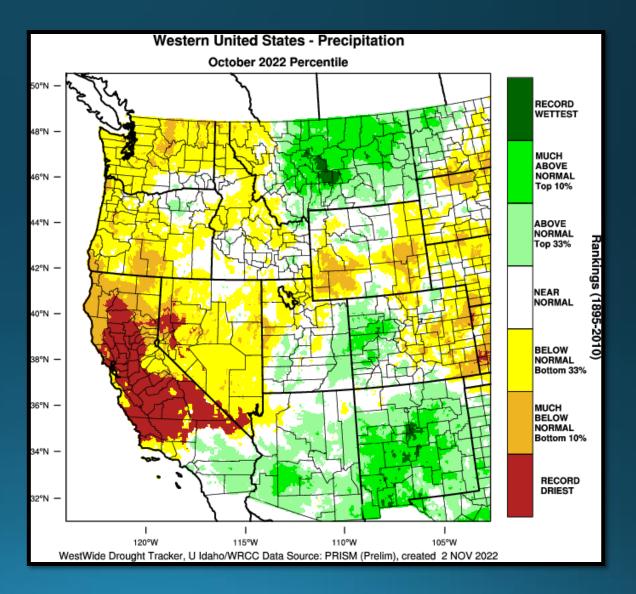
Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	87°	1 st	40°	27 th
Roseburg	88°	2 nd	41°	23 rd & 27 th
Medford	<i>93</i> °	6 th & 7 th	38°	27 th & 31 st
Klamath Falls	84°	7 th	19°	24 th & 27 th
Montague, CA	92°	6 th	28°	24 th
Mt. Shasta City, CA	88°	7 th & 8 th	28°	24 th
Alturas, CA	84°	6 th & 7 th	16°	24 th



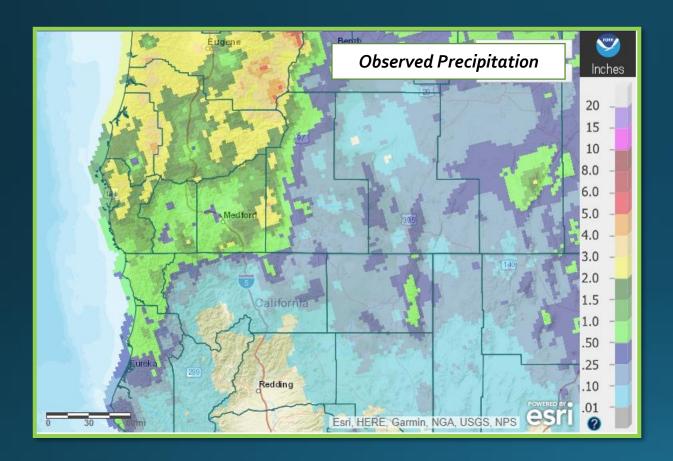
October 2022 Observed Precipitation



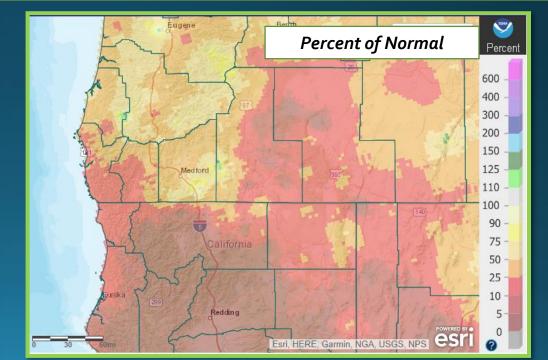




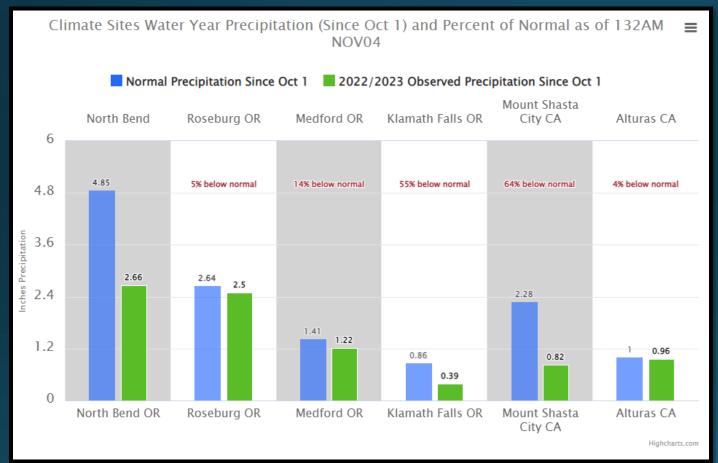
Precipitation

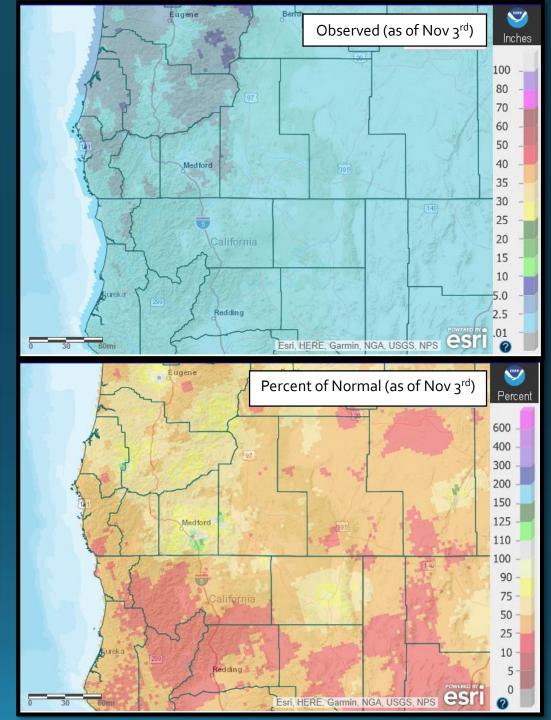


	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	1.53"	-2.71"	0.71"	31 st
Roseburg	1.21"	-1.11"	o.6o″	21 st – 22 nd
Medford	0.47"	-0.75"	0.39"	21 st – 22 nd
Klamath Falls	0.06"	-0.68"	0.04"	21 st – 22 nd
Montague, CA	0.05"	-0.81"	0.05"	22 nd
Mt. Shasta City, CA	0.10"	-1.90"	0.10"	22 nd
Alturas, CA	0.16"	-0.73"	0.16"	21 st – 22 nd



2022-2023 Water Year Status (as of Nov 3rd)







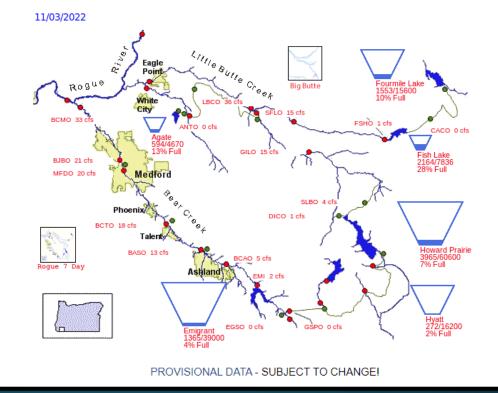
Reservoir Status

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

Rogue Basin Teacup Diagram to Willamette to Coastal Basinsh Empgra River CEAN Rogue Total (LOS+APP) CRATE LAKE No Alerts Lost Creek Prospect Glendale Flood Stage McLeod LOST CREET WILLOW Grants Pass Raygold Applegate Little Applegate Created: Fri Nov 4 16:25:48 2022 WCD: Water Control Diagram 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 **Bureau of Reclamation**

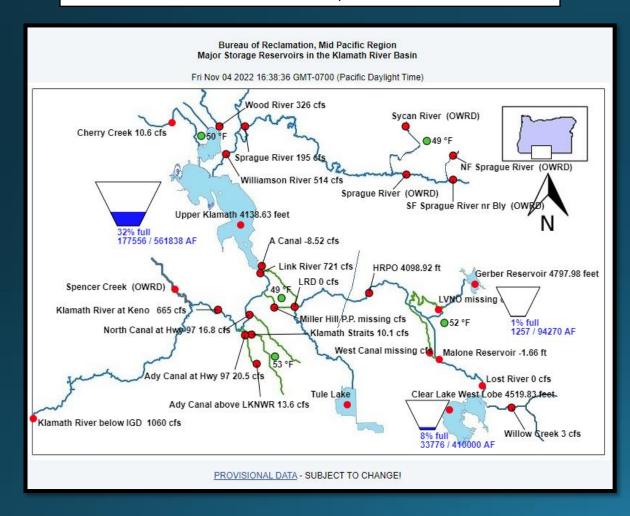
US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins



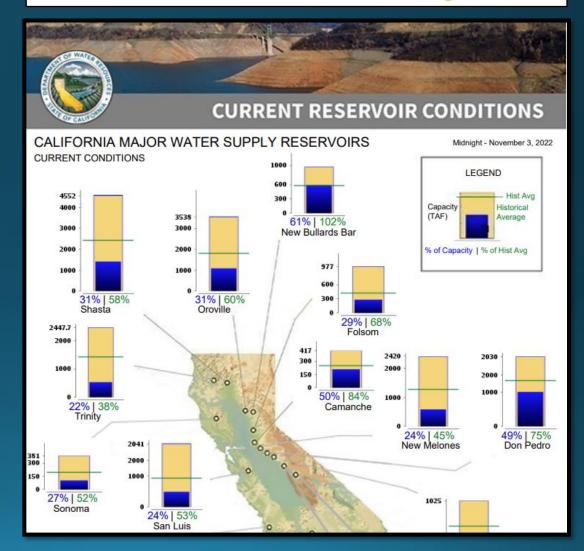


Reservoir Status

Klamath River Basin. Data courtesy of **Bureau of Reclamation**



Northern California. California Data Exchange Center



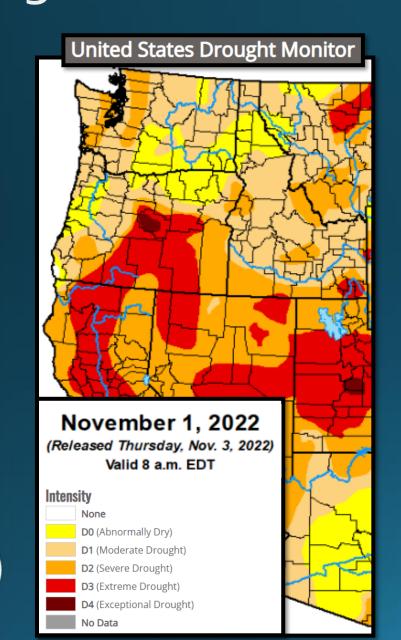
Crater Lake

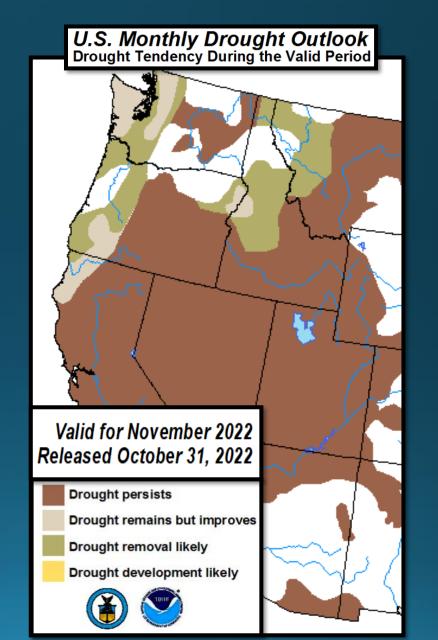




	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 10/31/21	Highest Max/ Lowest Min
October	46.1°	30.7°	6.69"	27.7"	2"	66° on 4 th & 5 th / 19° on 12 th
Normal (1991-2020)	50.7°	30.2°	4.80″	17.2"	5"	N/A

Drought Monitor (Current) & Outlook (November)





Notable Weather Events





Record Hot October for Medford, OR

- Warmest first 20 days of October 2022 = Average temperature of 67.9°F. This beat the first 20 days of October 2015 by 2.2°F (65.5°F).
- The average *maximum* temperature through the first 20 days was 88.0°F! This was the highest temperature ever for that stretch, beating out 1991, when the average high temperature was 85.9°F through October 20th.
- There were 8 days above 90°F, which was second to only 1991, when there were 9 days.
- The 20 consecutive days above 80°F to start the month were a also record. This also beat the monthly record of 16 days greater than or equal to 80°F set in 1988.
- The peak of the heat was on the 6th and 7th when the temperature hit 93°F on both days. During the hot stretch, one daily high temperature record was broken -- 88°F on 16th (87°F in 2015) -- and another was tied -- 83°F on the 19th, previously reached in 1999.
- The average date for the first fall frost (less than 37°F) is October 5th. There are only 4 Octobers in the climatological record (dating back to 1911) where the temperature has failed to fall below 37°F during the entire month -- October 1944, 2014, 2016 and now 2022.
- The weather pattern changed though beginning on October 21st when the stretch of 30 consecutive precipitation-free days ended with the first measurable rainfall of the month (0.03").



October Record High Temperatures

	Date	Record High	Old Record/Year
North Bend	1 st	87°F	83°F/1902
Roseburg	13 th	83°F	Ties w/2015
Medford	13 th	88°F	Ties w/2004
	16 th	88°F	87°F / 2015
	19 th	83°F	Ties w/1999
Klamath Falls	20 th	78°F	Ties w/1927
Alturas	20 th	79°F	Ties w/2003
Mt Shasta City	7 th	88°F	86°F/1980
	8 th	88°F	Ties w/1996
	15 th	85°F	Ties w/2015
	19 th	81°F	80°F / 1974
	20 th	81°F	80°F / 2018

	Date	Record High	Old Record/Year
Montague	4 th	90°F	89°F / 1952
	6 th	92 ° F	90°F / 1952
	7 th	91°F	86°F / 2014
	8 th	91°F	85°F / 2015
	9 th	88°F	Ties w/2015
	10 th	86°F	Ties w/2015
	12 th	87°F	86°F / 1952
	13 th	87°F	Ties w/2015
	14 th	90°F	87°F / 2015
	15 th	89°F	Ties w/2015
	16 th	87°F	83°F / 2020
	18 th	8o°F	Ties w/2020
	19 th	83°F	81°F / 2020
	20 th	85°F	80°F / 2018

Maximum 20-Day Mean Max Temperature for ROSEBURG REGIONAL AP, OR

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days			
1	79.1	2022-10-20	0			
2	78.3	2015-10-20	0			
3	78.3	2014-10-20	0			
4	78.1	1952-10-20	0			
5	76.3	2020-10-20	0			
6	75.6	1936-10-20	0			
7	74.9	1958-10-20	0			
8	74.7	1934-10-20	0			
9	74.2	1940-10-20	0			
10	73.7	1933-10-20	0			
	Period of record: 1900-04-01 to 2023-03-01					

Maximum 20-Day Mean Max Temperature for Klamath Falls Area, OR (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

		0,	0
Rank	Value	Ending Date	Missing Days
1	79.8	2022-10-20	0
2	79.2	1991-10-20	0
3	79.1	1907-10-20	0
4	76.3	1988-10-20	1
5	75.7	1917-10-20	0
6	75.0	1987-10-20	0
7	74.9	1921-10-20	0
8	74.6	2020-10-20	0
9	74.5	1902-10-20	3
10	74.1	1992-10-20	2
	Period (of record: 1897-12-02 to 2	2023-02-27

<u>Average Maximum</u>

Temperature Warmest First 20 Days of October

Maximum 20-Day Mean Max Temperature for Mount Shasta Area, CA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days		
1	83.2	2022-10-20	0		
2	79.8	1991-10-20	0		
3	77.8	1952-10-20	0		
4	76.4	2020-10-20	0		
5	75.6	2015-10-20	0		
6	75.2	1978-10-20	0		
7	75.0	1958-10-20	0		
8	74.6	1988-10-20	1		
9	74.3	1964-10-20	0		
10	73.6	2012-10-20	0		
	Doriod	of record: 1049 04 15 to 1	2022 02 04		

Period of record: 1948-04-15 to 2023-03-01



Maximum 20-Day Mean Max Temperature for Alturas Area, CA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	82.6	1991-10-20	0
2	81.3	1952-10-20	6
3	80.7	2022-10-20	0
4	80.2	1958-10-20	0
5	79.3	1964-10-20	0
6	78.9	1987-10-20	0
7	78.1	1978-10-20	0
8	77.8	1988-10-20	0
9	76.9	1936-10-20	1
10	76.7	1961-10-20	0
	Period (of record: 1935-05-01 to 2	2023-03-01

Maximum 20-Day Mean Max Temperature for Medford Area, OR (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days			
1	88.0	2022-10-20	0			
2	85.9	1991-10-20	0			
3	83.4	1987-10-20	0			
4	82.4	1952-10-20	0			
5	82.2	1988-10-20	0			
6	81.6	1933-10-20	0			
7	81.5	1936-10-20	0			
8	81.1	2015-10-20	0			
9	80.8	2020-10-20	0			
10	79.8	1958-10-20	0			
	Period of record: 1911-03-11 to 2023-03-01					

Warmest/Top Warmest October 2022

Maximum 31-Day Mean Avg Temperature for Mount Shasta Area, CA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

1		Ending Date	Missing Days
	57.8	1952-10-31	0
2	57.4	2022-10-31	0
3	57.1	2015-10-31	0
4	56.7	1965-10-31	0
5	56.4	1988-10-31	1
6	56.2	2020-10-31	0
7	56.2	1958-10-31	0
8	55.3	2003-10-31	0
9	55.1	1964-10-31	0
10	54.5	1991-10-31	0

Maximum 31-Day Mean Avg Temperature for Medford Area, OR (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days		
1	62.0	2022-10-31	0		
2	61.9	2015-10-31	0		
-	61.9	1988-10-31	0		
4	61.2	1987-10-31	0		
5	60.5	2020-10-31	1		
6	60.3	2014-10-31	0		
7	59.7	1952-10-31	0		
8	59.1	1979-10-31	0		
9	58.9	1944-10-31	0		
10	58.5	1993-10-31	0		
Period of record: 1911-03-11 to 2023-03-01					



Maximum 31-Day Mean Avg Temperature for ROSEBURG REGIONAL AP, OR

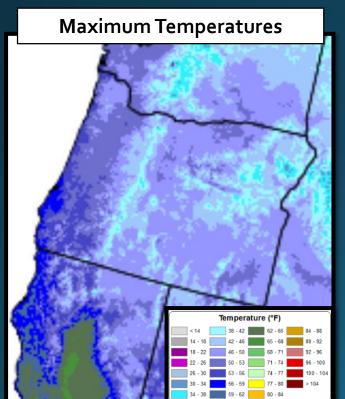
Click column heading to sort ascending, click again to sort descending.

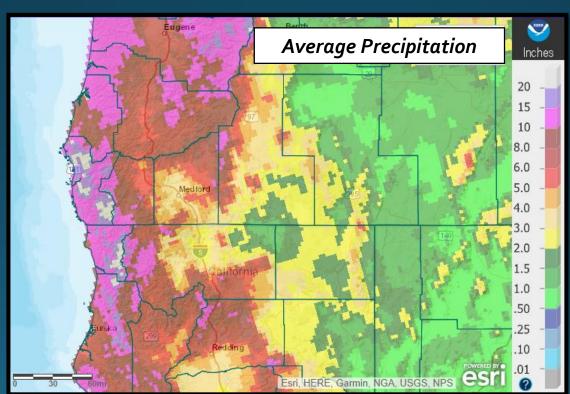
Rank	Value	Ending Date	Missing Days		
1	62.1	2014-10-31	0		
2	62.0	2015-10-31	0		
3	60.4	2022-10-31	0		
4	59.2	1944-10-31	0		
5	59.0	1940-10-31	0		
6	58.8	1934-10-31	0		
7	58.7	2003-10-31	0		
-	58.7	1937-10-31	0		
9	58.5	1952-10-31	0		
10	58.4	2020-10-31	0		
Period of record: 1900-04-01 to 2023-03-01					

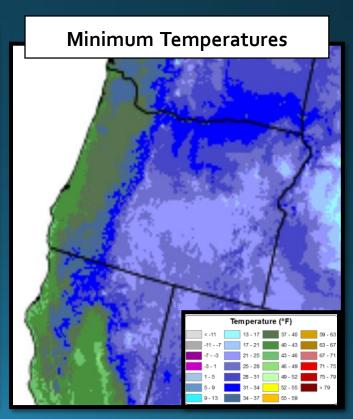


Looking Ahead: Normals for November (1991-2020)

November is a key month for the wet season, resulting in, on average, the second greatest single month precipitation totals across the area. Typically, this is the month when snowpack starts to build in the mountains. The historical average snow depth (1931-2000) at Crater Lake NP Headquarters is 7 inches on the Nov 1st and grows to 29 inches by the 30th. More appreciable snowpack is typical above 7,000 feet in the Cascades. Daily high temperatures are typically in the 30s to lower 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 east of the Cascades, in the 30s and 40s from the Cascades westward, and in the lower 50s along the immediate coast. 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 get 1-3 inches. The Cascades typically receive 8 inches or more of water, with 10 to 20+ inches in the Coastal Mountains.









*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:

- North Bend: 01/1902 Present
- Roseburg: 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
- Klamath Falls: 12/1897 Present

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