National Weather Service Medford

2022: September 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>.



September 2022 Weather Review

September began hot and dry with the Four Corners High dominating the weather for the first week of the month. A shortwave trough passed through the region on the 2nd and 3rd, bringing critical fire weather conditions with strong south to southwest winds and critically low relative humidities. Two wildfires ignited during this time, realizing the critical fire weather conditions and these wildfires spread very rapidly. Unfortunately, one fire ignited in the community of Weed, CA and this quickly spread throughout residential areas and forced evacuations of the entire communities of Weed and Lake Shastina. Within a few hours, a second fire, the Mountain Fire, ignited to the west of the Mill Fire and spread rapidly as well.

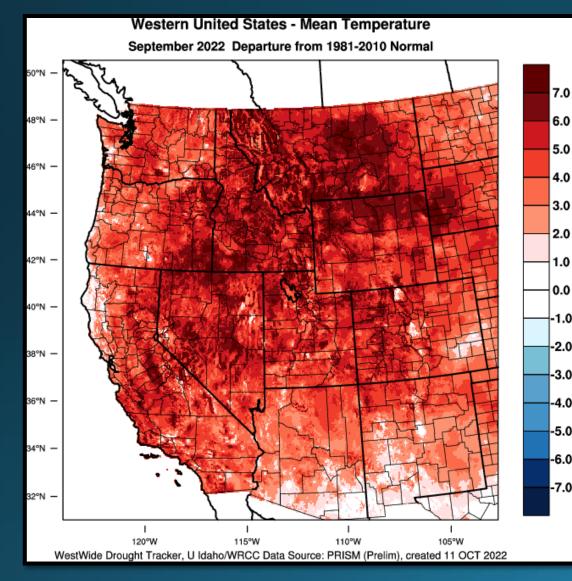
Following this tragic event, high pressure resumed control and several high temperature records were set between the 5th and 10th for various climate sites. At the same time, smoke from area wildfires continued to bring degraded air quality to the region. Thunderstorms occurred on the 7th as troughing briefly moved through the region. There was little precipitation, but also a smattering of cloud to ground lightning -- about 210 flashes, most of which occurred in Klamath and Lake counties.

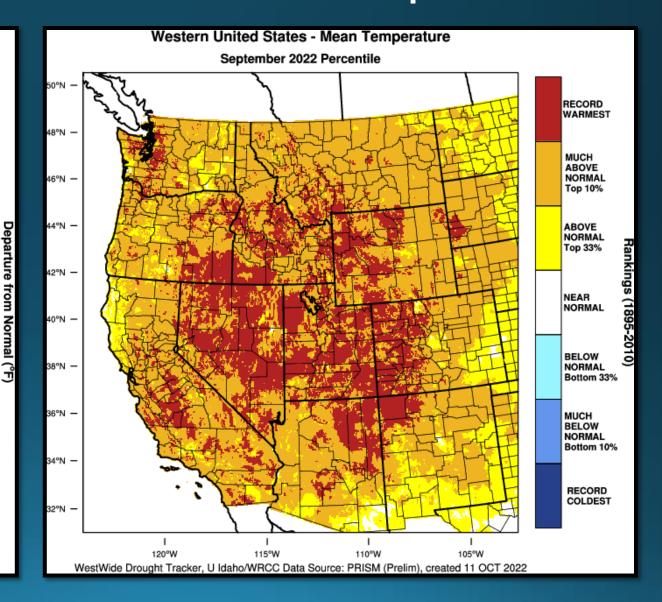
The first real stretch of cooler weather arrived on the 13th and continued through the 23rd. During the stretch, most days averaged right around normal with respect to temperature, but the 17th was the coolest day of the stretch when average temperatures bottomed out around 5°F to 10°F below average. Showers were common area wide from the 17th to the 21st. Thunderstorms on the 17th brought another significant round of lightning with 270 flashes, mostly focused from the Shasta Valley up along and just east of the Cascades. But, these were wet storms and resulted in little new fire activity. In fact, from the 19th-21st, low pressure drenched the area resulting in a widespread wetting rainfall with some areas receiving 0.50"-1.00" of rain with a handful of climate sites setting daily precipitation records. With all the rainfall, most area fires were doused, and this put a significant slow down to the 2022 fire season. One fire burning to the north in Lane County, the Cedar Creek fire, continued to bring smoke at times into northern sections of the forecast area.

Despite the true change of seasons to autumn, high pressure returned at the end of the month, and "summer" like heat returned across the region for 4 consecutive days from the 24th-27th. No additional records were set though. More autumn like weather returned for the last three days of the month with cooler temperatures more typical for that time of year.



September 2022 Observed Temperatures

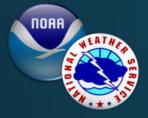






Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	60.4	1.4°	68.2	1.5°	52.6	1.3°
Roseburg	69.1	3.0°	82.1	2.0 °	56.1	3.9°
Medford	71.3	3.6°	87.1	2.8°	55.6	4.4°
Klamath Falls	61.1	2.9°	80.8	3.3°	41.3	2.3°
Montague, CA	69.2	4.3°	87.3	2.9°	51.0	5.6°
Mt. Shasta City, CA	64.6	3.1°	81.8	3.4°	47.4	2.8°
Alturas, CA	61.7	3.2°	82.7	3.0°	40.6	3.4°



Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	95°	9 th	46°	24 th
Roseburg	99°	10 th	48°	24 th
Medford	107°	6 th	46°	30 th
Klamath Falls	99°	6 th	<i>33</i> °	23 rd & 29 th
Montague, CA	106°	6 th	40°	30 th
Mt. Shasta City, CA	103°	6 th	38°	22 nd
Alturas, CA	102°	6 th	30°	17 th

Date	Record High	Old Record/Year
10 th	99°F	Ties w/2013
6 th	107°F	104°F / 1923
6 th	99°F	95°F / 2020
5 th	101°F	97°F / 1988
6 th	103°F	94°F / 2021
1 st	98°F	Ties w/1955
7 th	99°F	98°F / 2021
10 th	94°F	Ties w/2015
5 th	101°F	99°F / 2017
6 th	106°F	96°F / 2020
7 th	102°F	Ties w/2020
8 th	98°F	95°F / 1948
9 th	98°F	Ties w/2011
10 th	100°F	98°F / 2015
	10 th 6 th 5 th 6 th 1 st 7 th 10 th 5 th 6 th 7 th 8 th	Date High 10^{th} $99^{\circ}F$ 6^{th} $107^{\circ}F$ 6^{th} $99^{\circ}F$ 5^{th} $101^{\circ}F$ 6^{th} $98^{\circ}F$ 10^{th} $98^{\circ}F$ 10^{th} $98^{\circ}F$ 10^{th} $94^{\circ}F$ 10^{th} $94^{\circ}F$ 10^{th} $94^{\circ}F$ 5^{th} $101^{\circ}F$ 6^{th} $106^{\circ}F$ 10^{th} $94^{\circ}F$ 5^{th} $101^{\circ}F$ 8^{th} $98^{\circ}F$ $98^{\circ}F$ $98^{\circ}F$



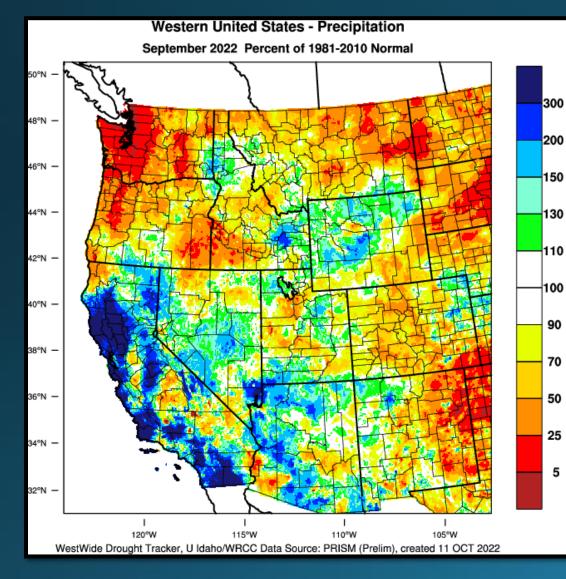
September 2022 Observed Precipitation

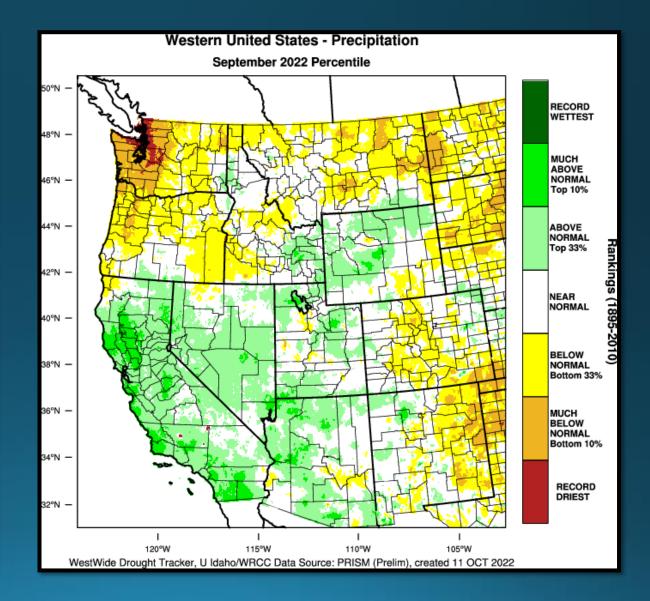
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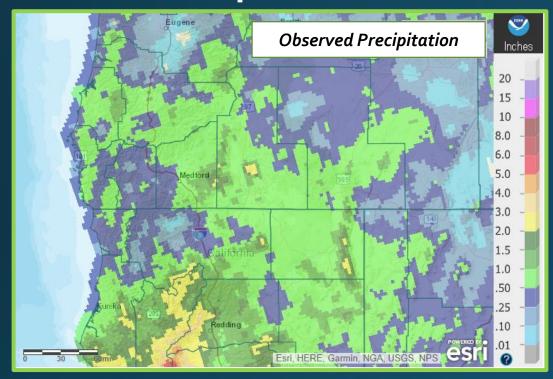
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Precipitation

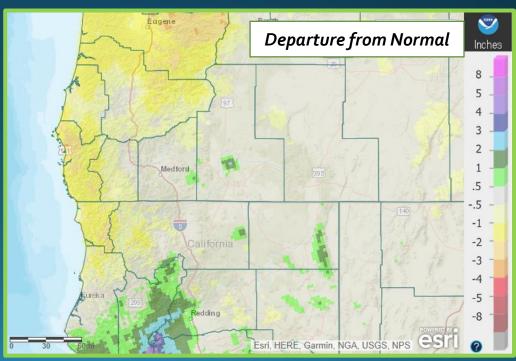


Record Precipitation

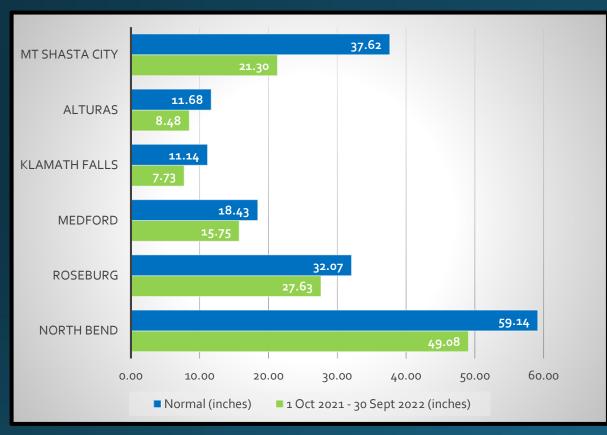
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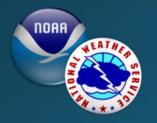
	Date / Amount	Old Record / Year
Medford	20 th / 0.43″	0.22″ / 1984
Klamath Falls	20 th / 0.36″	0.21" / 1969
Montague	19 th / 0.22″	0.07″ / 2019

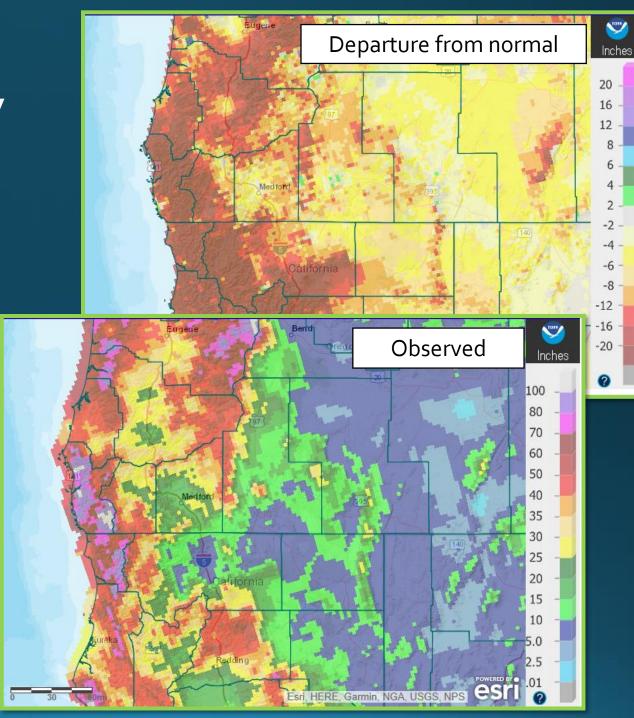
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.48″	-1.07″	0.14″	28 th – 29 th
Roseburg	o.88″	0.03″	0.61″	20 th – 21 st
Medford	0.52″	0.04″	0.43″	20 th
Klamath Falls	0.72″	0.42″	0.72″	19 th – 20 th
Montague, CA	0.47″	0.20″	0.25″	17 th – 18 th
Mt. Shasta City, CA	1.09″	0.58″	0.65″	19 th
Alturas, CA	0.93″	0.58″	0.69″	19th – 20th



2021-2022 Water Year Summary









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)

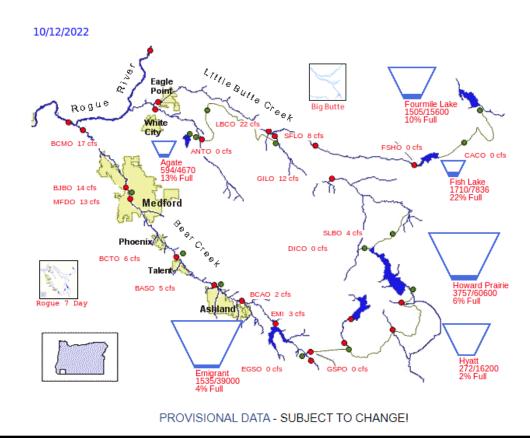
Reservoir Status

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

Rogue Basin Teacup Diagram A to Coastal Basinsh Umpgua River to-Willamette CEAN 32/-25 DIAMOND ALCE Corps Riddle 33/-28 Rogue Total (LOS+APP) Wesz Other CoreAzalea CRATE Gage LAKE West Fork No Alerts Glendale Lost Creek Prospect 🔲 Bank Full Elk Creek McLeod Big Butte LOST CREEK Flood Stage Agness Dodge Bridge WILLOW FL. LAKE Grants Pass Raygold 1 Wilderville C FISH LAKE 7 Applegate Little Applegate Copper Created: Thu Oct 13 20:41:01 2022 WCD: Water Control Diagram

Data courtesy of **Bureau of Reclamation**

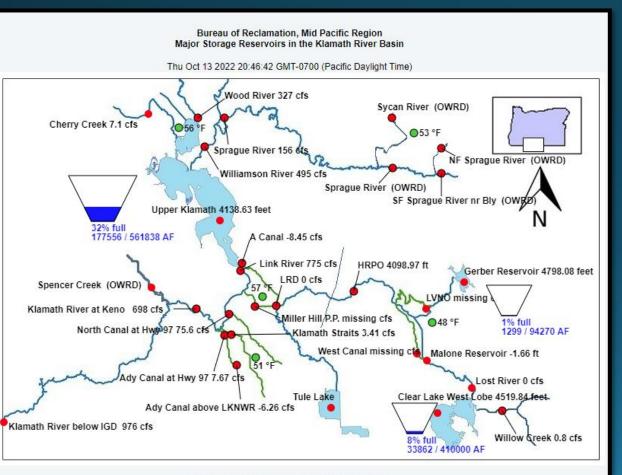
US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins





Reservoir Status

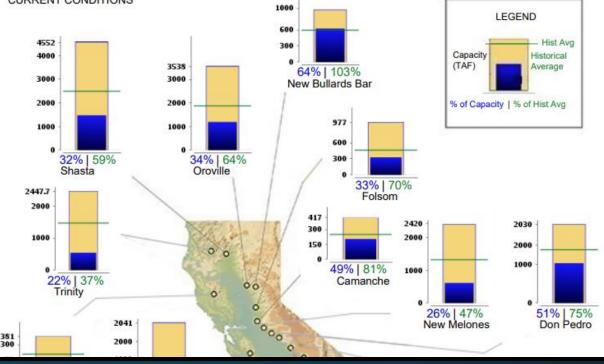
Klamath River Basin. Data courtesy of Bureau of Reclamation





CALIFORNIA MAJOR WATER SUPPLY RESERVOIRS CURRENT CONDITIONS

Midnight - October 12, 2022



Northern California. California Data Exchange Center

PROVISIONAL DATA - SUBJECT TO CHANGE!

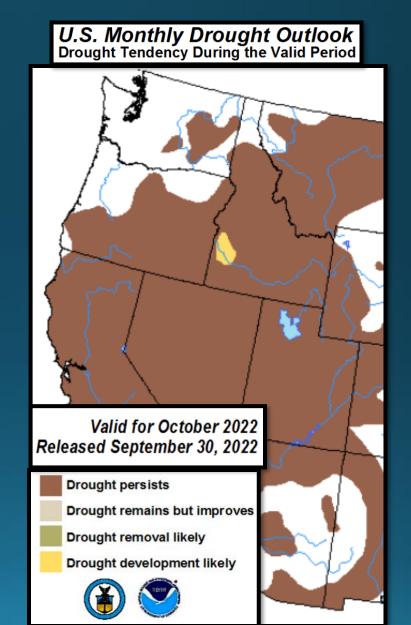
Image: NPS

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 9/30/22	Highest Max/ Lowest Min
September	65.6°	43.1°	2.24″	0.0″	o"	82° on 7 th / 34° on 16 th – 18 th
Normal (1991-2020)	63.0°	37.1°	1.93″	1.8″	Trace	N/A

Drought Monitor (Current) & Outlook (October)

United States Drought Monitor Map released: Thurs. October 13, 2022 Data valid: October 11, 2022 at 8 a.m. EDT Intensity None D0 (Abnormally Dry)

None
D0 (Abnormally Dry)
D1 (Moderate Drought)
D2 (Severe Drought)
D3 (Extreme Drought)
D4 (Exceptional Drought)
No Data







Looking Ahead: Normals for October (1991-2020)

October is the first month of the water year because it is the month when the weather usually turns definitively cooler and wetter for our forecast area. If fire season hasn't already ended, it almost certainly will end this month. Average low temperatures are in the 20s and 30s east of the Cascades, and in the upper 30s to 40s west of them. Average high temperatures are mainly in the 50s in the mountains, though colder on the peaks, where snow usually begins to accumulate. Most east side valley highs are in the 60s while, on the west side, 60s and lower 70s are normal. 5-10 inches of precipitation is normal for Curry County & in the higher terrain of far western Siskiyou County, and 10-15" in the Curry mountains. Elsewhere, amounts vary greatly, with 0.5"-3" east of the Cascades, and 1" to 5" across much of the rest of the area.

Average Maximum Temperatures Average Minimum Temperatures Average Precipitation Inches 20 15 10 8.0 6.0 5.0 4.0 3.0 2.0 1.5 1.0 .50 25 10 .01 Esri, HERE, Garmin, NGA, USGS, NPS



*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