

National Weather Service Medford

2023: 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 2023 Weather Review

The cooling trend from the end of April carried into the beginning of May when average temperatures hovered around 5 to 10 degrees below normal through the first 10 days of the month. This was due to yet another upper level trough that dropped southward into the region that lingered through the 5th, followed quickly by a period of broad troughing over the Pacific Northwest that persisted through the 10th. During this time, showers and thunderstorms were a common occurrence and the Medford Airport recorded the vast majority of its monthly precipitation during the first 8 days of the month.

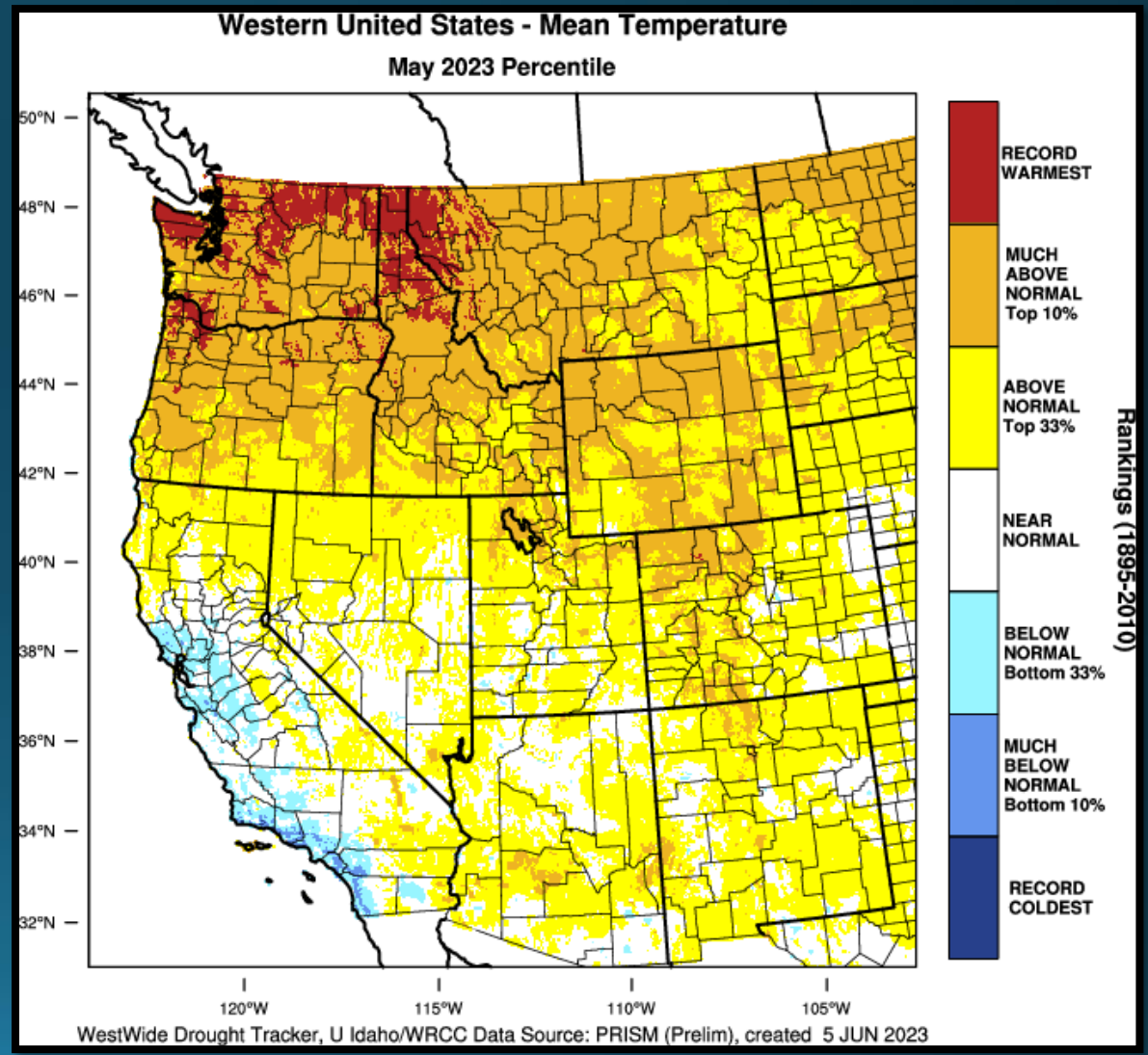
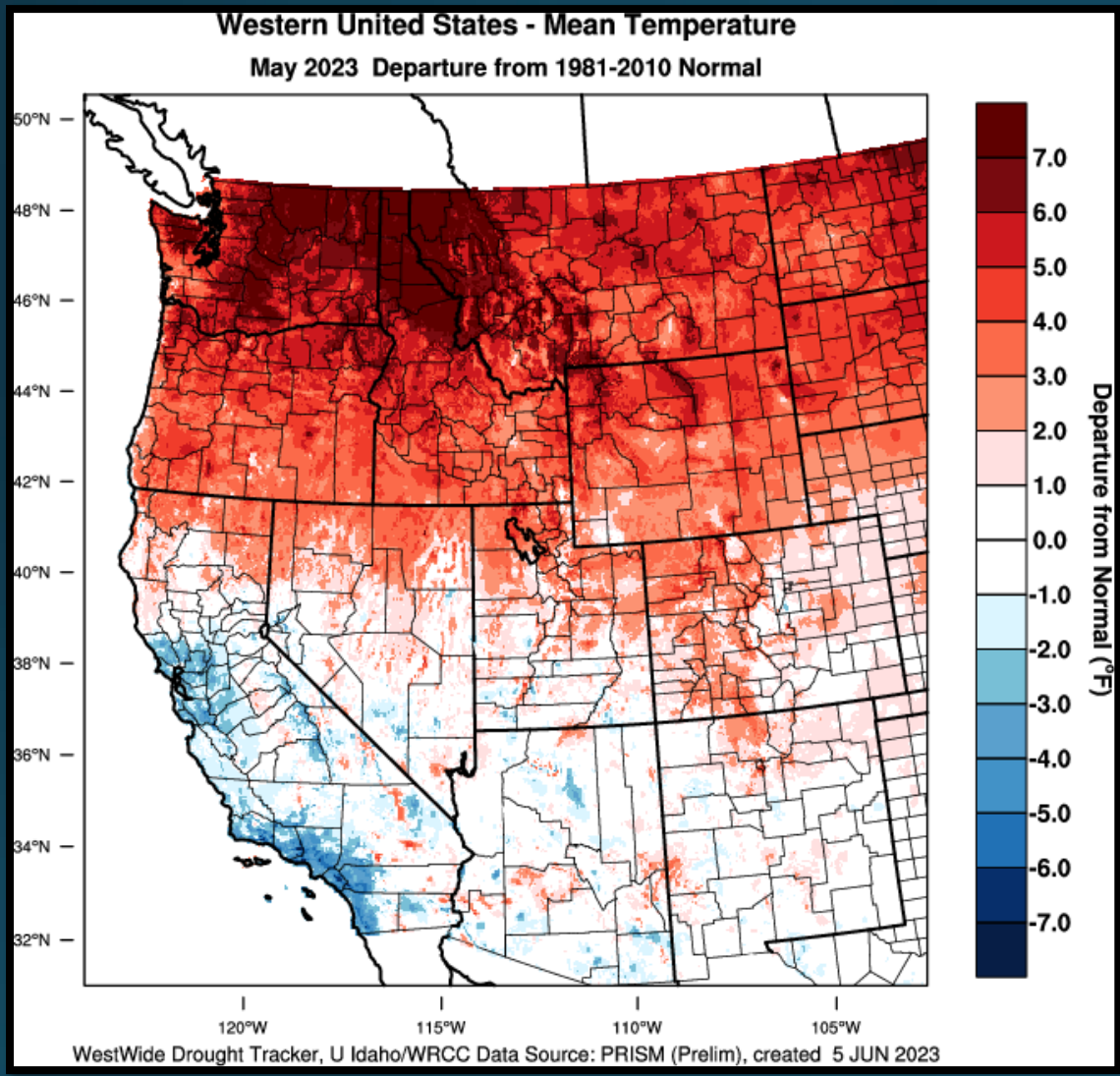
Conditions transitioned to a more summer like pattern for the remainder of the month with daily thunderstorms and warmer temperatures. Around the 11th, the flow quickly transitioned from zonal to an amplified upper level ridge by the 14th. This brought a sharp warm up with high temperatures more typical of summer values than mid-May. Low pressure retrograded and undercut the amplified ridge, leading to a Rex Block pattern. This limited the inland heat, but the orientation of the upper level pattern brought the warmest temperatures to the coast and into the Umpqua Basin. Temperatures peaked on the 14th and although Medford only recorded 93 degrees that day, both North Bend and Roseburg recorded 95 degrees. This was a new daily record for North Bend but Roseburg fell short of their daily record by two degrees.

Despite low pressure in the region, temperatures remained hot for much of the area and several days of low 90s were recorded at the Medford Airport through the 19th. The region remained under the influence of the upper low through the 16th, then high pressure returned around the 17th and dominated the local weather through the 21st. This maintained benign weather with hot temperatures and dry conditions.

The pattern transitioned again around the 22nd as a trough passed north of the area and brought a dry cold front through the region. Broad troughing settled over the Pacific Northwest after this front and persisted through the end of the month. This brought average temperatures closer back to seasonal norms, though temperatures were still around five degrees above normal. The more noticeable change was the return to a daily thunderstorm pattern, especially east of the Cascades and across northern California. The Medford area was on the western periphery of thunderstorms, so only a trace of precipitation was recorded on the 28th as a thunderstorm grazed by the airport. East of the Cascades and across northern California, however, slow moving storms brought upwards of half to three quarters of an inch of rain and the climate sites in those areas recorded above normal precipitation for the month.



May 2023 Observed Temperatures





Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	54.6	0.4°F	60.7	0.2°F	48.6	0.6°F
Roseburg	62.9	3.4°F	75.6	4.6°F	50.2	2.3°F
Medford	64.2	3.8°F	78.0	4.1°F	50.4	3.5°F
Klamath Falls	54.8	3.1°F	69.7	2.5°F	39.8	3.6°F
Montague, CA	60.8	5.9°F	76.2	7.5°F	45.4	4.4°F
Mt. Shasta City, CA	57.3	2.9°F	72.2	3.1°F	42.5	2.8°F
Alturas, CA	54.2	1.7°F	70.0	2.1°F	38.4	1.2°F



Monthly Max & Min Temperatures

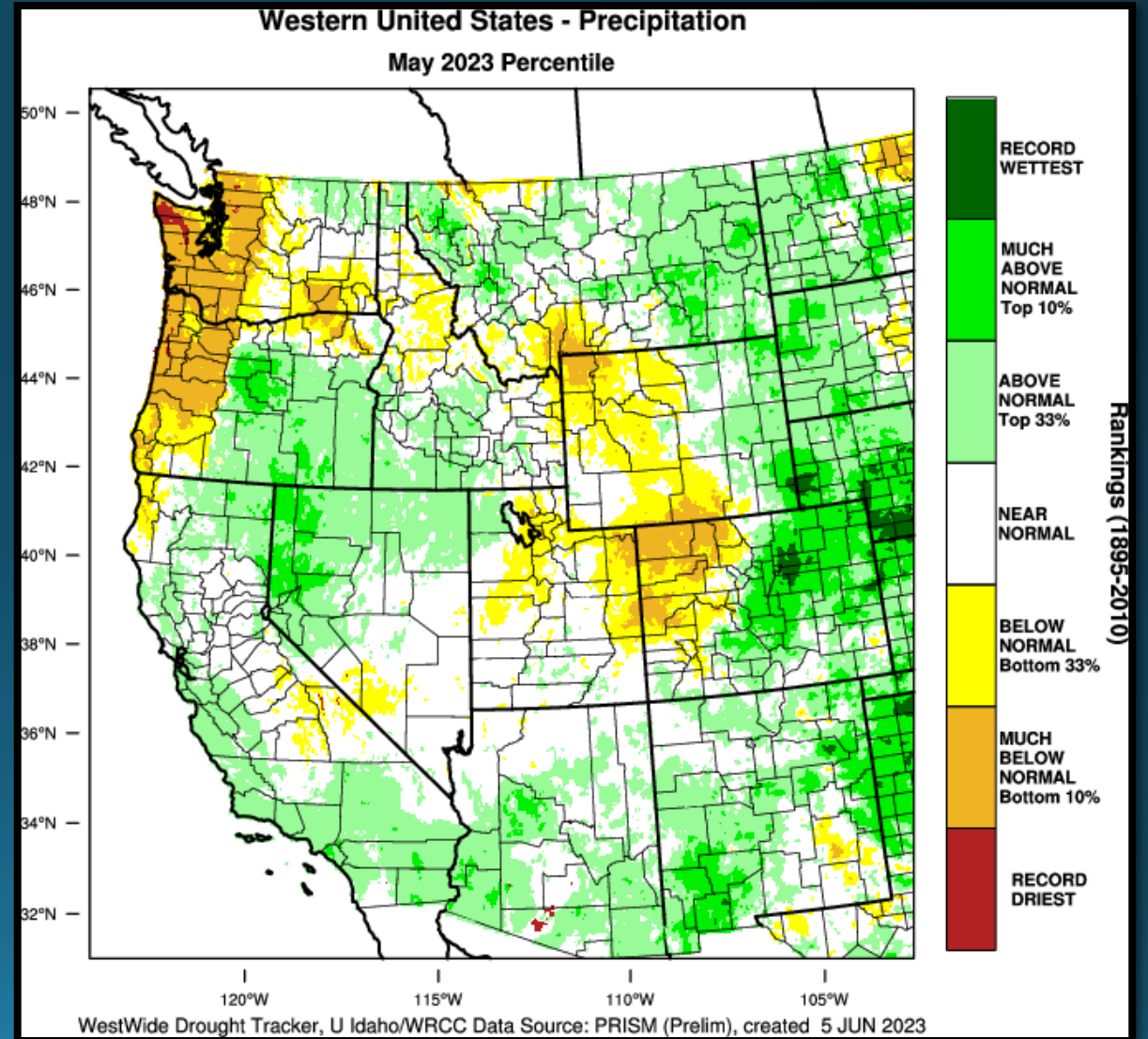
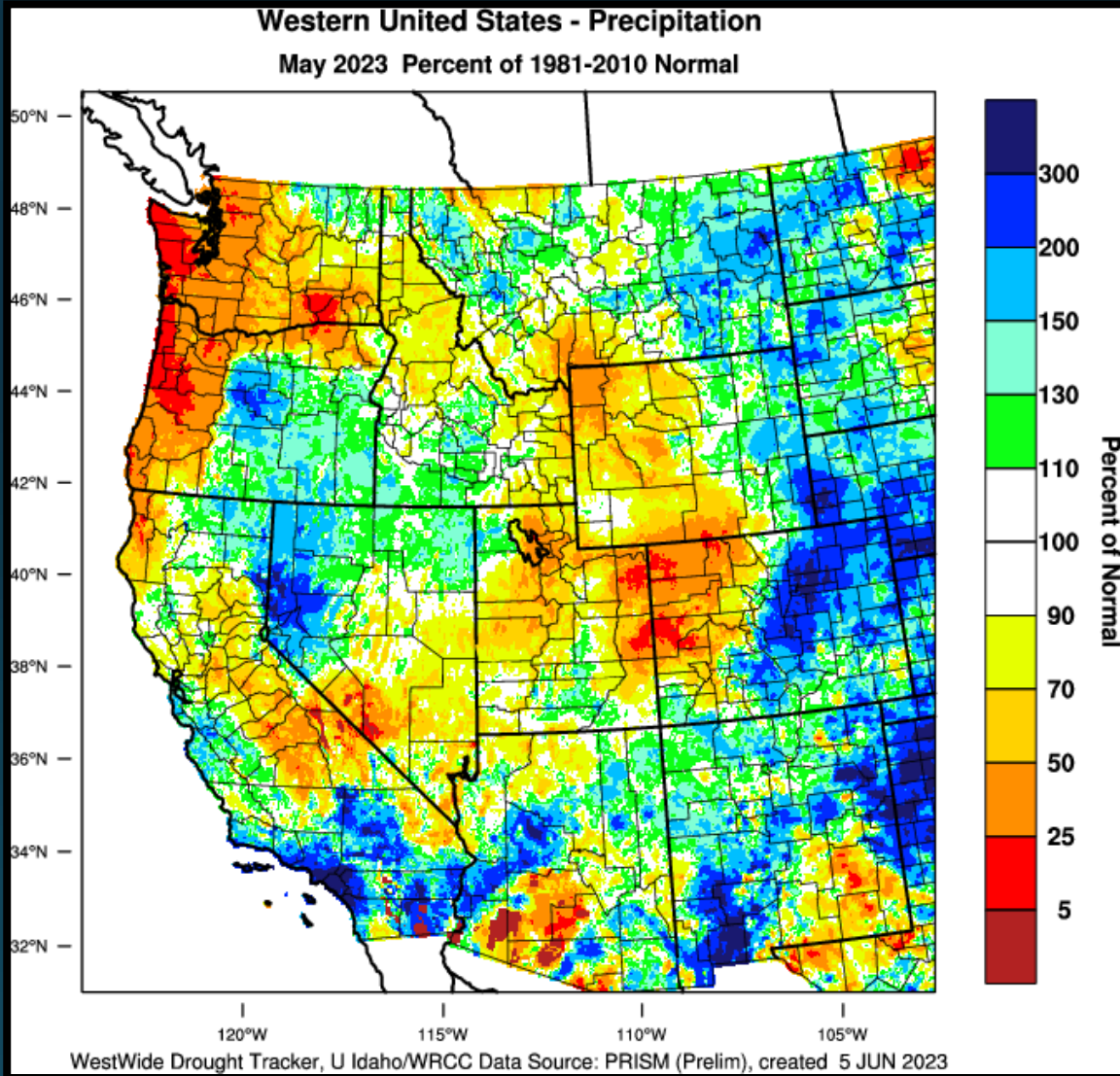
	Max (°F)	Date(s)	Min (°F)	Date(s)
<i>North Bend</i>	95°	14th	40°	9th
<i>Roseburg</i>	95°	14th	39°	7th
<i>Medford</i>	93°	14th	38°	7th
<i>Klamath Falls</i>	87°	19th	29°	9th
<i>Montague, CA</i>	93°	20th	32°	9th
<i>Mt. Shasta City, CA</i>	89°	19th	29°	9th
<i>Alturas, CA</i>	88°	19th	24°	9th

Record Temperatures

	Date	Record High	Old Record/Year
North Bend	14 th	95°F	82° / 2014
Klamath Falls	19 th	87°F	Ties w/1919
Montague	20 th	93°F	Ties w/1963
Mt Shasta City	19 th	89°F	Ties w/2008
	20 th	88°F	Ties w/1963

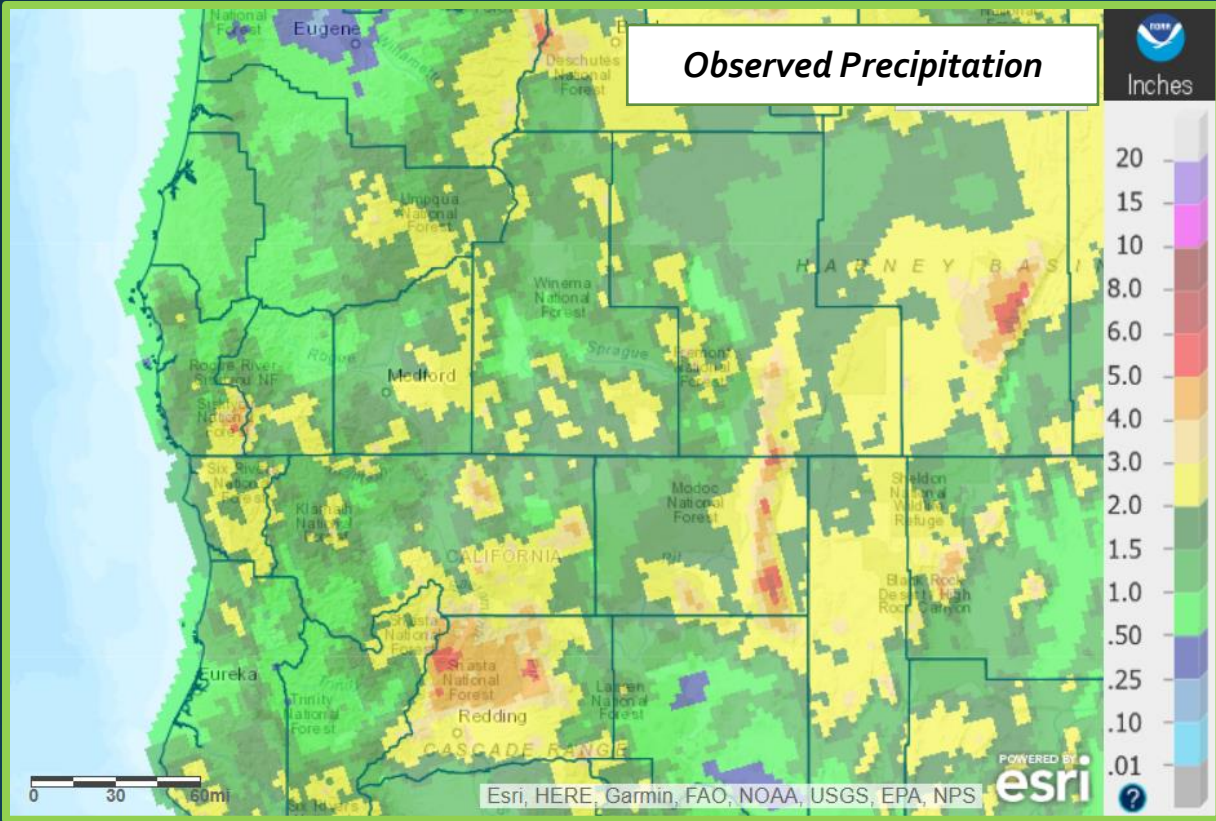


May 2023 Observed Precipitation

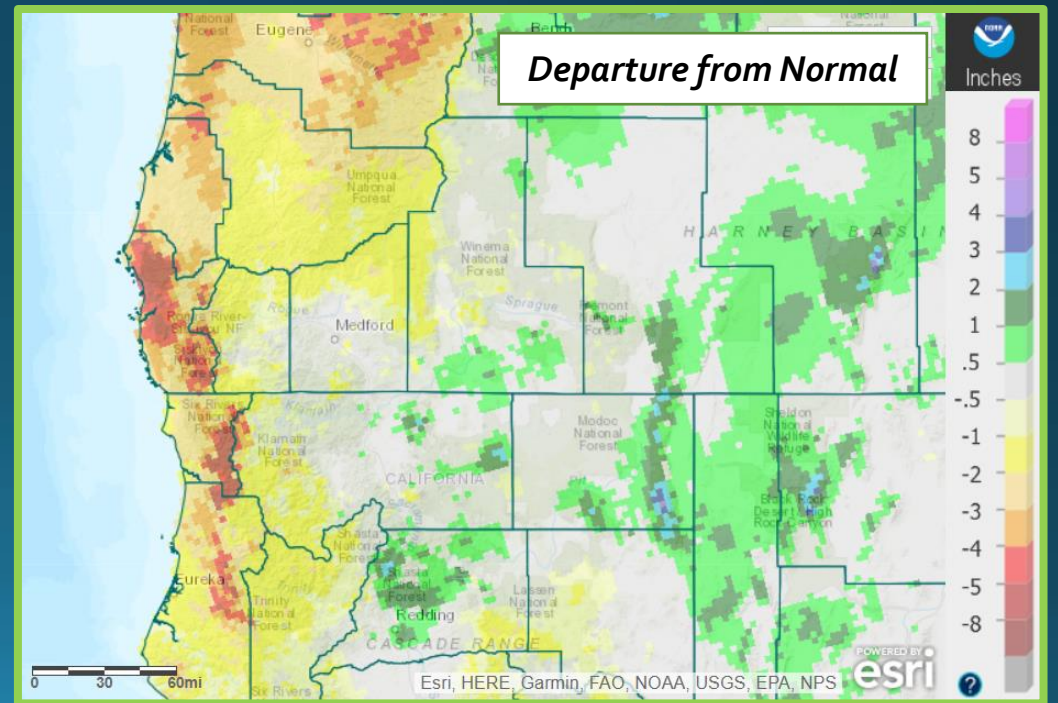




Precipitation



	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	1.27"	-1.68"	0.63"	7 th – 8 th
Roseburg	1.01"	-1.08"	0.54"	7 th – 8 th
Medford	1.03"	-0.31"	0.50"	7 th – 8 th
Klamath Falls	2.24"	1.20"	0.99"	4 th – 5 th
Montague, CA	1.50"	-0.60"	0.55"	2 nd
Mt. Shasta City, CA	1.78"	-0.44"	0.60"	7 th – 8 th
Alturas, CA	2.11"	0.85"	0.64"	30 th



Record Precipitation

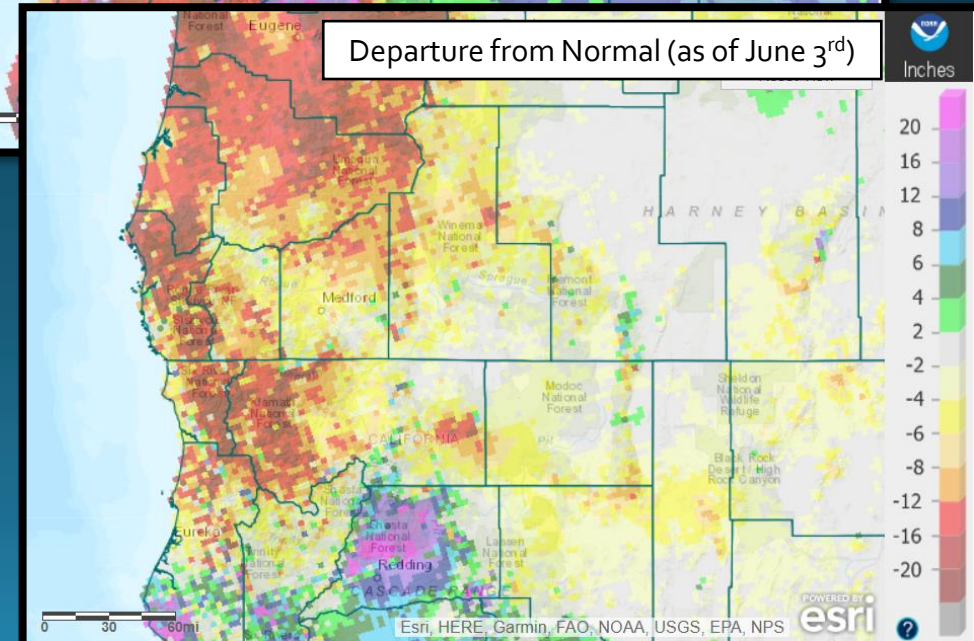
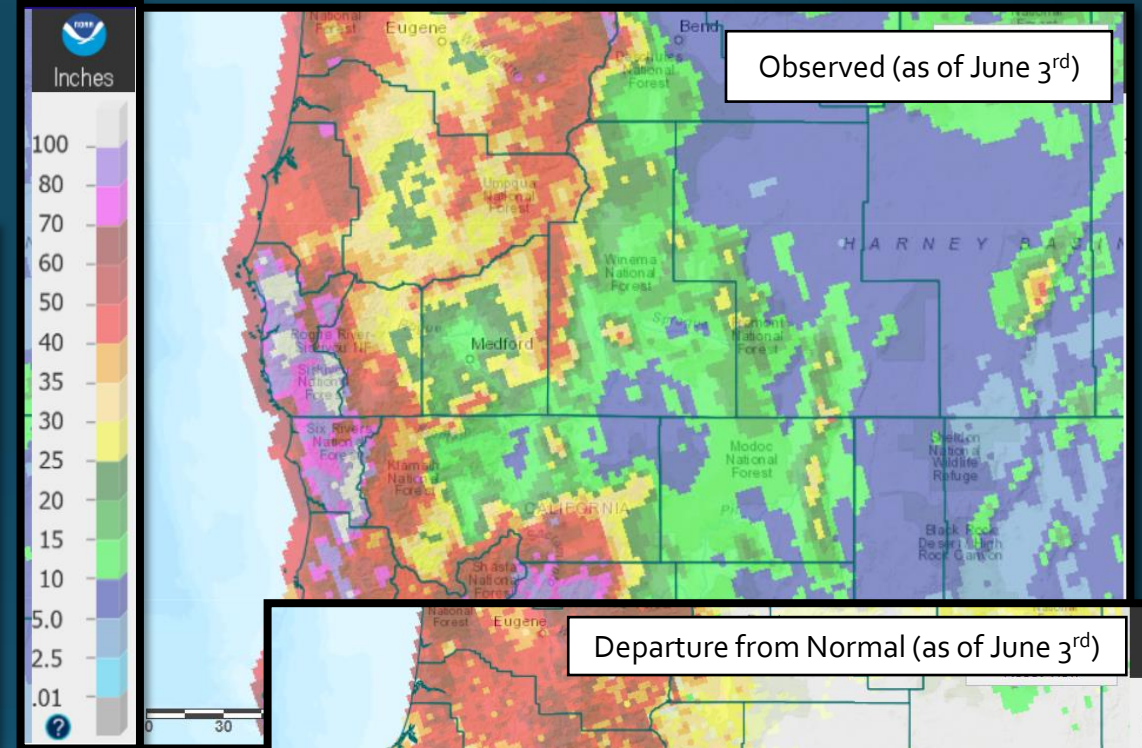
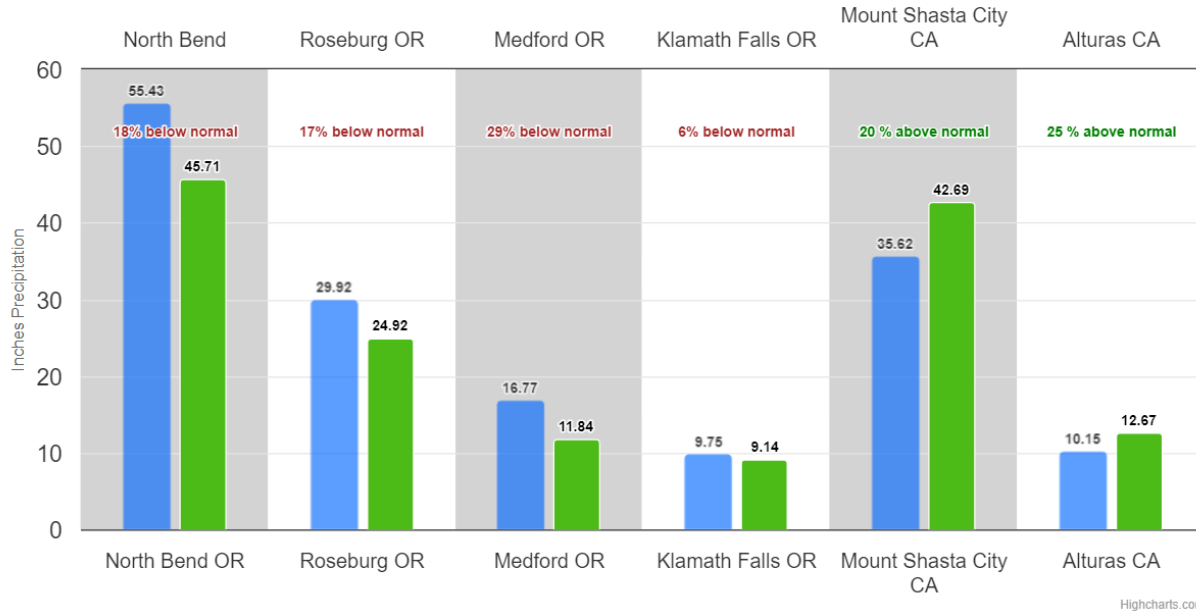
	Date / Amount	Old Record / Year
Montague	2 nd / 0.55"	0.34" / 2009



Water Year Status (As of June 3rd)

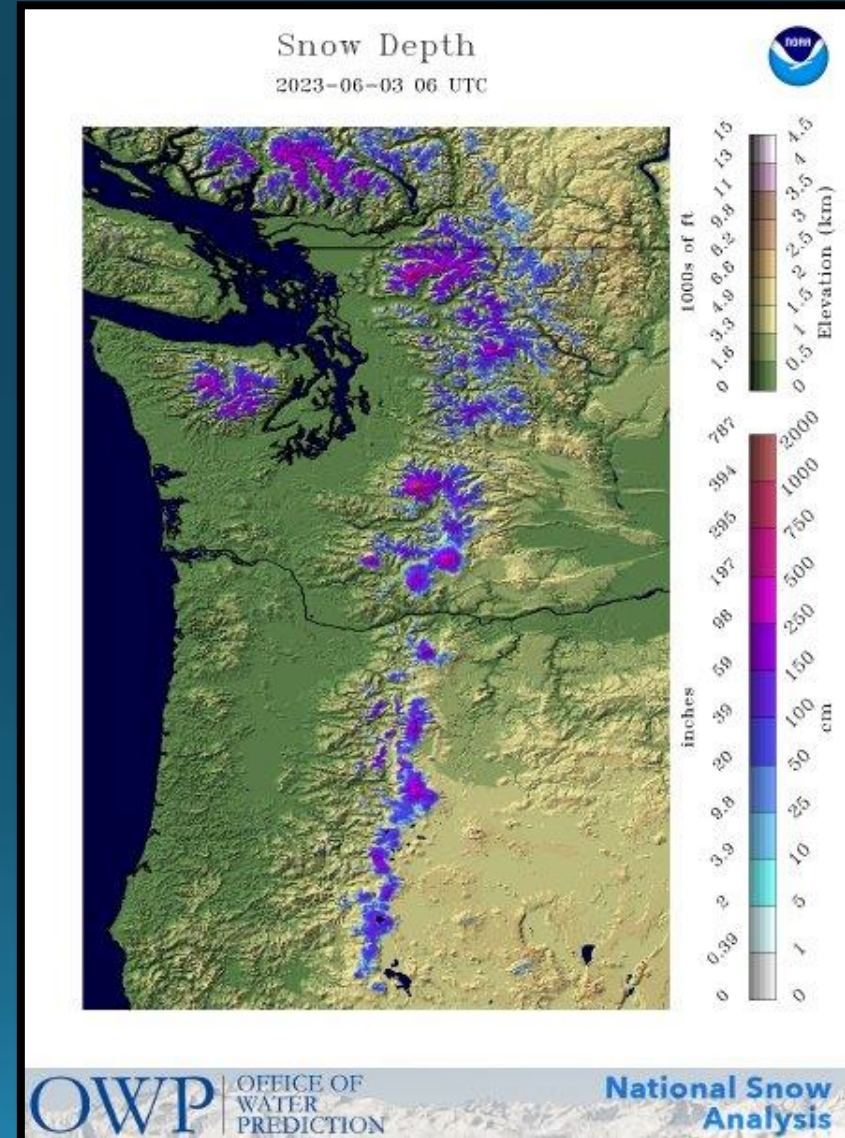
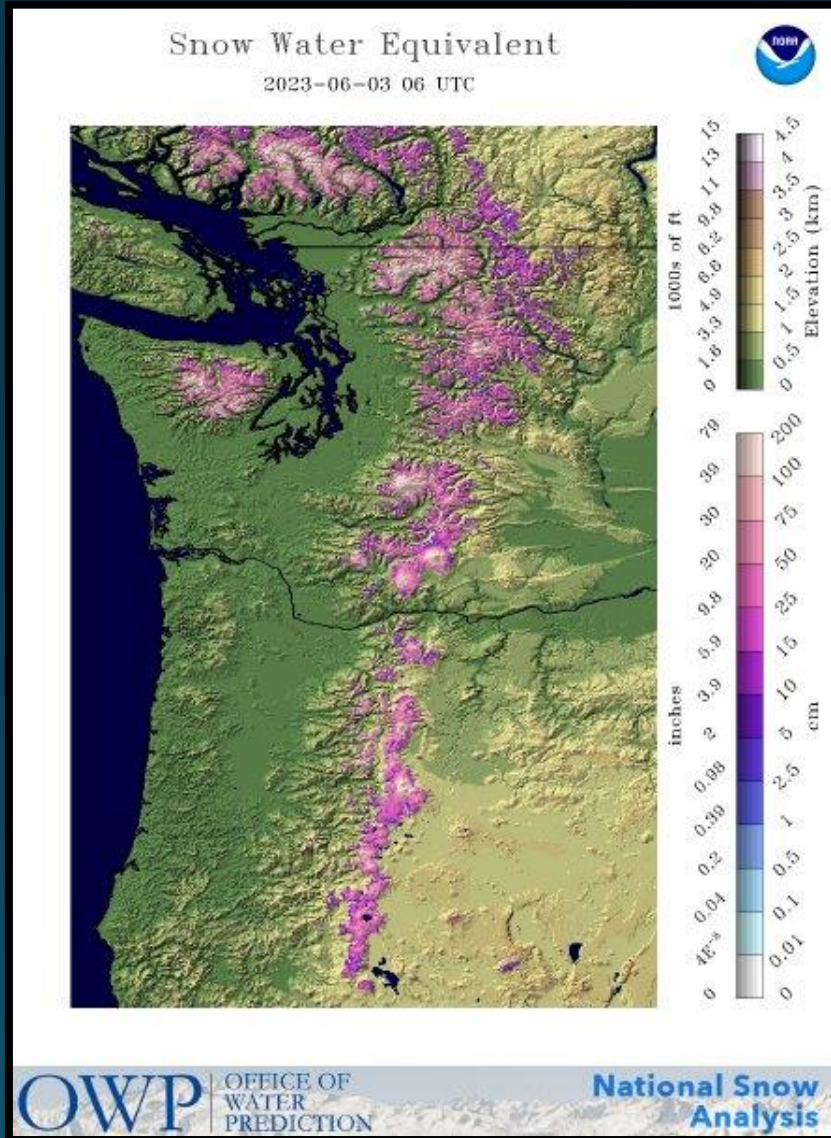
Climate Sites Water Year Precipitation (Since Oct 1) and Percent of Normal as of 130AM JUN03

■ Normal Precipitation Since Oct 1 ■ 2022/2023 Observed Precipitation Since Oct 1

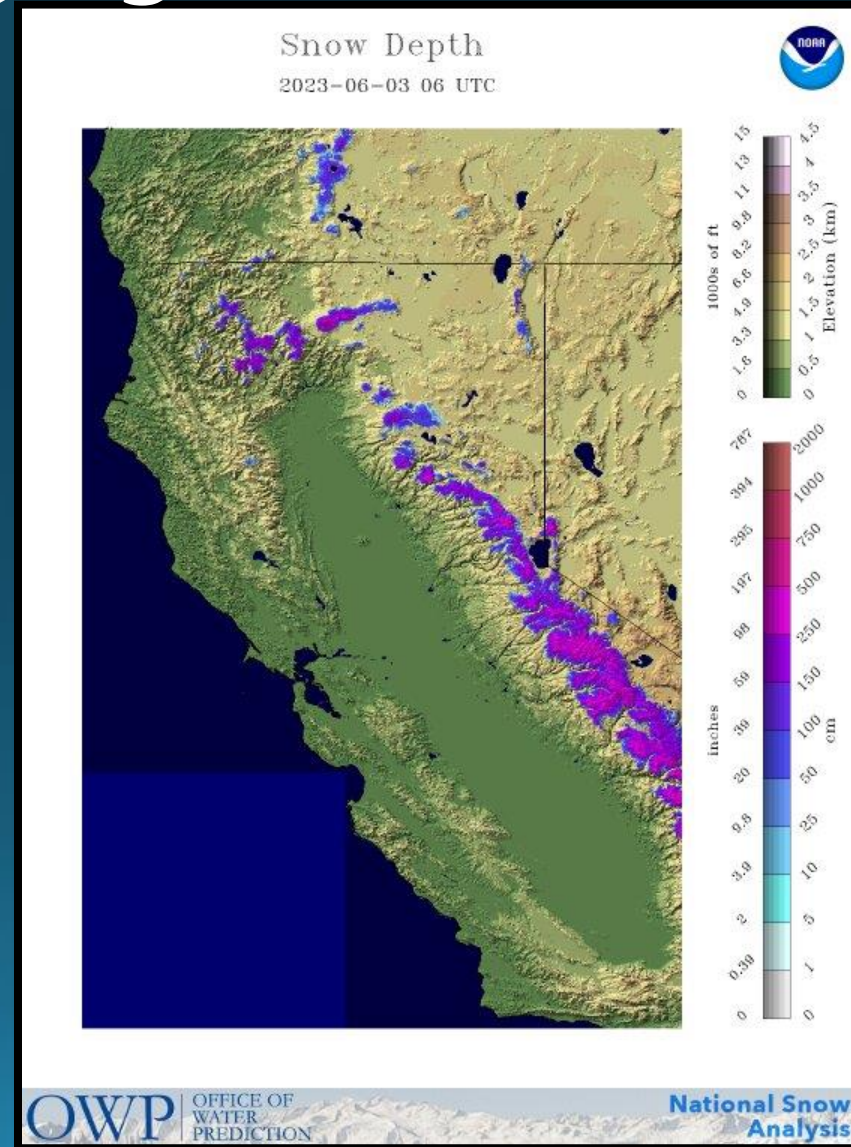
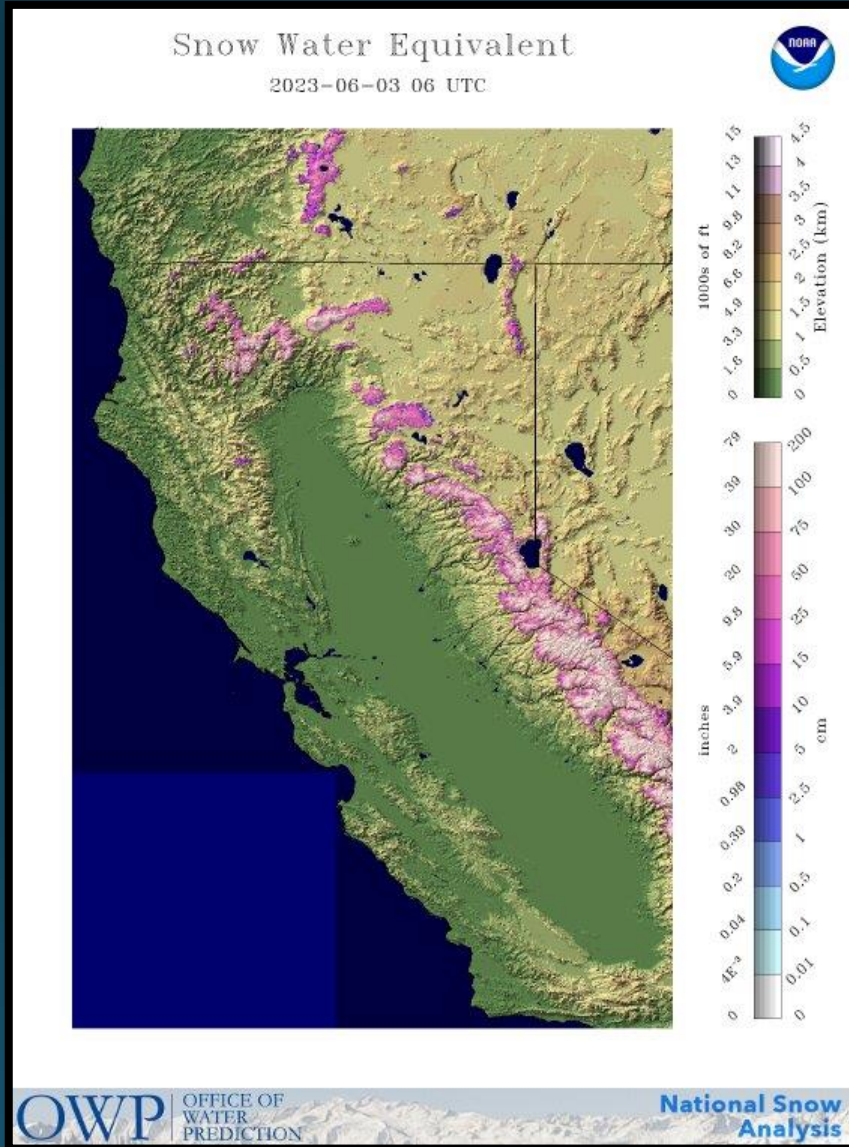




PacNW SWE & Snow Depth as of 6/3/23



California SWE & Snow Depth as of 6/3/23





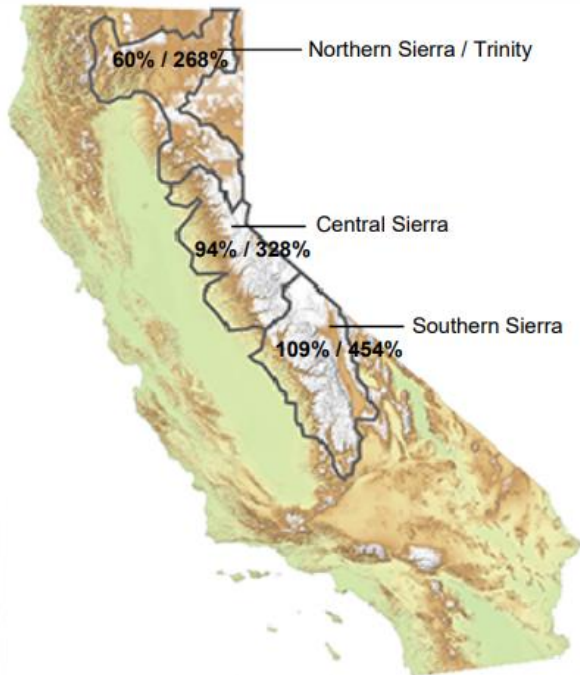
Snowpack Status



STATEWIDE SNOW WATER CONTENT

CURRENT REGIONAL SNOWPACK FROM AUTOMATED SNOW SENSORS

% of April 1 Average / % of Normal for This Date



NORTH	
Data as of June 2, 2023	
Number of Stations Reporting	24
Average snow water equivalent (Inches)	17.9
Percent of April 1 Average (%)	60
Percent of normal for this date (%)	268

CENTRAL	
Data as of June 2, 2023	
Number of Stations Reporting	37
Average snow water equivalent (Inches)	22.9
Percent of April 1 Average (%)	94
Percent of normal for this date (%)	328

SOUTH	
Data as of June 2, 2023	
Number of Stations Reporting	23
Average snow water equivalent (Inches)	21.1
Percent of April 1 Average (%)	109
Percent of normal for this date (%)	454

STATE	
Data as of June 2, 2023	
Number of Stations Reporting	84
Average snow water equivalent (Inches)	21.0
Percent of April 1 Average (%)	86
Percent of normal for this date (%)	322

Westwide SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Jun 03, 2023

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1991-2020 Median

- unavailable *
- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- >= 150%

* Data unavailable at time of posting or measurement is not representative at this time of year

Provisional data subject to revision



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<https://www.nrcs.usda.gov/wps/portal/nrcs/home/>

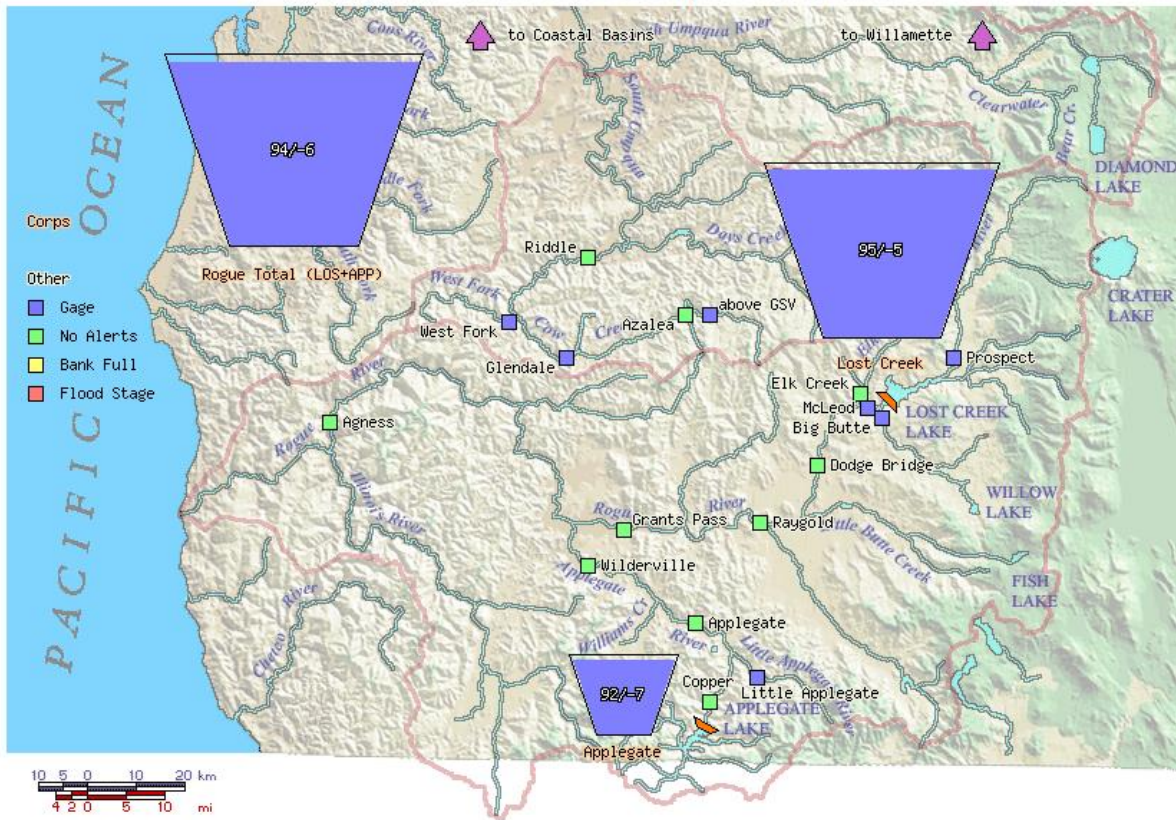




Reservoir Status

Data courtesy of [US Army Corps of Engineers](#)

Rogue Basin Teacup Diagram



Created: Sat Jun 3 13:25:47 2023

WCD: Water Control Diagram

Project numbers: percent full / percent above WCD, where

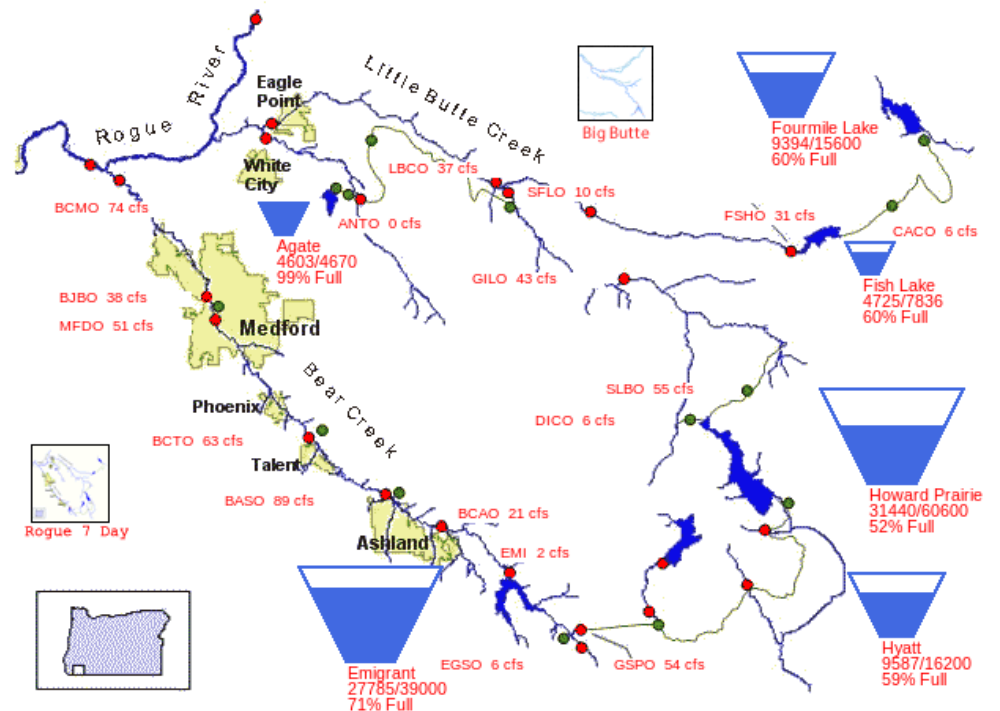
percent full = (current storage - minimum conservation storage) / (maximum conservation storage - minimum conservation storage)

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

06/02/2023

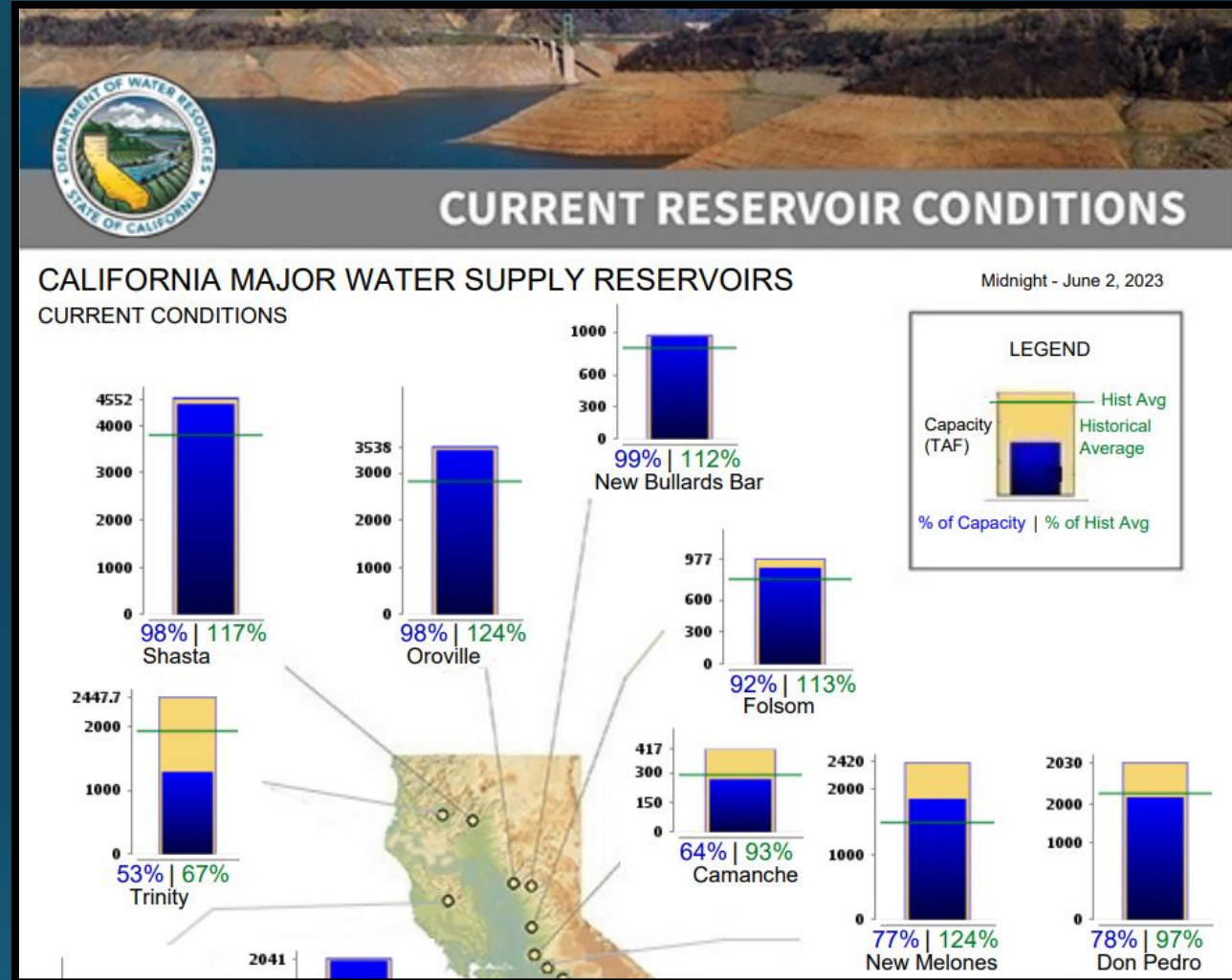
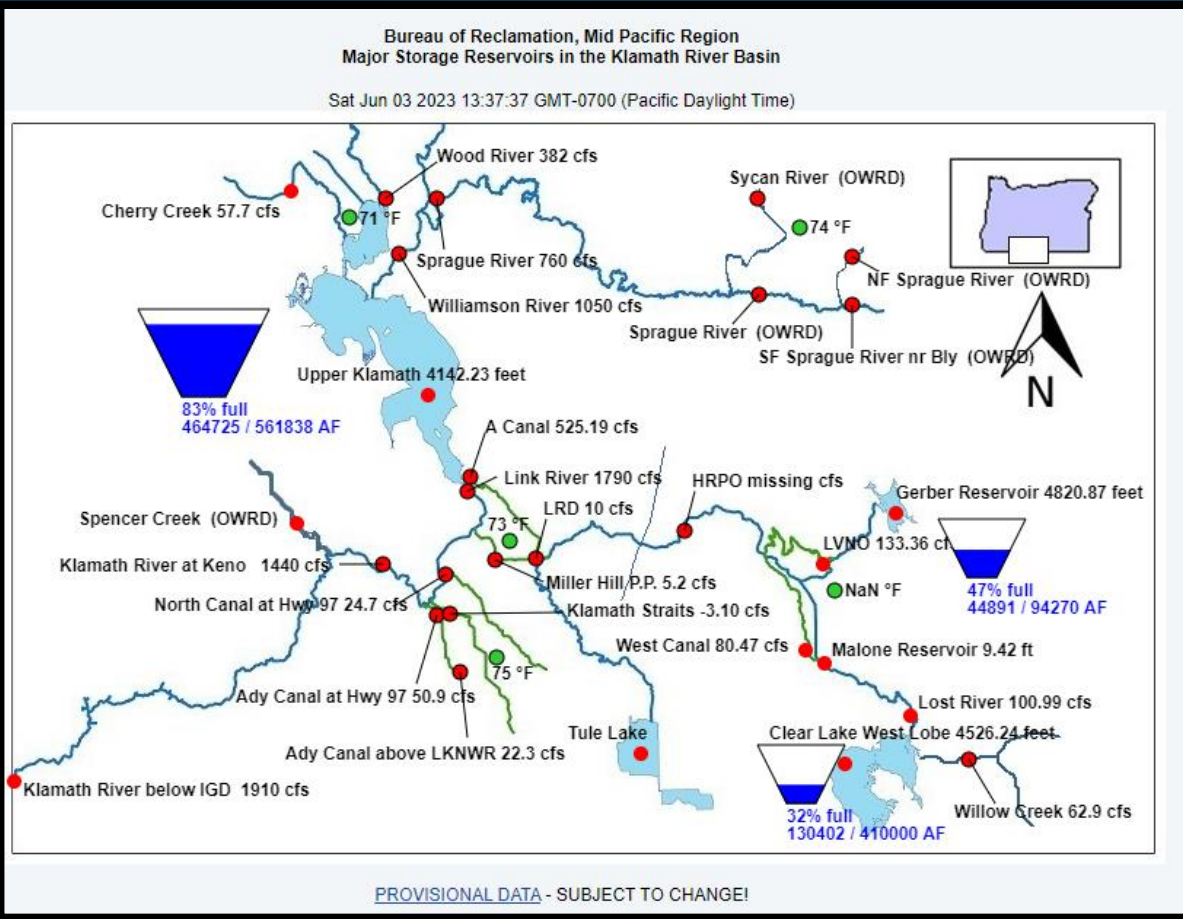


PROVISIONAL DATA - SUBJECT TO CHANGE!

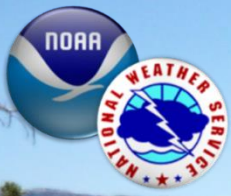


Reservoir Status

Klamath River Basin. Data courtesy of [Bureau of Reclamation](#)



Northern California. [California Data Exchange Center](#)



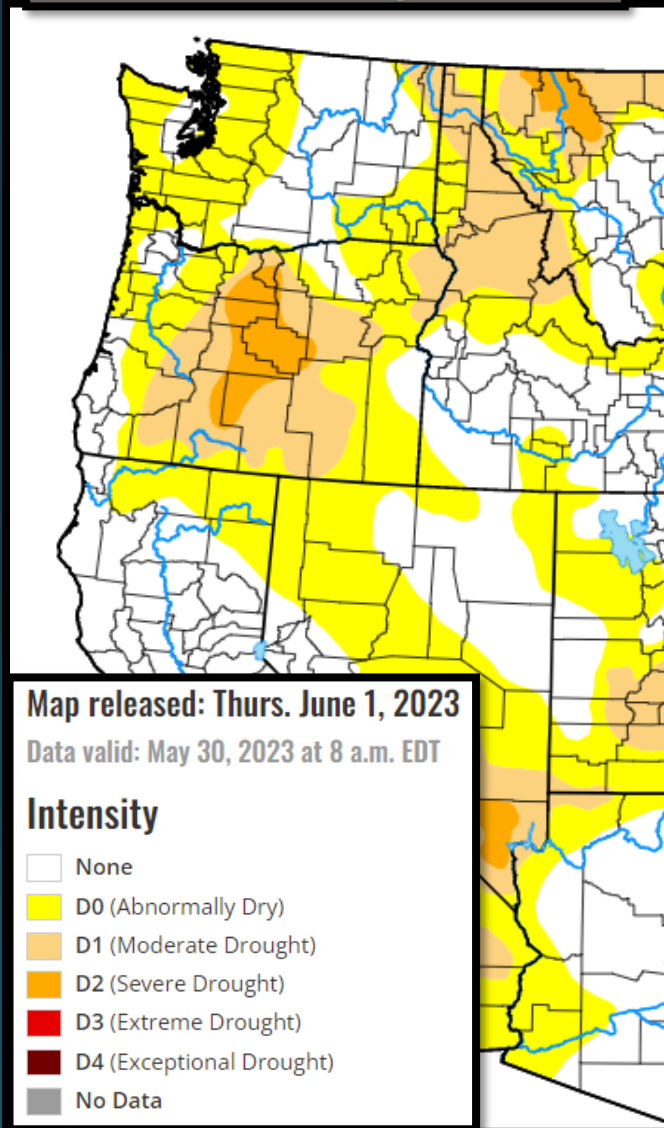
Crater Lake

Image: NPS

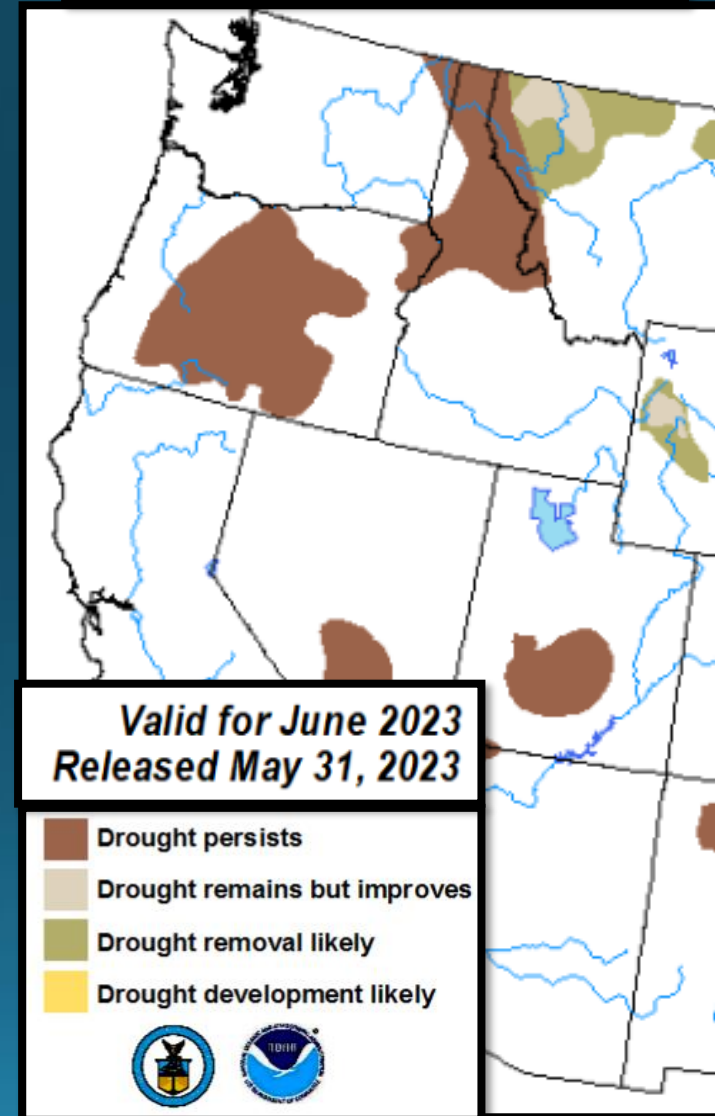
	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 5/29/23	Highest Max/ Lowest Min
May	54.0°	32.5°	1.62"	9.9"	70"	70° on 20 th / 21° on 7 th & 9 th
Normal (1991-2020)	49.0°	29.3°	3.65"	14.5"	44"	N/A

Drought Monitor (Current) & Outlook (June)

United States Drought Monitor



U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period





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, an 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.

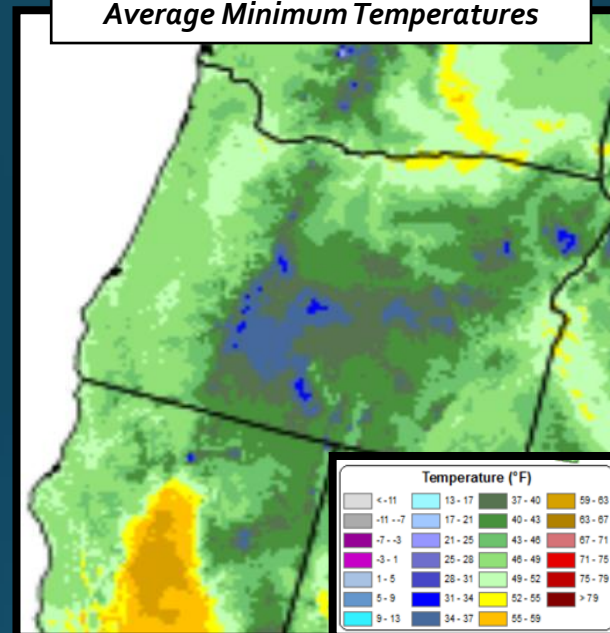
Snow:

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 4.2 inches on June 1st, and 5 inches on June 30th.

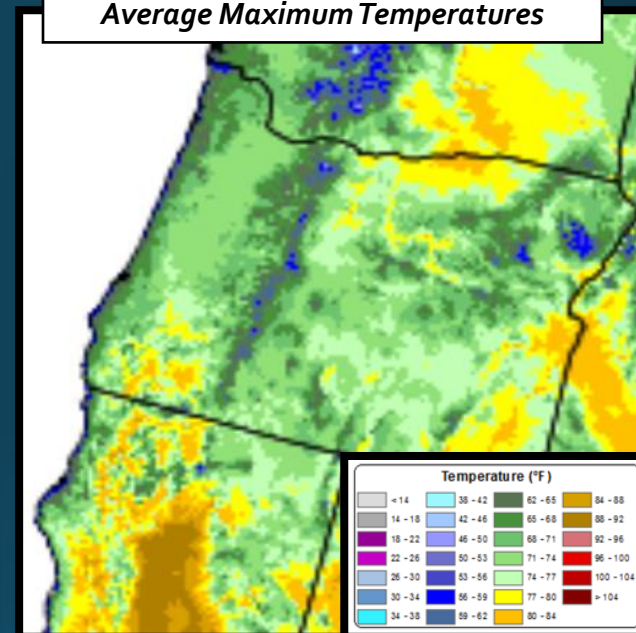
Lightning, 2003-2017 Average:

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.

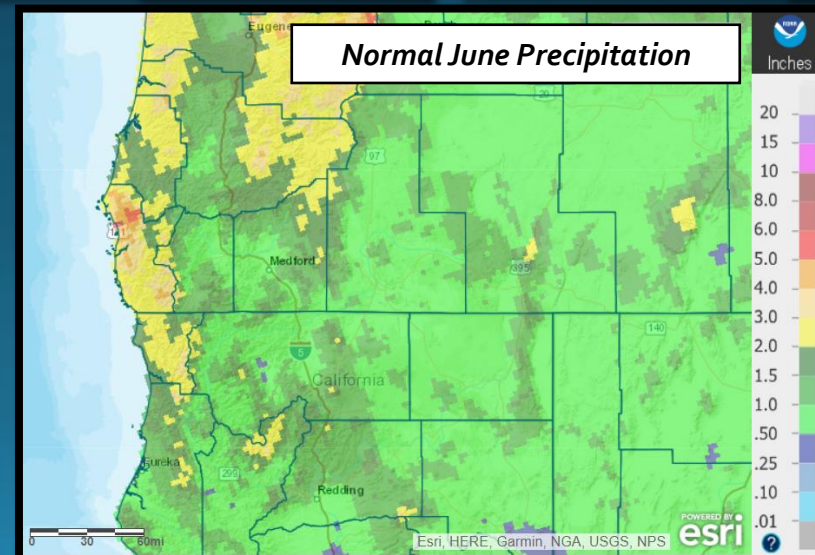
Average Minimum Temperatures



Average Maximum Temperatures



Normal June Precipitation





*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
- **Montague, CA: 07/1948 – Present**
 - ❖ *Missing:*
 - 08-09/1952
 - 02/1953-06/2000
- **Mount Shasta City, CA: 04/1948 – Present**
- **Alturas, CA: 05/1935 – Present**
- **Medford: 03/11/1911 – Present**
- **Klamath Falls: 12/1897 – Present**