# National Weather Service Medford 2022: May 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 National Centers for Environmental Information (NCEI).



# May 2022 Weather Review

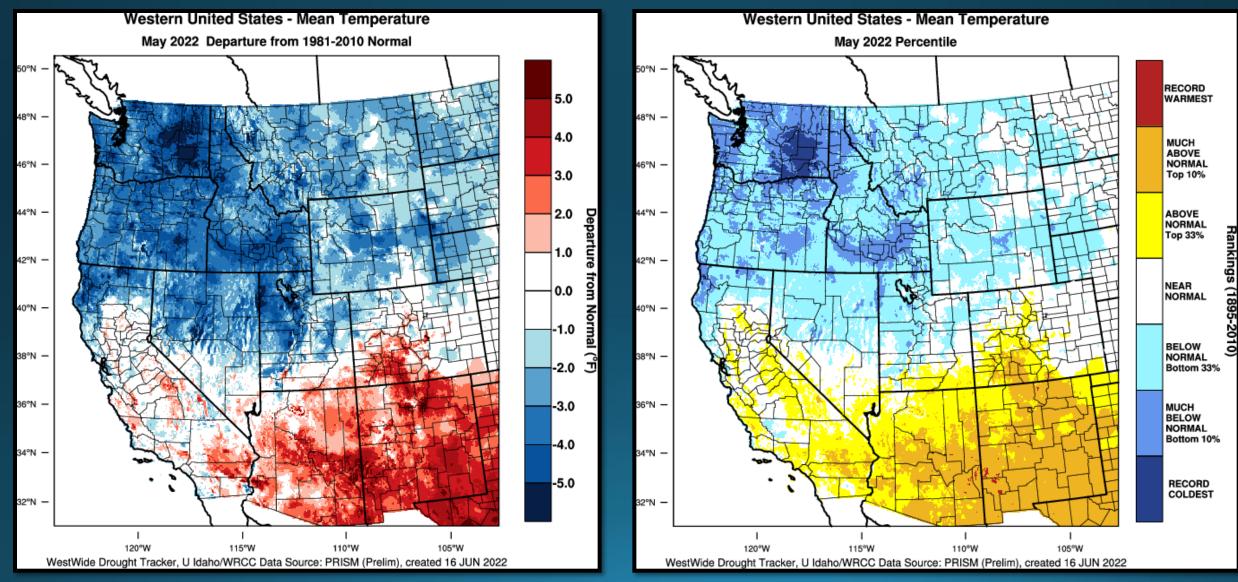
The cooler and wetter trend from the end of April continued well into May, though there was a brief break on the 4<sup>th</sup> and 5<sup>th</sup>. Anomalous troughing settled over the Pacific Northwest for the first half of May, and this brought a parade of fronts through the region. Cool temperatures, gusty winds, and beneficial precipitation accompanied each of these fronts. The most significant of these fronts, affected the region from the 8<sup>th</sup> to the 10<sup>th</sup>, and during this time, snow levels dipped to around 1500 ft. This brought snow down to some west side valley floors, though no accumulation occurred. Crater Lake, however, recorded almost a foot of snow with this front. The coldest temperatures of the month also occurred during this time, and every climate site in the forecast area set a new daily record low maximum temperature on the 8<sup>th</sup> and/or 9<sup>th</sup>. Active weather and well below normal temperatures continued into the middle of the month, though temperatures trended warmer after the 10<sup>th</sup>.

The anomalous trough finally moved to the east around the 15<sup>th</sup> and a period of zonal flow followed through the 20<sup>th</sup>. This resulted in more seasonable temperatures and a period of dry conditions. The frequency of active weather really slowed down after the middle of the month when, instead of a front coming through roughly every other day, it became more of a once a week occurrence. The next period of troughing returned from the 20<sup>th</sup> to the 22<sup>nd</sup>. This brought cooler temperatures, with values slightly below normal, but precipitation was scarce with this system. Upper level ridging followed this trough, and brought a sharp warm up to the region with temperatures reaching 5 to 10 degrees above normal. The Medford Airport came close to reaching it's first 90 degree day of the year on the 25<sup>th</sup>, but only managed to reach 88 degrees. Another period of troughing followed this ridge, and with temperatures returning to below normal values, this ended the chance for the Medford Airport to reach it's first 90 degree day of the year this month. This is notable considering the average first date for Medford to reach 90 degrees is May 20<sup>th</sup>.

With relatively persistent troughing, especially during the first half of the month, overall monthly temperatures were below normal and precipitation was near to above normal for much of the forecast area. This late season activity significantly helped to reduce water deficits, improve snowpack by May standards, and more importantly, slow the onset of fire season. Though water deficits were significantly improved, drought conditions persisted across much of the area into June.



# May 2022 Observed Temperatures





# Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	51.8	-2.4°	58.3	-2.2°	45.3	-2.7°
Roseburg	56.6	-2.9°	66.9	-4.1°	46.4	-1.5°
Medford	57.4	-3.0°	69.7	-4.2°	45.0	-1.9°
Klamath Falls	47.2	-4.5°	63.0	-4.2°	31.4	-4.8°
Montague, CA	54.4	-0.5°	71.1	2.4°	37.8	-3.2°
Mt. Shasta City, CA	53.6	-0.8°	67.8	-1.3°	39.3	-0.4°
Alturas, CA	48.2	-4-3°	64.8	-3.1°	31.6	-5.6°



# Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	75°	26 <sup>th</sup>	38°	11 <sup>th</sup>
Roseburg	<mark>8</mark> 3°	25 <sup>th</sup>	<i>37</i> °	9 <sup>th</sup>
Medford	<mark>88</mark> °	25 <sup>th</sup>	34°	20 <sup>th</sup>
Klamath Falls	<mark>8</mark> 3°	25 <sup>th</sup>	21 <sup>0</sup>	3 <sup>rd</sup> & 11 <sup>th</sup>
Montague, CA	<b>91°</b>	25 <sup>th</sup>	24°	8 <sup>th</sup> & 11 <sup>th</sup>
Mt. Shasta City, CA	<b>88°</b>	25 <sup>th</sup>	22 <sup>0</sup>	9 <sup>th</sup>
Alturas, CA	85°	25 <sup>th</sup>	14°	9 <sup>th</sup>



# May Temperature Records

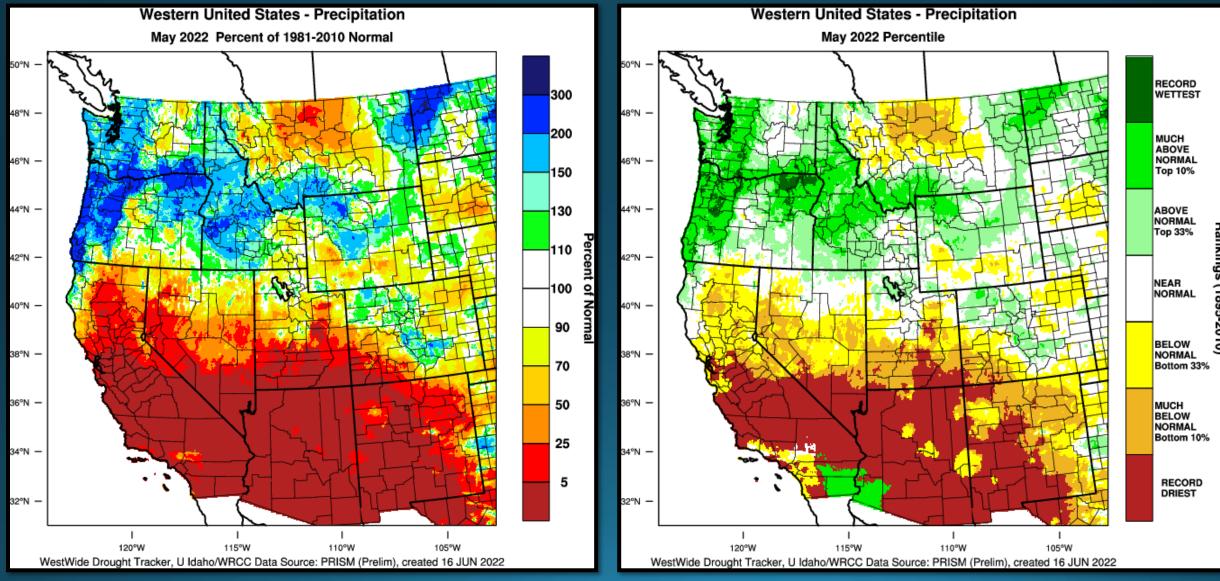
	Date	Record High	Old Record/Year
North Bend	26 <sup>th</sup>	75 <b>°</b>	72°/1919

	Date	Record Low Max	Old Record/Year
Medford	8 <sup>th</sup>	50°F	Ties w/1922
Klamath Falls	8 <sup>th</sup>	39 <b>°</b>	44° / 1922
	9 <sup>th</sup>	43°	44° / 1953
Alturas	8 <sup>th</sup>	41 <sup>0</sup>	Ties w/2003
	9 <sup>th</sup>	42°	43° / 2003
Mt Shasta City	9 <sup>th</sup>	47°	48° / 1977
North Bend	9 <sup>th</sup>	49°	51° / 1967
	29 <sup>th</sup>	55°	Ties w/2011
Roseburg	8 <sup>th</sup>	50°	Ties w/1933
Montague	8 <sup>th</sup>	48°	51° / 2003
	9 <sup>th</sup>	49 <b>°</b>	53° / 2005

	Date	Record Low	Old Record/Year
Klamath Falls	11 <sup>th</sup>	21 <sup>0</sup>	24°/1909
	17 <sup>th</sup>	25°	Ties w/ 1965
Mt Shasta City	8 <sup>th</sup>	27°	29°/1977
	9 <sup>th</sup>	22 <sup>°</sup>	29°/1985
Alturas	8 <sup>th</sup>	19°	21°/1990
	9 <sup>th</sup>	14 <sup>0</sup>	22°/1990
	31 <sup>st</sup>	26°	27° / 1978
Montague	3 <sup>rd</sup>	27°	Ties w/1959
	8 <sup>th</sup>	24 <sup>°</sup>	27° / 1965
	11 <sup>th</sup>	24 <sup>°</sup>	27° / 1970
	20 <sup>th</sup>	34°	35° / 2003

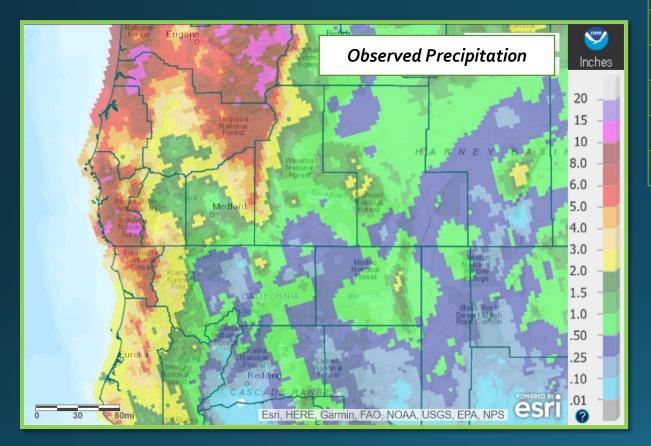


# May 2022 Observed Precipitation

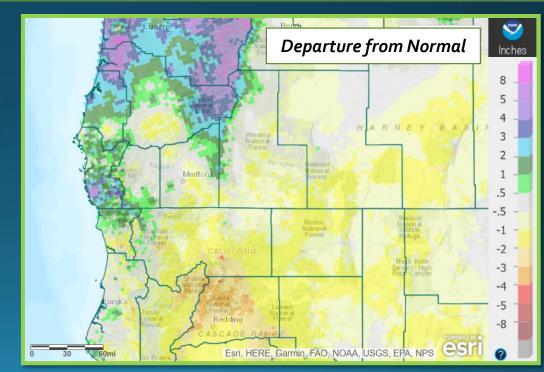




# Precipitation



	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	5.11″	2.16″	1.08″	<b>13<sup>th</sup> – 14<sup>th</sup></b>
Roseburg	2.68″	0.59″	0.51″	5 <sup>th</sup>
Medford	0.82″	-0.52″	0.19″	9 <sup>th</sup> <b>– 10</b> <sup>th</sup>
Klamath Falls	0.41″	-0.63″	0.14″	27 <sup>th</sup> – 28 <sup>th</sup>
Montague, CA	0.06″	-2.04″	0.02″	5 <sup>th</sup>
Mt. Shasta City, CA	0.54″	-1.68″	0.25″	9 <sup>th</sup>
Alturas, CA	0.72″	-0.54″	0.19″	8 <sup>th</sup> – 9 <sup>th</sup>



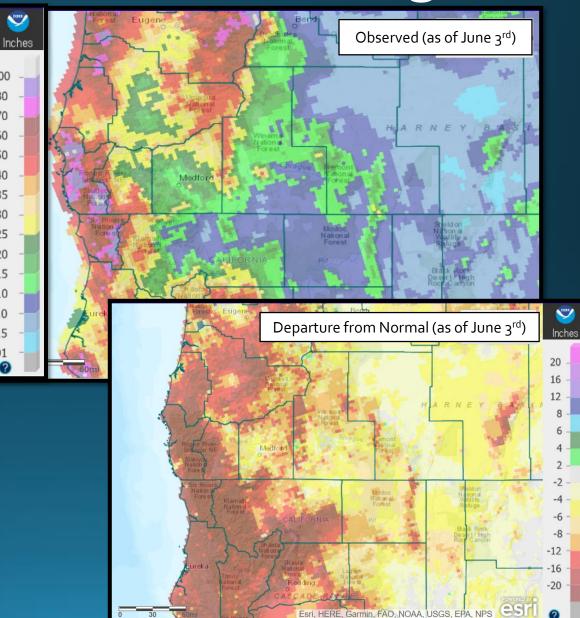


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# WaterYear Status (As of June 3<sup>rd</sup>)

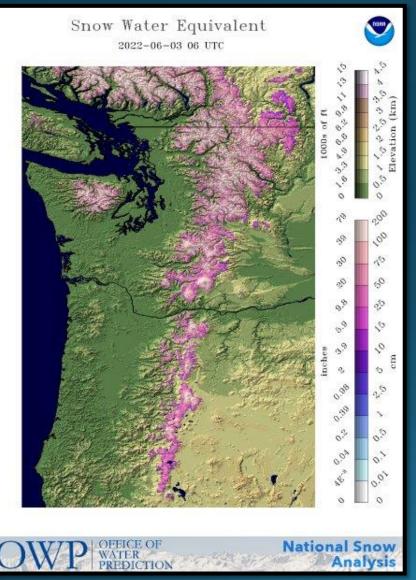
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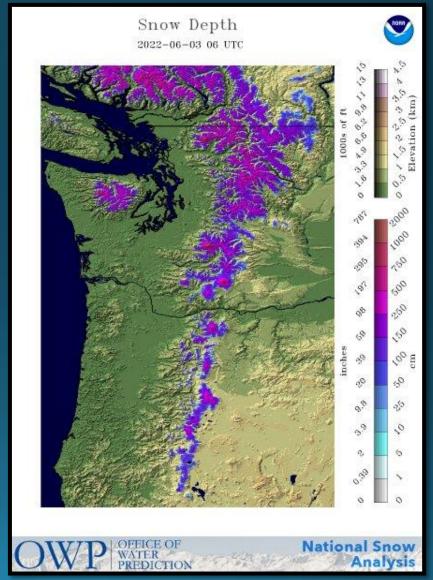
80 Climate Sites Water Year Precipitation (Since Oct 1) and Percent of Normal as of 131AM  $\equiv$ 70 IUN03 60 50 Normal Precipitation Since Oct 1 2021/2022 Observed Precipitation Since Oct 1 40 Mount Shasta 35 North Bend Medford OR Alturas CA Roseburg OR Klamath Falls OR City CA 30 60 55.43 25 42% below normal 33% below normal 7% below norma 21% below normal 22% below normal 49% below normal 48 45.93 15 ecipitation 35.62 36 29.92 luches 24 23.65 18.31 16.77 13.15 12 10.15 9.75 6.83 5.69 0 Mount Shasta North Bend OR Roseburg OR Medford OR Klamath Falls OR Alturas CA City CA Highcharts.com





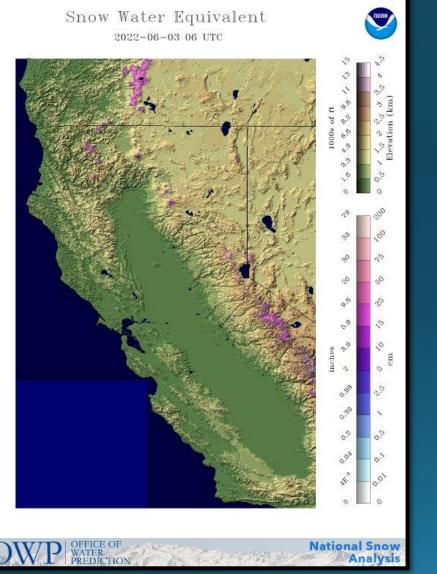
# PacNW SWE & Snow Depth as of 6/3/22

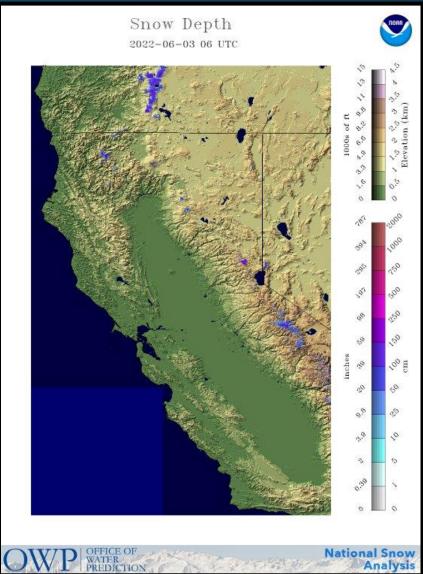


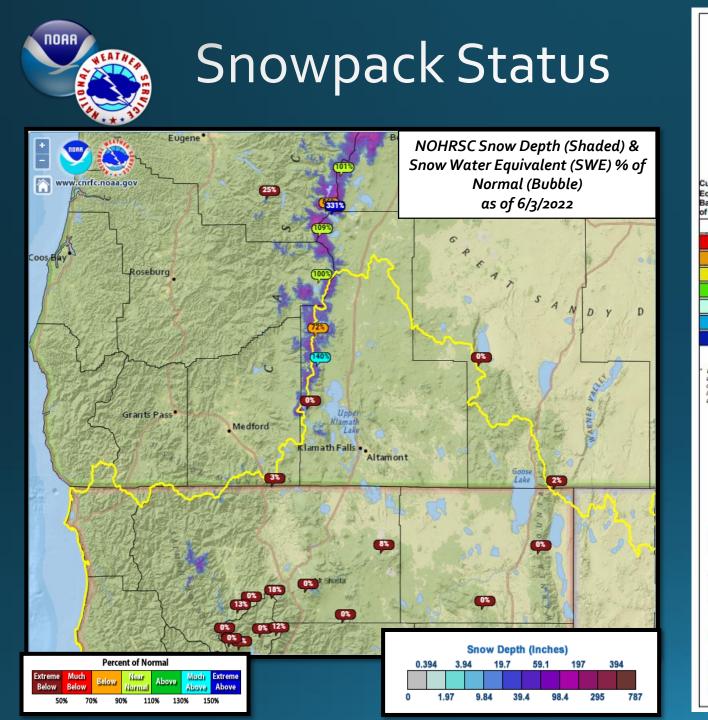


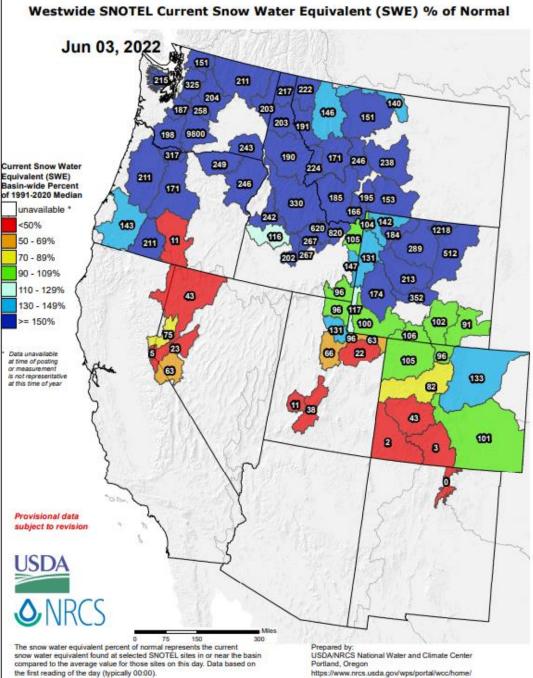


# California SWE & Snow Depth as of 6/3/22











# **Reservoir Status**

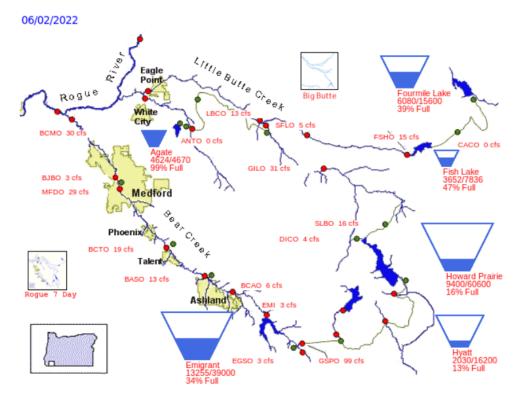
Data courtesy of <u>US Army Corps of Engineers</u>

### Rogue Basin Teacup Diagram to Willamette to Coastal Basinsh Company Rive CEAN 97/-6 DIAMONE Corps Riddle 99/-1 Rogue Total (LOS+APP) Other CreAzalea CRATER Gage LAKE West Fork No Alerts Lost Creek Prospect Glendale Bank Full Elk Creek, Flood Stage McLeod Big Butte LOST CREEL Agness LAKE Dodge Bridge WILLOW LAKE Pass Raygold hand Wilderville U AK Z Applegate Little Applegate Copper 88/-12 Created: Fri Jun 3 12:40:32 202 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

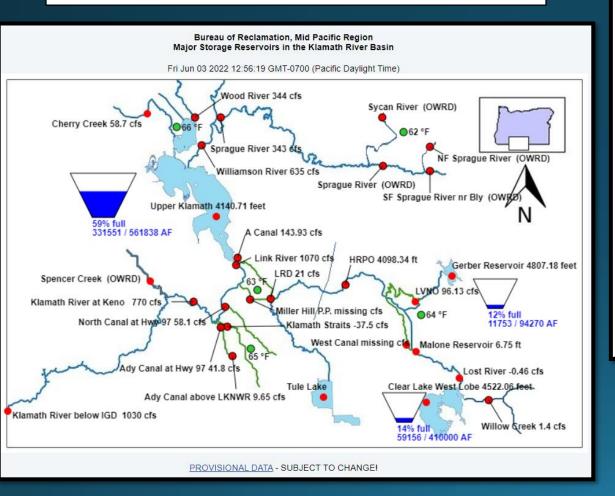


PROVISIONAL DATA - SUBJECT TO CHANGE!

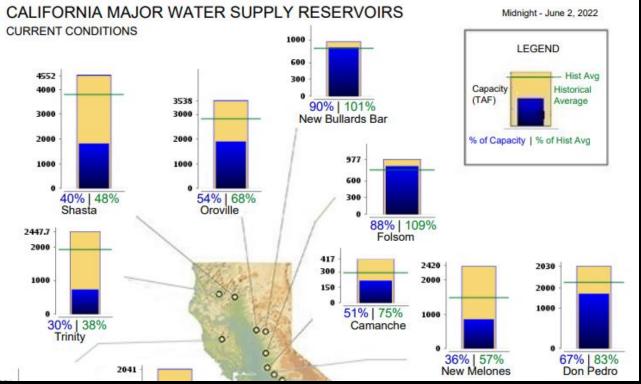


# Reservoir Status

### Klamath River Basin. Data courtesy of <u>Bureau of Reclamation</u>







Northern California. California Data Exchange Center



10A

Image: NPS

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 5/29/22	Highest Max/ Lowest Min
May	45·5°	27.5°	7.36″	32.9″	41″	62° on 26 <sup>th</sup> / 17° on 11 <sup>th</sup>
Normal (1991-2020)	49.0°	29.3°	3.65″	14.5″	44″	N/A

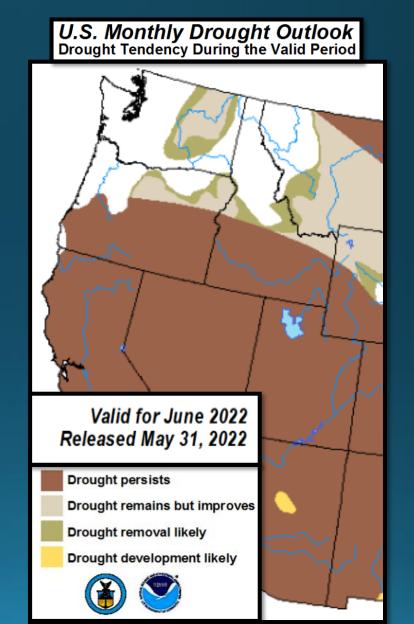
# Drought Monitor (Current) & Outlook (June)

# United States Drought Monitor

Map released: Thurs. June 2, 2022 Data valid: May 31, 2022 at 8 a.m. EDT

### Intensity

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





# Looking Ahead: Normals for June (1991-2020)

### **Temperatures:**

Along the coast lows are around 50 with highs in the 60s. Inland, valley high temperatures are usually in the 70s to mid 80s. Nights are typically cool, with average minimum temperatures in the 30s and 40s in the valleys east of the Cascades, and in the 40s to near 50 in the valleys west of the Cascades. The higher mountains typically experience highs in the 50s and 60s, with lows in the 30s to lower 40s.

### **Precipitation:**

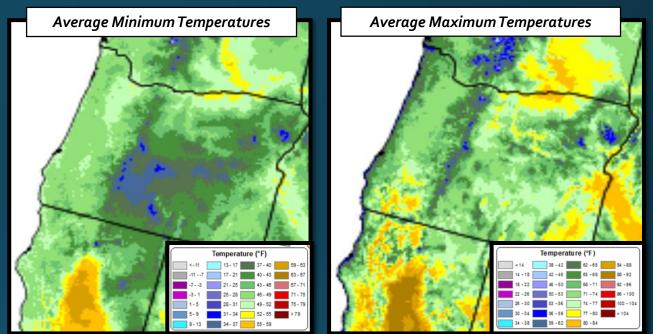
June is a dry season month, so it typically features limited precipitation. Precipitation often comes in the form of showers and thunderstorms, but frontal systems do still occur, though much less frequently than during the wetter months of the year. Nearly half of the forecast area receives, on average, and inch or less of precipitation in June. The mountains get 1 to 3 inches of water in June, except in portions of the Cascades and Coast Range, where 3 to as much as 6 inches occurs, on average. West of the Coast Range and in eastern Douglas County normal precipitation is 2 to 4 inches.

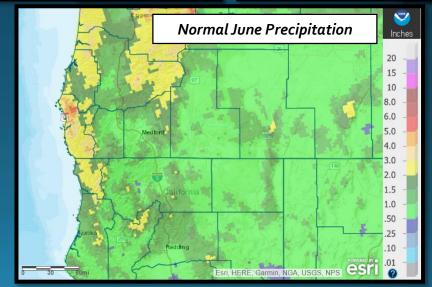
### <u>Snow:</u>

Crater Lake NP HQ's average June snowfall is 3.7 inches, per the 1991-2020 normal period. Average snow depth there for the 1991-2010 time period is 42 inches on June 1<sup>st</sup>, and 5 inches on June 30<sup>th</sup>.

### Lightning, 2003-2017 Average:

The average number of cloud to ground lightning strikes in the Medford County Warning Area during the month of June from 2003 to 2017 was 3,080. For comparison, the average for May is 2,466 and 4,196 for July.







# \*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