

National Weather Service Medford

2023: March 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 \(NCEI\)](#).



March 2023 Weather Review

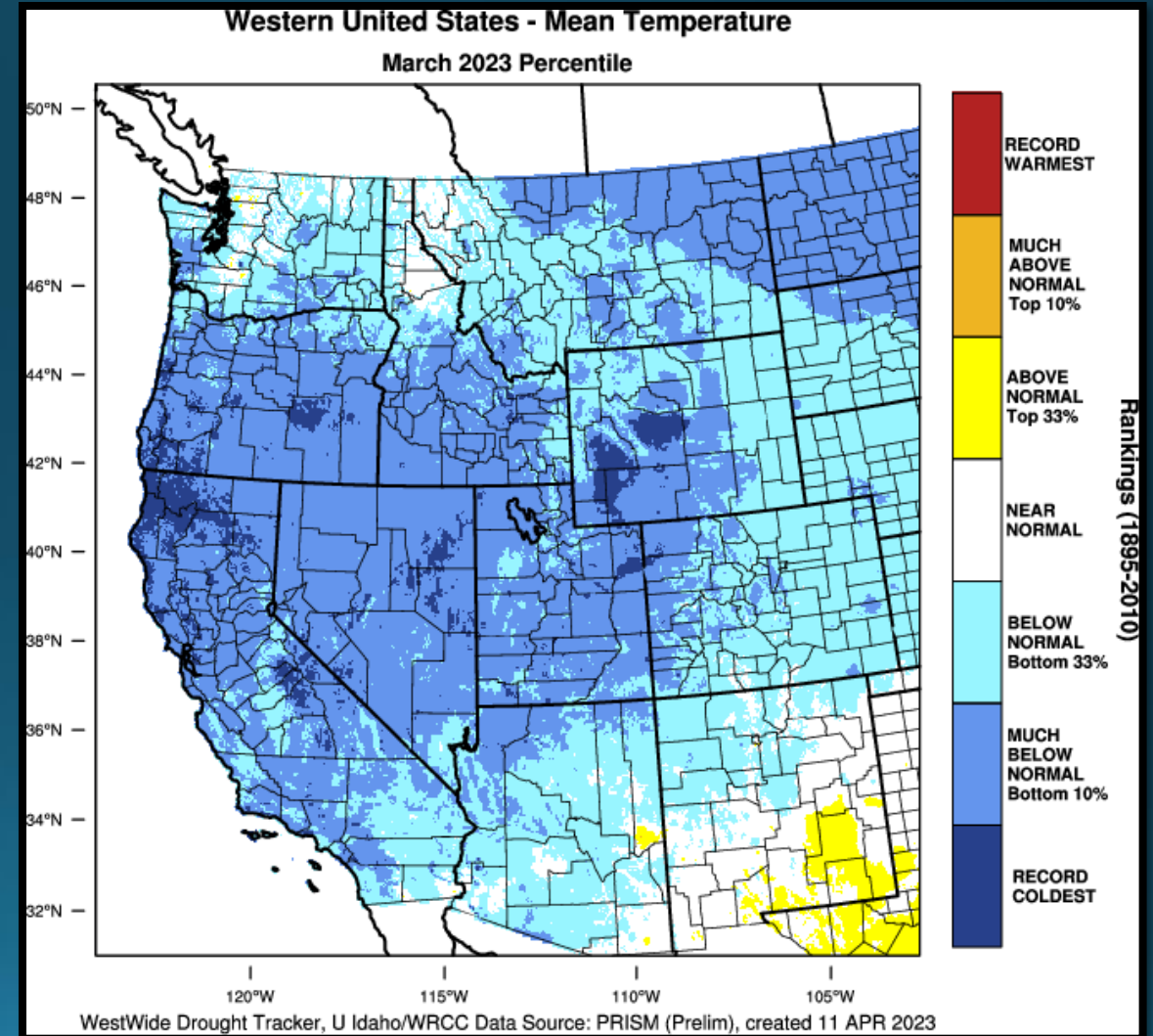
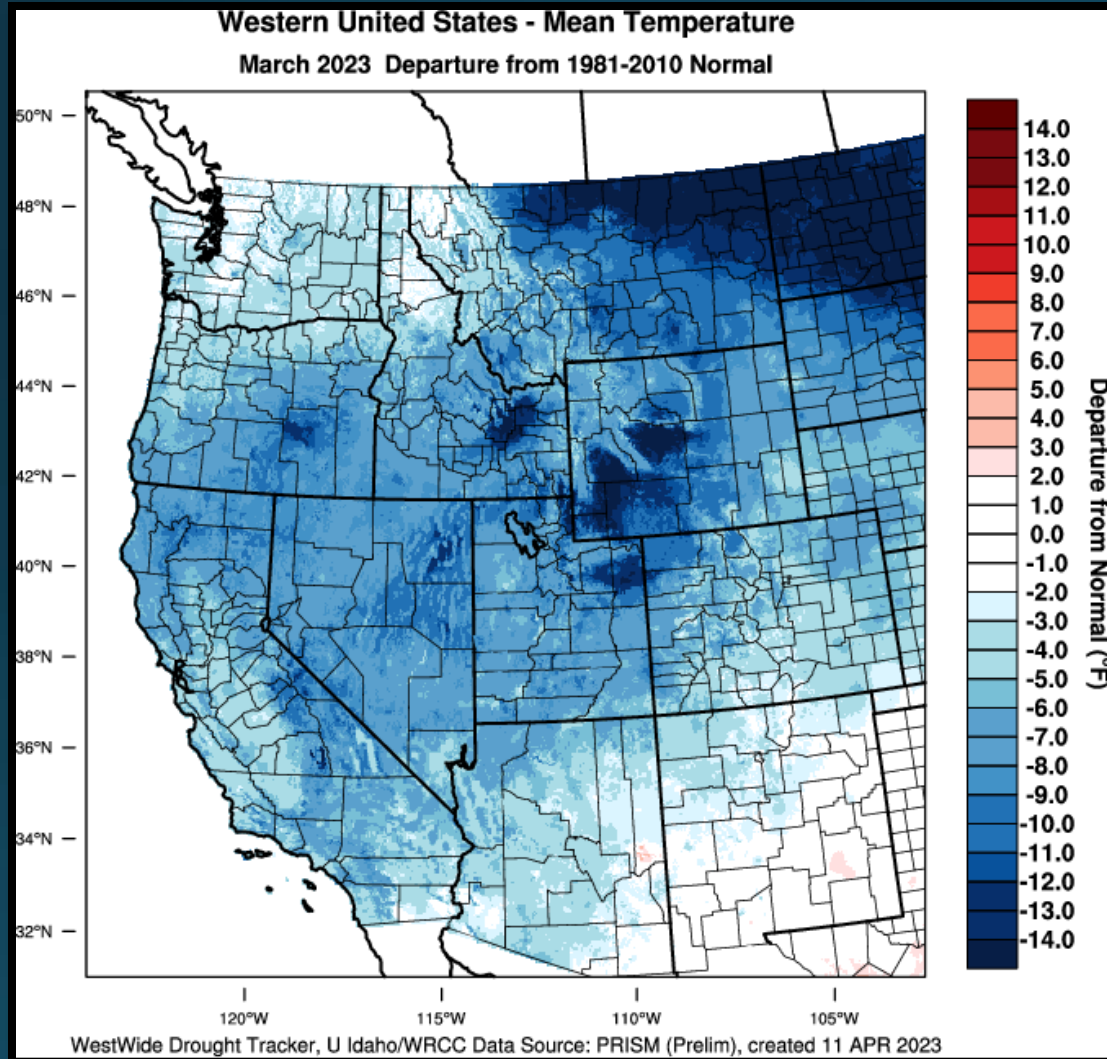
Well below normal temperatures and active weather continued well into March with more rounds of low elevation snow during the first week of the month. Low pressure that brought snow to valley floors at the end of February, exited the region on the first day of March, and this was followed by a shortwave ridge with northwest flow that continued through the 4th. The next low pressure arrived on the 5th and the region remained under the influence of this broad trough with multiple fronts passing through the region through the 10th. Temperatures trended warmer, but still remained below normal and active weather continued. Snow levels trended higher during this time, and ample precipitation on top of low-mid elevation snow pack led to flooding concerns around the 12th and 13th. This was short-lived however, as another arctic front arrived on the 14th and brought another round of heavy mountain snow and valley rain.

High pressure moved into the region, and brought a much welcomed break in the weather around the 16th through the 19th. This gave the area's rivers and streams the chance to recede, and with a thermal trough along the coast, offshore flow brought warmer temperatures day by day and temperatures returned to near normal. This relatively warmer pattern continued through around the 23rd though average temperatures were still below normal. Active weather continued during this time, with the bulk of the impacts focused over California. Several fronts passed through the region bringing additional rounds of mountain snow, valley rain and gusty winds.

Another cold trough settled over the Pacific Northwest for the last week of the month. Yet another round of arctic air moved into the region with successive systems and well below normal temperatures, underlining the abnormally cold month. There was another round of low elevation snow on the 25th when the Medford Airport recorded an inch of snowfall. Temperatures trended slightly warmer as the month came to an end, but still remained below average. All in all, the region recorded near to above normal precipitation and above normal snowpack with March 2023 falling in the top five coldest Marches on record for several of the area's climate sites.



March 2023 Observed Temperatures





Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	43.5	-5.0°	50.0	-5.1°	37.0	-4.9°
Roseburg	43.8	-5.4°	52.4	-6.3°	35.2	-4.4°
Medford	42.5	-5.8°	52.5	-6.9°	32.4	-4.8°
Klamath Falls	32.1	-7.3°	41.9	-10.4°	22.3	-4.2°
Montague, CA	38.1	-6.3°	49.0	-9.2°	27.3	-3.3°
Mt. Shasta City, CA	34.5	-7.7°	42.5	-10.0°	26.5	-5.4°
Alturas, CA	31.0	-8.6°	41.0	-11.7°	20.9	-5.6°



Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
<i>North Bend</i>	58°	12th	30°	1st
<i>Roseburg</i>	64°	18th	30°	16th
<i>Medford</i>	64°	21st	24°	6th
<i>Klamath Falls</i>	54°	18th	3°	1st
<i>Montague, CA</i>	60°	13th & 18th	19°	30th
<i>Mt. Shasta City, CA</i>	54°	17th	18°	2nd
<i>Alturas, CA</i>	54°	18th	-1°	2nd

	Date	Record Low	Old Record/Year
Klamath Falls	6 th	8°F	9°F / 1917

	Date	Record Low Max	Old Record/Year
<i>Roseburg</i>	14 th	44°	45° / 1943
	25 th	46°	49° / 2012
	27 th	46°	Ties w/1998
<i>Montague</i>	4 th	39°	40° / 2009
	14 th	41°	42° / 1952
	25 th	41°	45° / 2012
	28 th	48°	50° / 2016
<i>Mt Shasta City</i>	9 th	34°	Ties w/1969
<i>Alturas</i>	25 th	36°	Ties w/1936
<i>Medford</i>	14 th	42°	43° / 1963
<i>Klamath Falls</i>	4 th	32°	Ties w/1918
	6 th	33°	Ties w/2012
<i>North Bend</i>	27 th	46°	Ties w/1976

Record Cold March

Minimum 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	42.9	1955-03-31	0
2	43.8	1954-03-31	0
3	43.8	2023-03-31	0
4	44.1	1935-03-31	0
5	44.6	1951-03-31	0
6	44.7	1953-03-31	0
7	45.2	2006-03-31	0
8	45.4	1958-03-31	0
9	45.4	1952-03-31	0
10	45.5	2009-03-31	0

Period of record: 1900-04-01 to 2023-04-14

Minimum 31-Day Mean Avg Temperature for Alturas Area, CA (ThreadEx)

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

Rank	Value	Ending Date	Missing Days
1	31.0	2023-03-31	0
2	32.1	1952-03-31	0
3	32.8	1977-03-31	0
4	33.2	1985-03-31	3
5	33.2	1976-03-31	0
6	33.3	2006-03-31	0
7	33.6	1971-03-31	0
8	34.2	1948-03-31	0
9	34.2	1938-03-31	0
10	34.4	1975-03-31	0

Period of record: 1935-05-01 to 2023-04-14

Minimum 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	39.9	1917-03-31	0
2	42.5	2023-03-31	0
3	42.5	1952-03-31	0
4	42.8	1976-03-31	0
5	43.0	1977-03-31	0
6	43.3	1948-03-31	0
7	43.3	1975-03-31	0
8	43.4	1935-03-31	0
9	43.4	1924-03-31	0
10	43.4	1920-03-31	0

Period of record: 1911-03-11 to 2023-04-14

Minimum 31-Day Mean Avg 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	34.2	2006-03-31	0
2	34.5	2023-03-31	0
3	36.3	1958-03-31	0
4	37.0	1975-03-31	0
5	37.1	1991-03-31	1
6	37.3	1999-03-31	0
7	37.4	1952-03-31	0
8	37.6	1967-03-31	0
9	37.9	1971-03-31	0
10	37.9	1977-03-31	0

Period of record: 1948-04-15 to 2023-04-14

Minimum 31-Day Mean Avg Temperature for Klamath Falls Area, OR (ThreadEx)

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

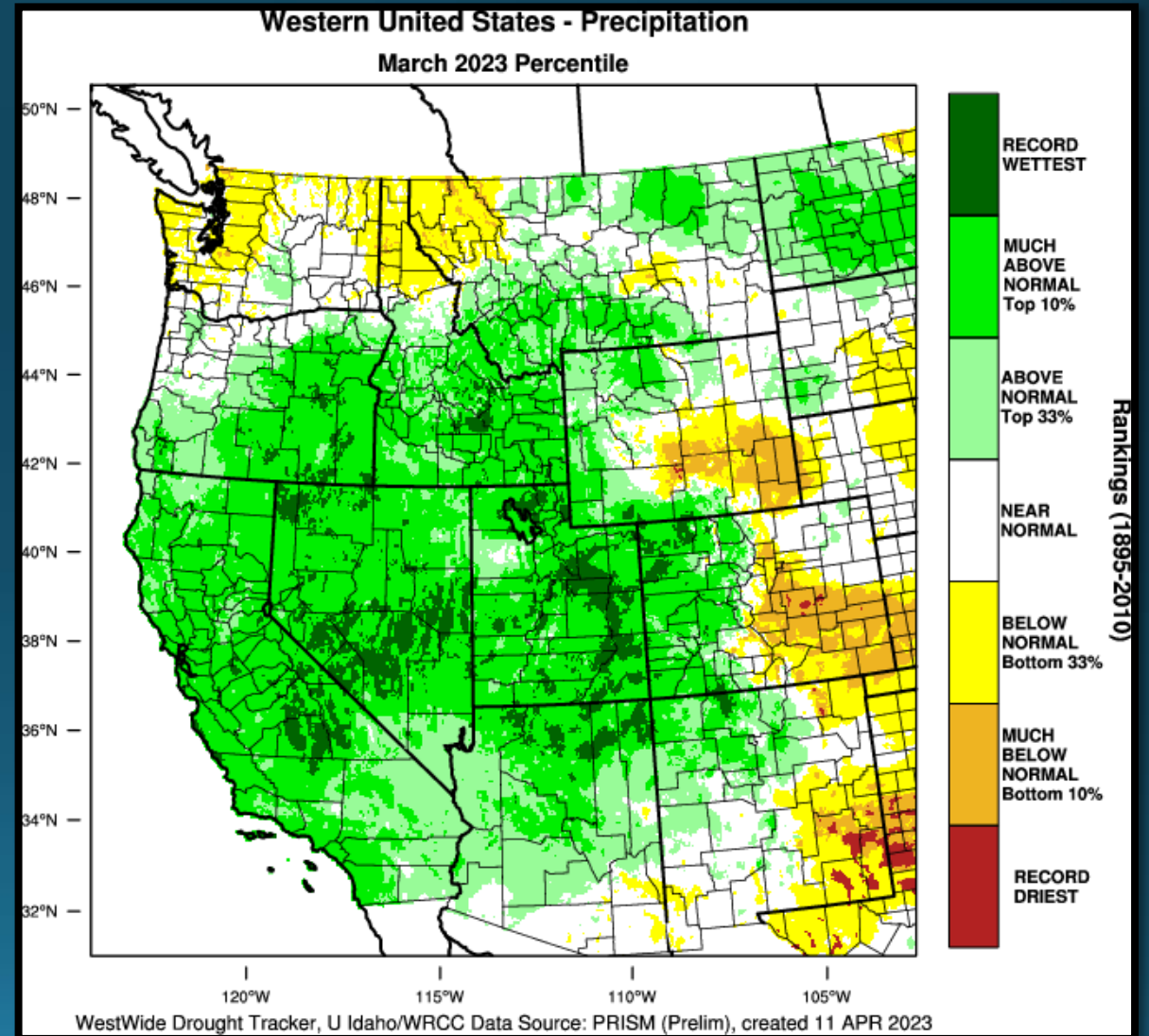
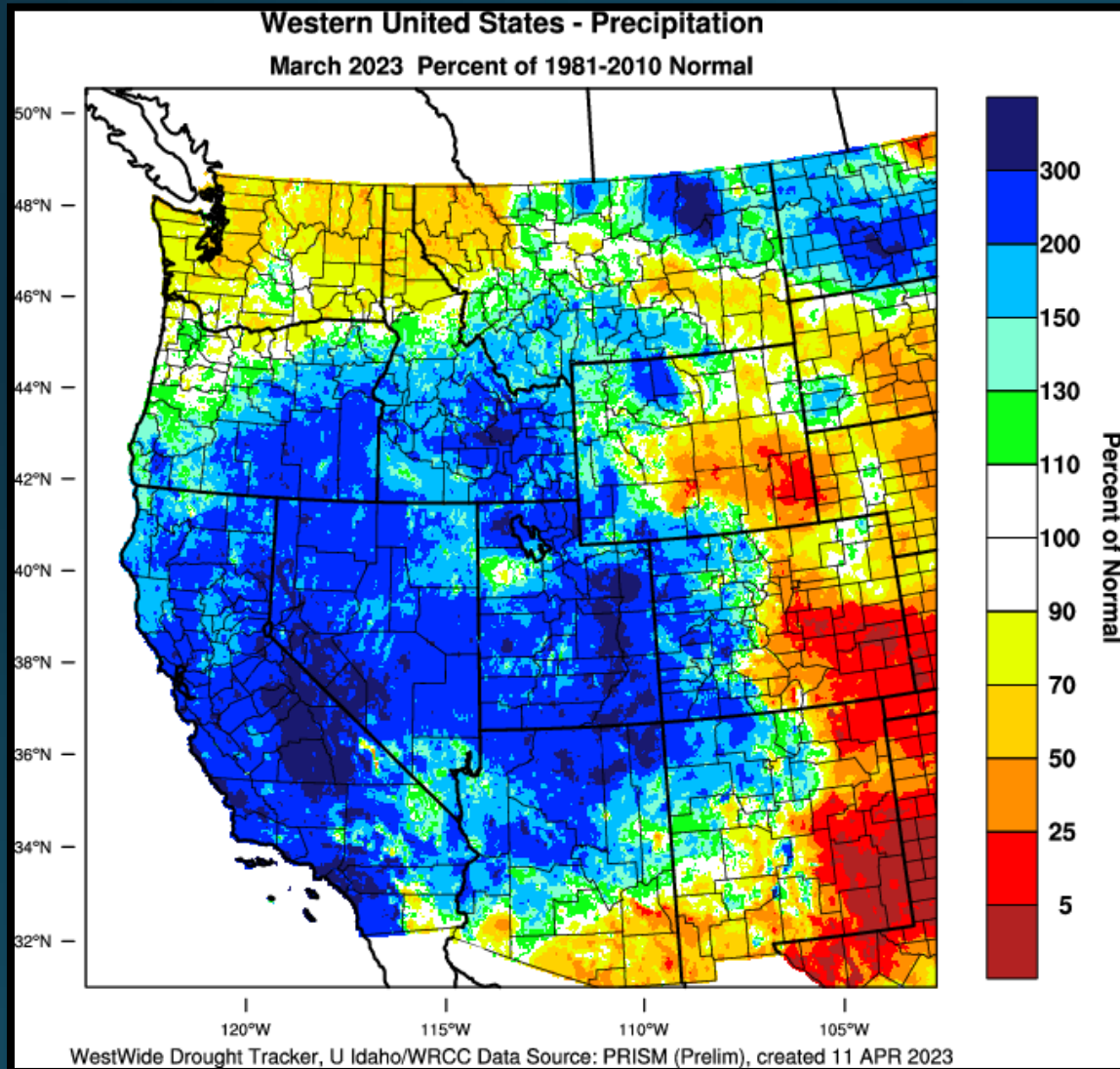
Rank	Value	Ending Date	Missing Days
1	26.3	1917-03-31	0
2	32.1	2023-03-31	0
3	32.8	1922-03-31	0
4	33.3	2006-03-31	0
-	33.3	1913-03-31	0
6	34.7	1952-03-31	0
7	34.8	2008-03-31	0
-	34.8	1964-03-31	0
9	34.9	1935-03-31	0
10	34.9	1906-03-31	1

Period of record: 1897-12-02 to 2023-04-12



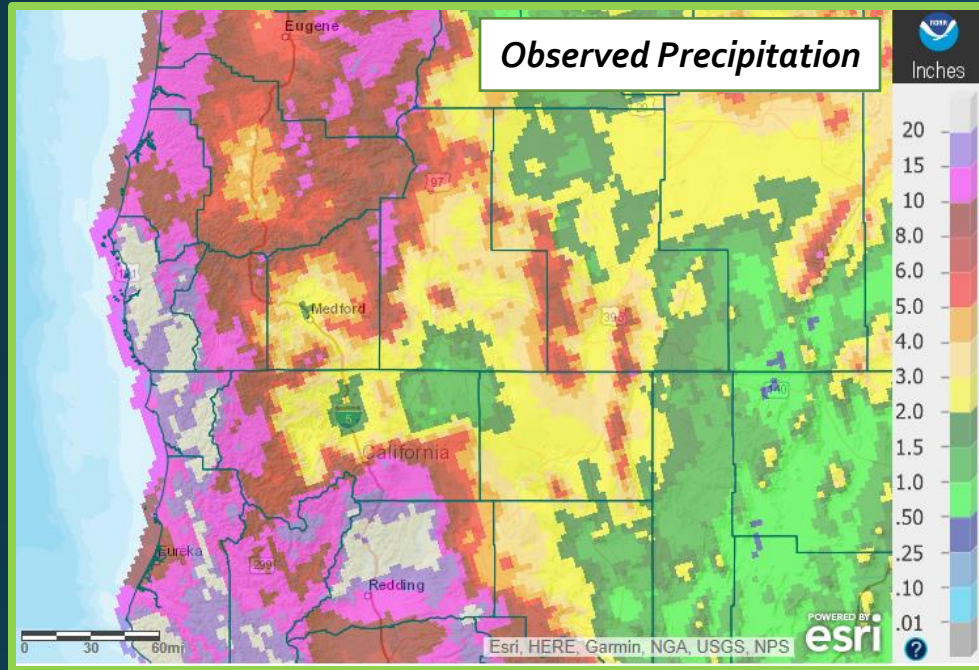


March 2023 Observed Precipitation





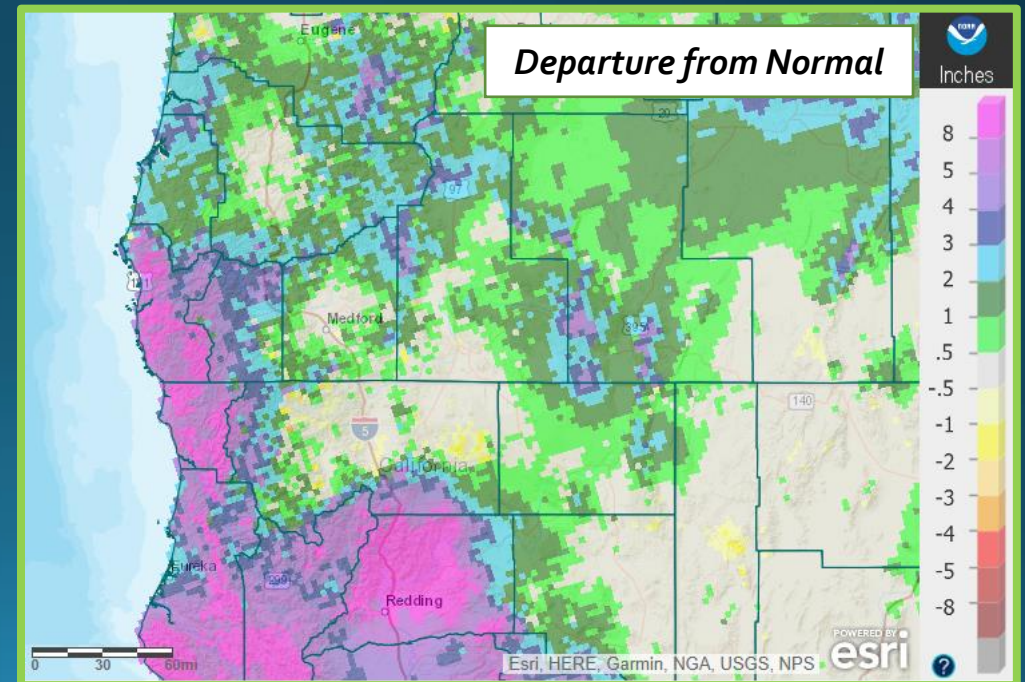
Precipitation



	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	9.35"	1.86"	1.39"	12 th – 13 th
Roseburg	4.05"	0.58"	0.91"	12 th – 13 th
Medford	1.92"	0.11"	0.74"	13 th – 14 th
Klamath Falls	1.23"	0.20"	0.68"	13 th – 14 th
Montague, CA	1.28"	0.03"	0.76"	13 th – 14 th
Mt. Shasta City, CA	10.01"	4.41"	2.12"	27 th – 28 th
Alturas, CA	2.80"	1.42"	0.78"	19 th – 20 th

Record Precipitation

	Date / Amount	Old Record / Year
Klamath Falls	14 th / 0.65"	0.44" / 1987
Montague	14 th / 0.75"	0.49" / 1980
Mt Shasta City	28 th / 1.97"	0.80" / 2006
Alturas	14 th / 0.57"	0.40" / 2003

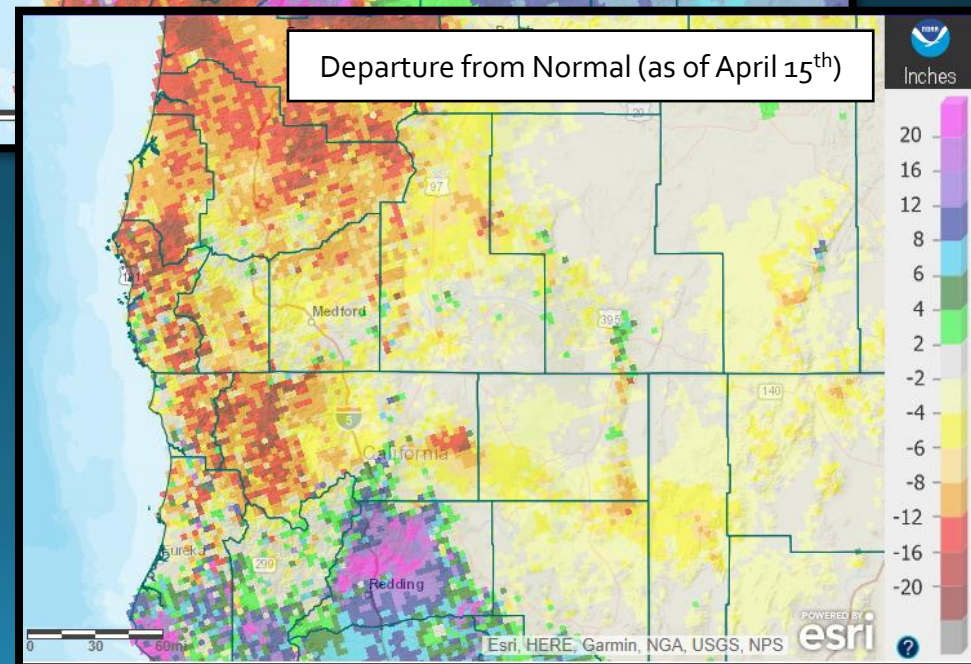
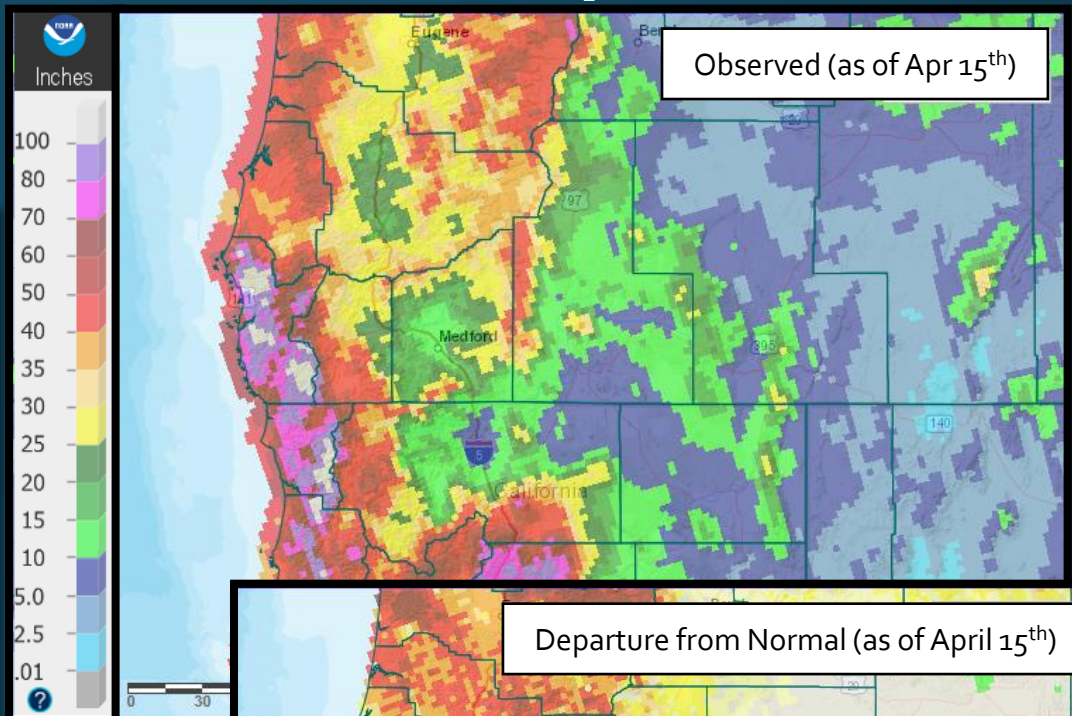
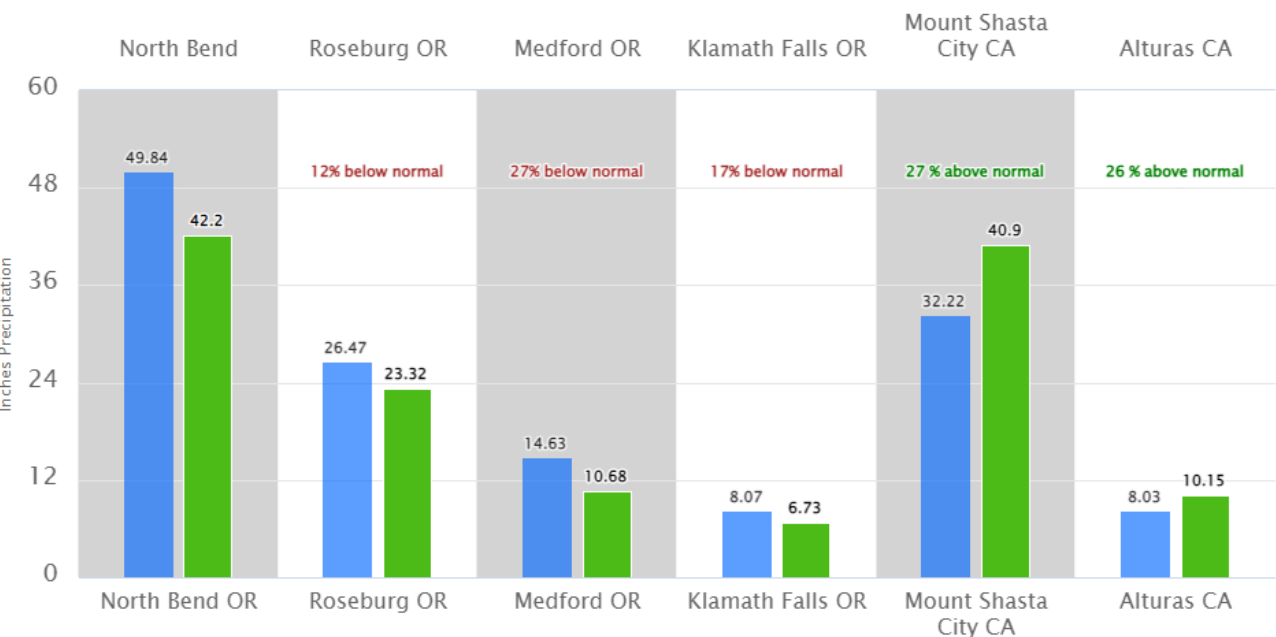




Water Year Status (As of April 15th)

Climate Sites Water Year Precipitation (Since Oct 1) and Percent of Normal as of 131AM APR15

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



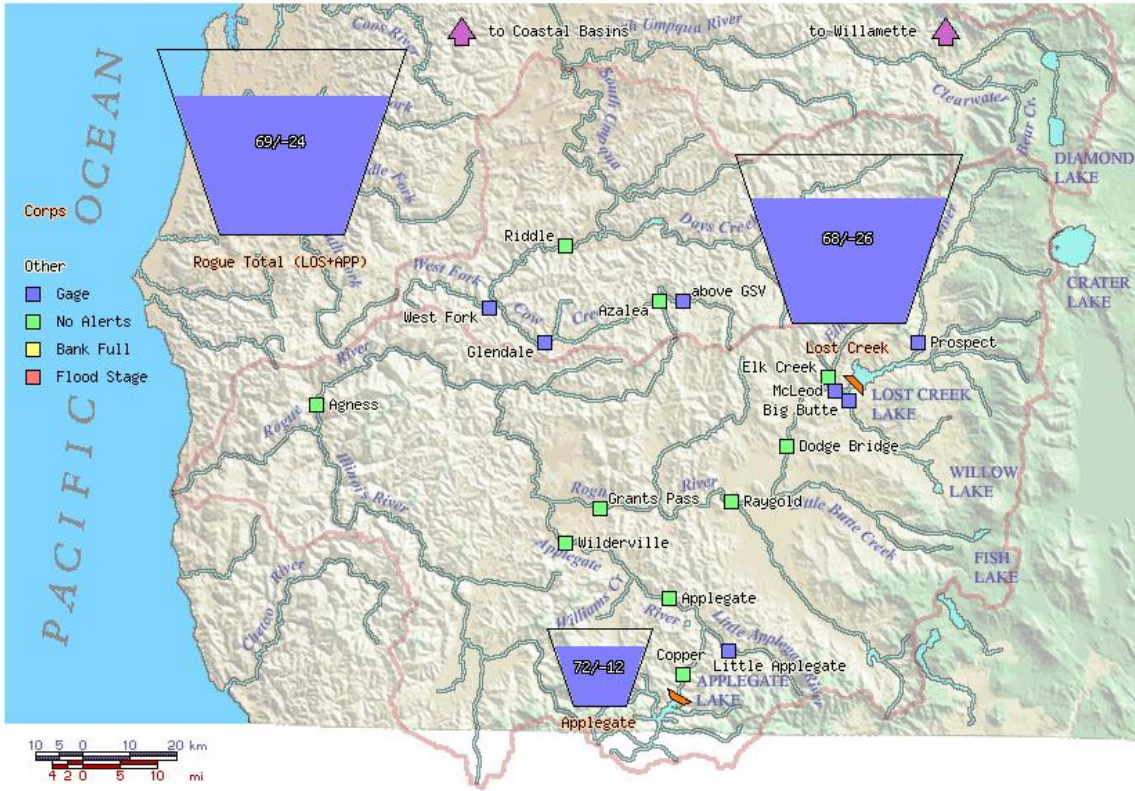


Reservoir Status

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

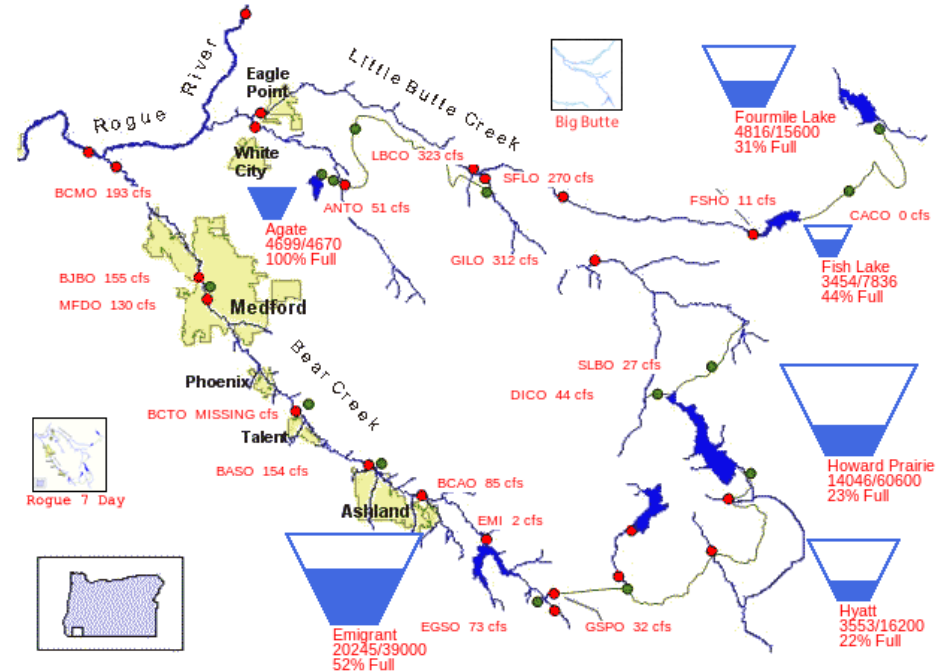
Data courtesy of [Bureau of Reclamation](#)

Rogue Basin Teacup Diagram



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

04/14/2023



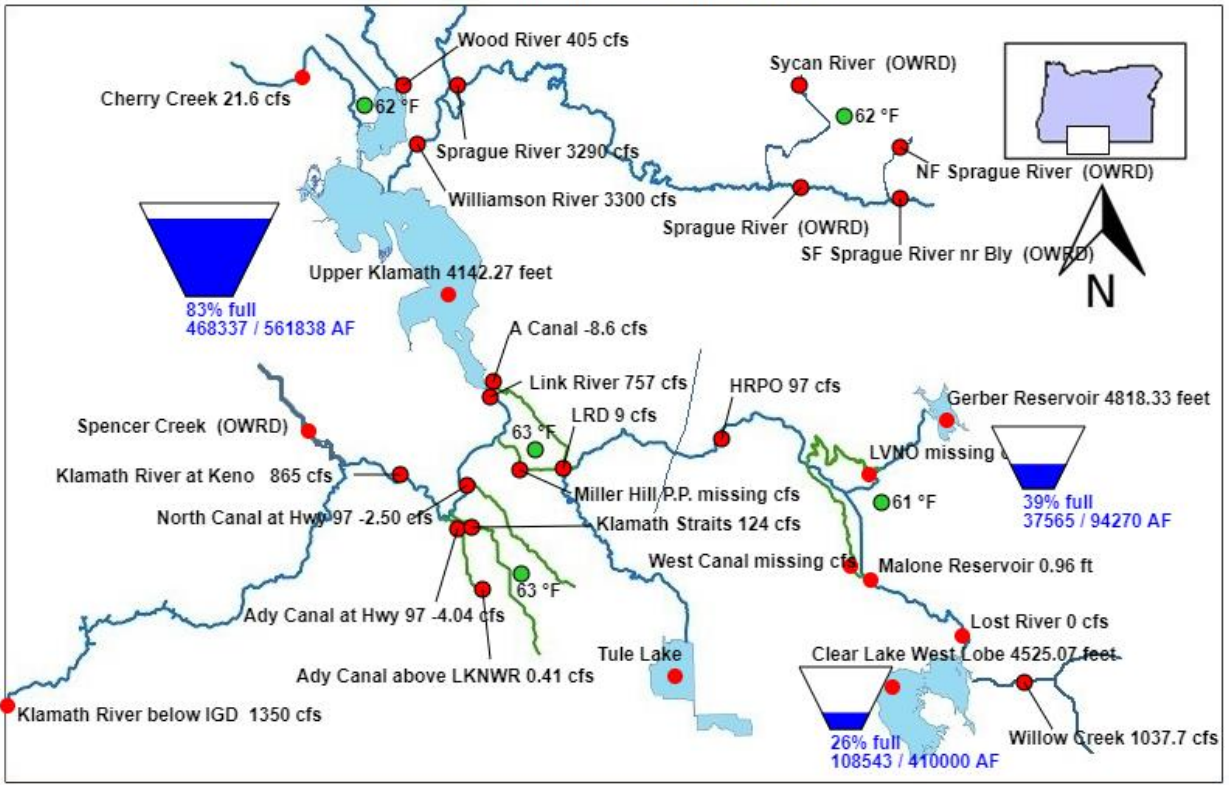
PROVISIONAL DATA - SUBJECT TO CHANGE!



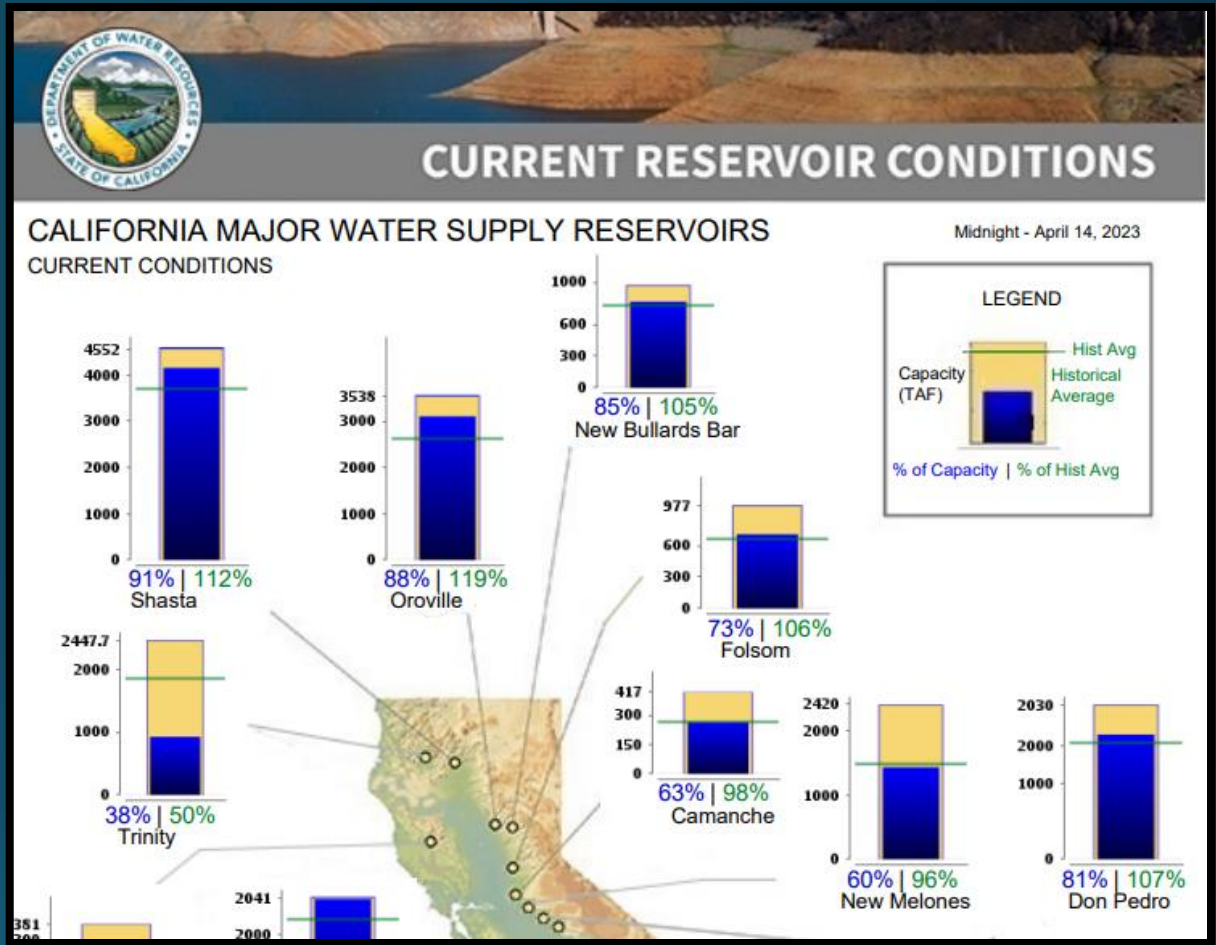
Reservoir Status

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

Bureau of Reclamation, Mid Pacific Region
Major Storage Reservoirs in the Klamath River Basin
Sat Apr 15 2023 17:24:44 GMT-0700 (Pacific Daylight Time)



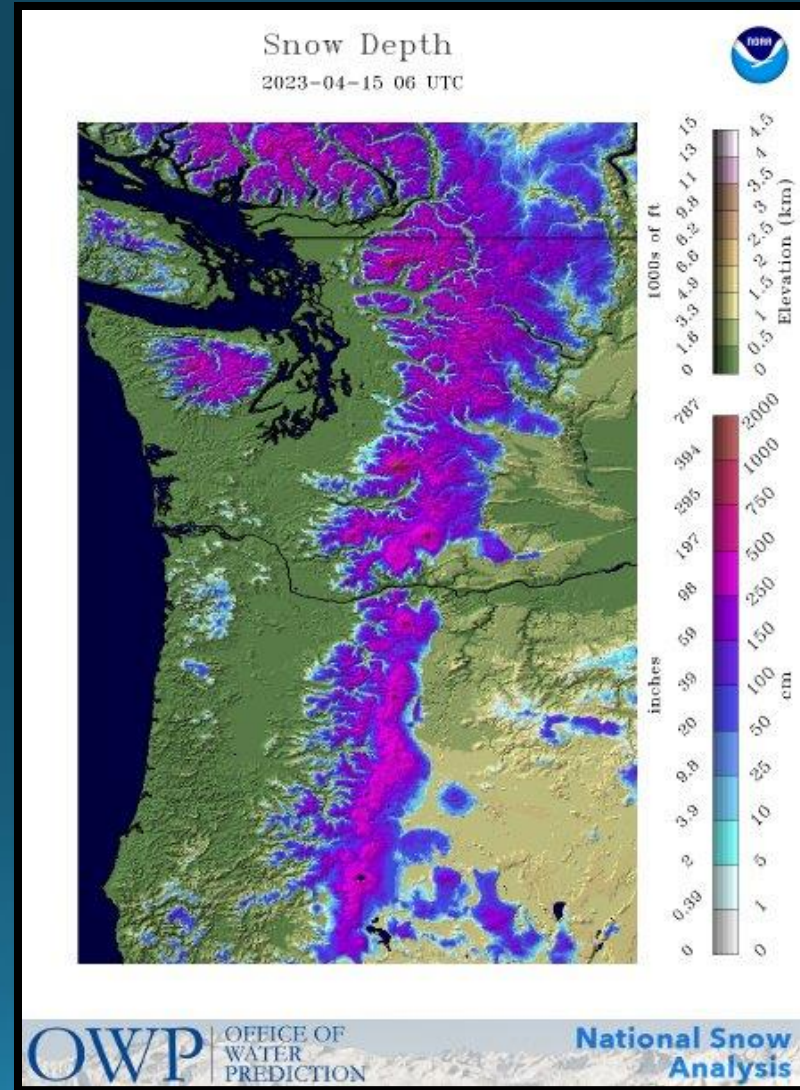
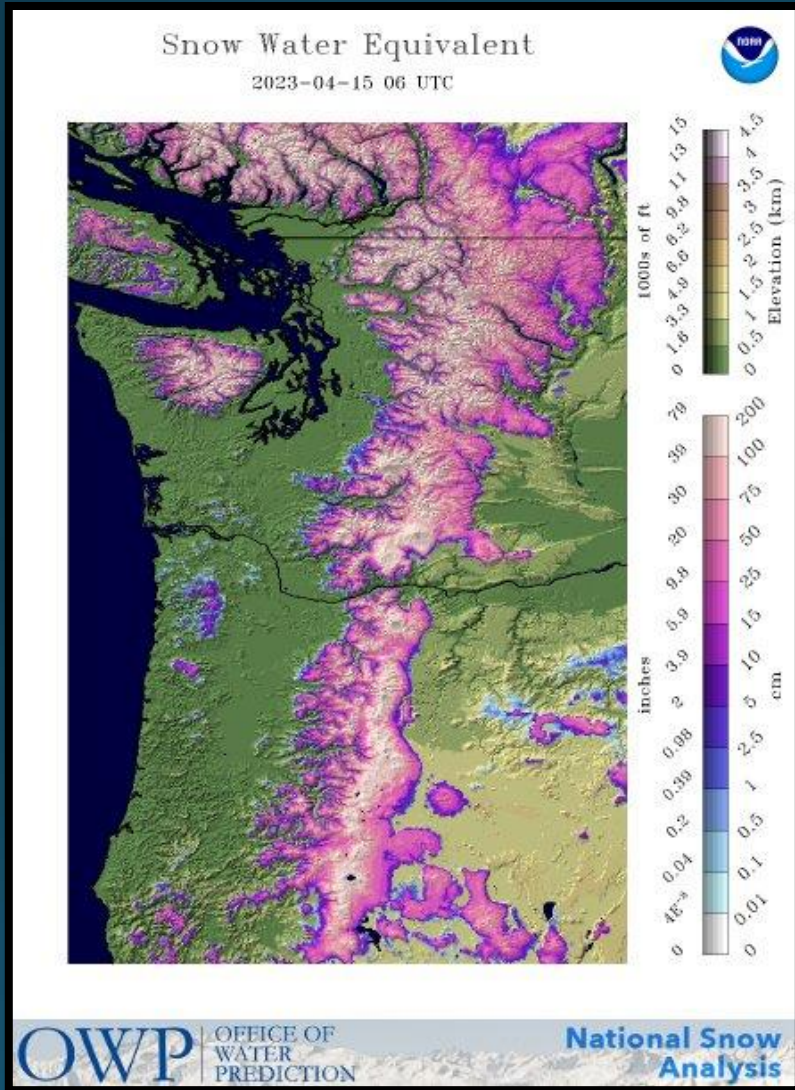
PROVISIONAL DATA - SUBJECT TO CHANGE!



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

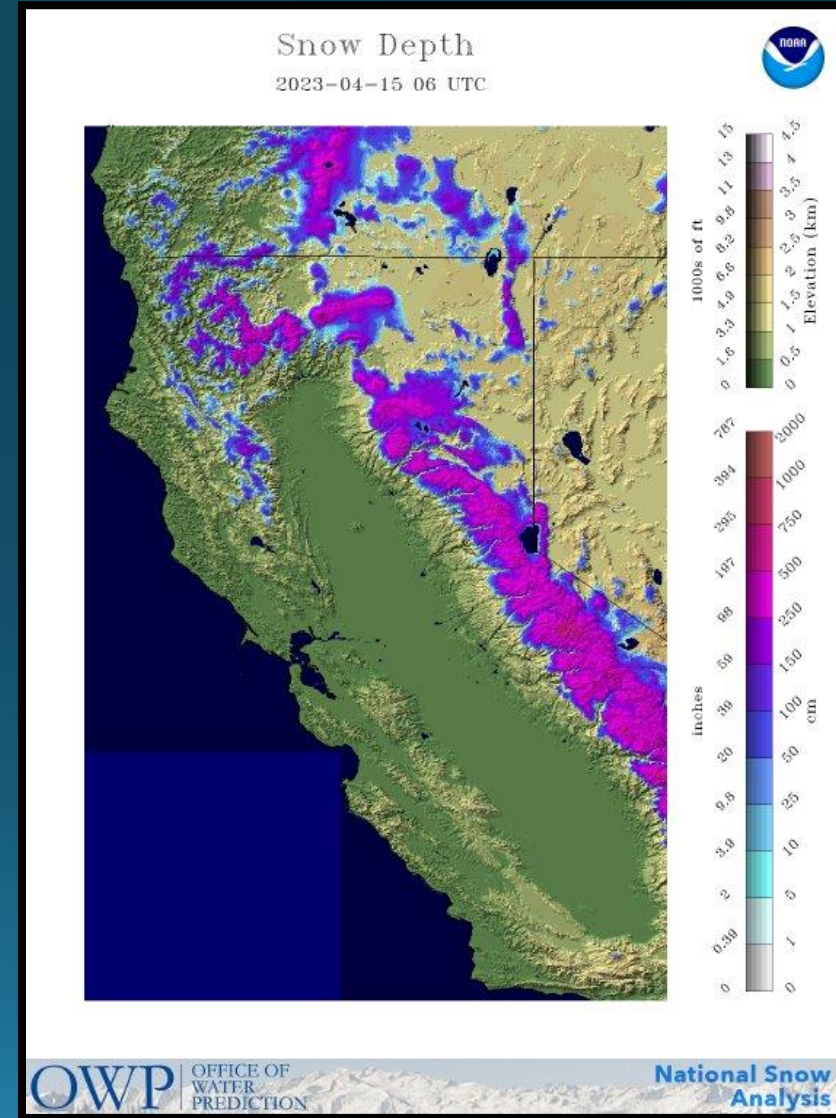
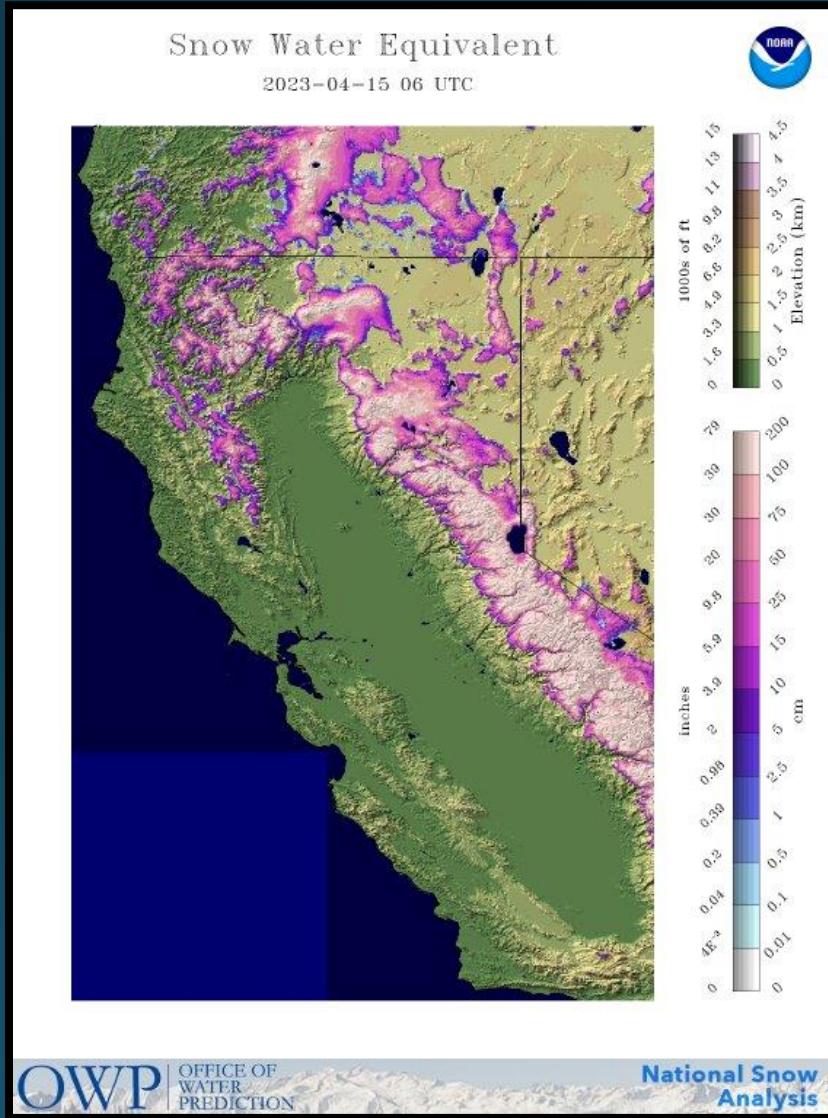


PacNW SWE & Snow Depth as of 4/15/23





California SWE & Snow Depth as of 4/15/23





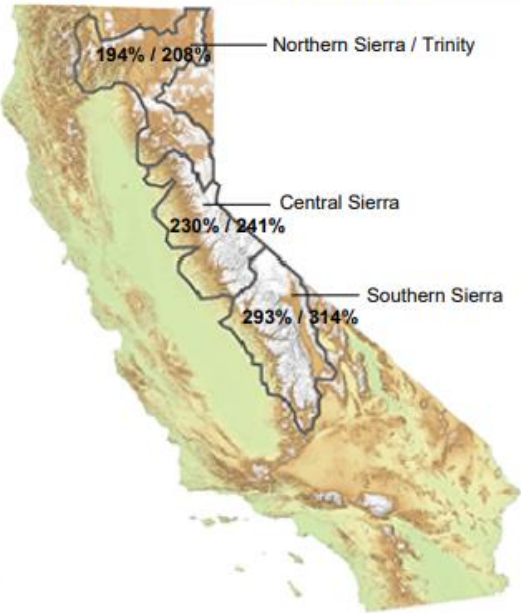
Snow Water Equivalent Status



STATEWIDE SNOW WATER CONTENT

CURRENT REGIONAL SNOWPACK FROM AUTOMATED SNOW SENSORS

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



NORTH	
Data as of April 14, 2023	
Number of Stations Reporting	24
Average snow water equivalent (Inches)	57.7
Percent of April 1 Average (%)	194
Percent of normal for this date (%)	208

CENTRAL	
Data as of April 14, 2023	
Number of Stations Reporting	42
Average snow water equivalent (Inches)	60.3
Percent of April 1 Average (%)	230
Percent of normal for this date (%)	241

SOUTH	
Data as of April 14, 2023	
Number of Stations Reporting	25
Average snow water equivalent (Inches)	61.6
Percent of April 1 Average (%)	293
Percent of normal for this date (%)	314

STATE	
Data as of April 14, 2023	
Number of Stations Reporting	91
Average snow water equivalent (Inches)	60.0
Percent of April 1 Average (%)	233
Percent of normal for this date (%)	247

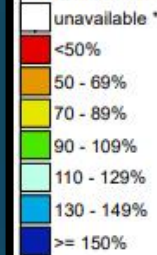
Statewide Average: 233% / 247%

Data Valid 4/14/2023

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

Apr 15, 2023

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



* 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/wcc/home/>

Crater Lake

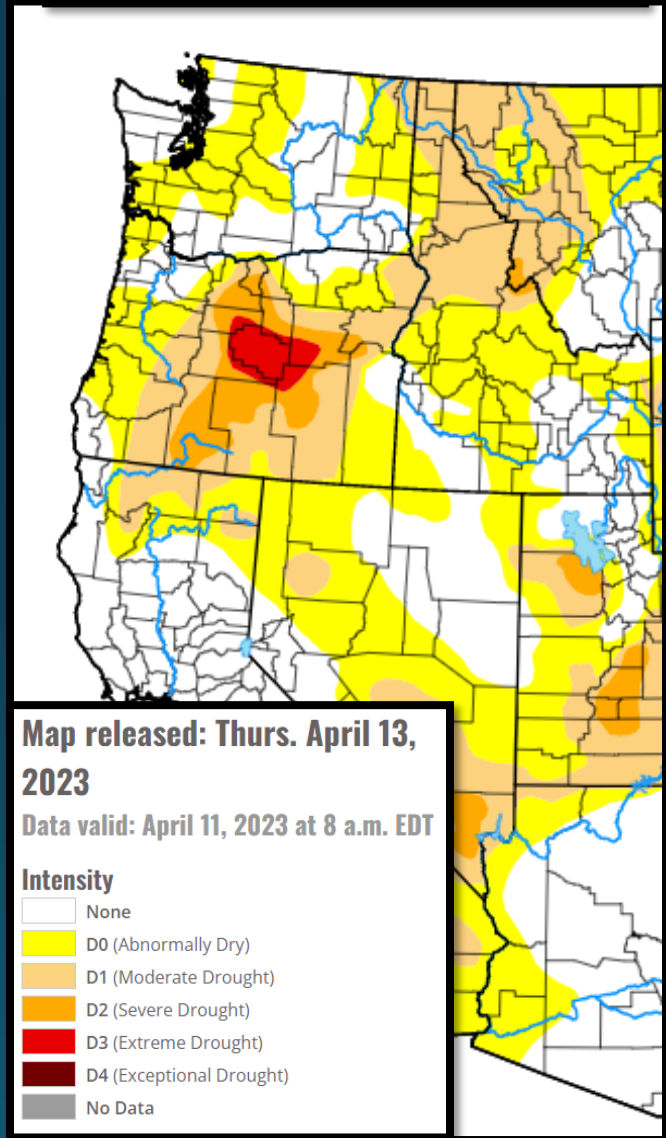
Image Courtesy: NPS



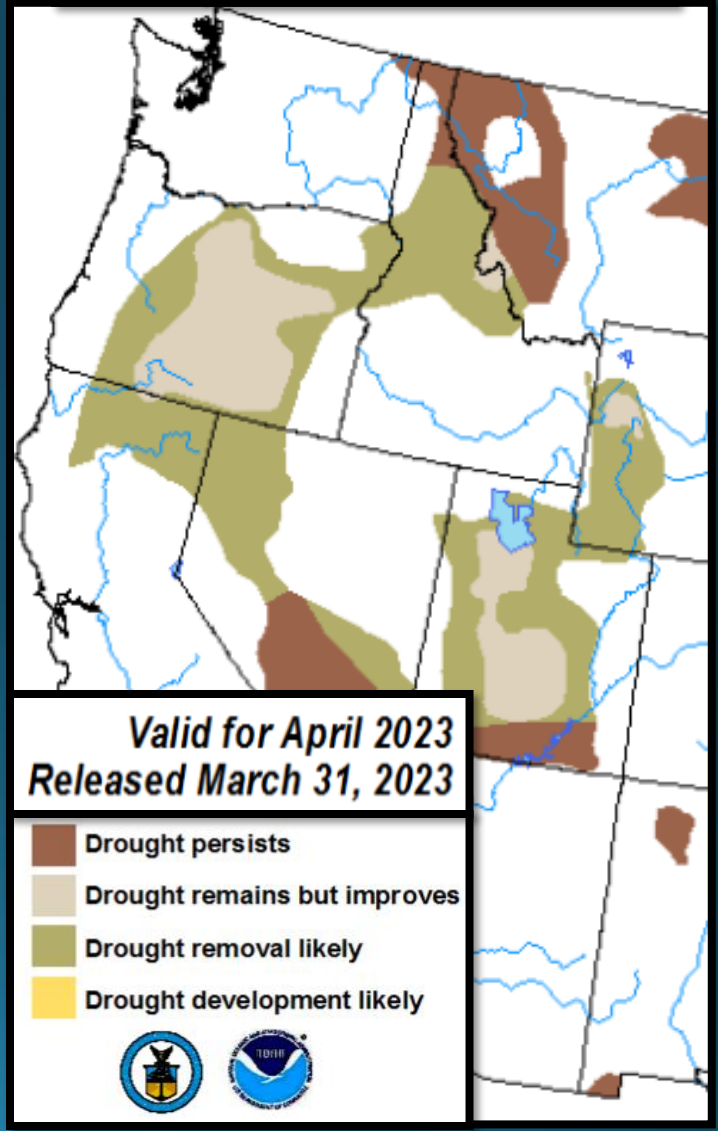
	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 03/31/23	Highest Max/ Lowest Min
March	26.2°	13.9°	14.12"	179.3"	156"	36° on 19 th / 4° on 26 th
Normal (1991-2020)	36.1°	20.3°	7.81"	71.9"	102"	N/A

Drought Monitor (Current) & Outlook (April)

United States Drought Monitor



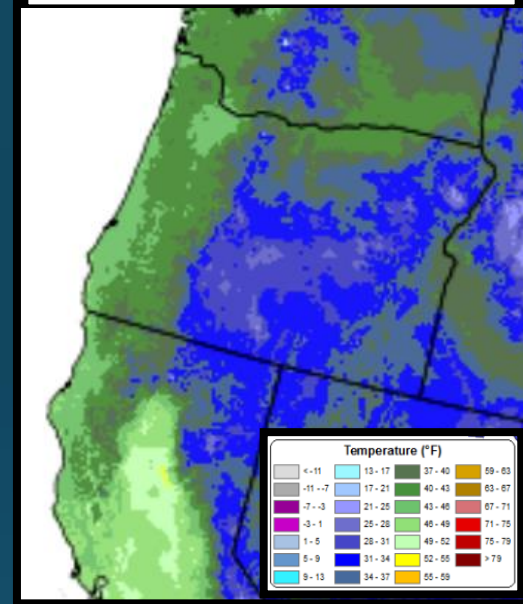
U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period



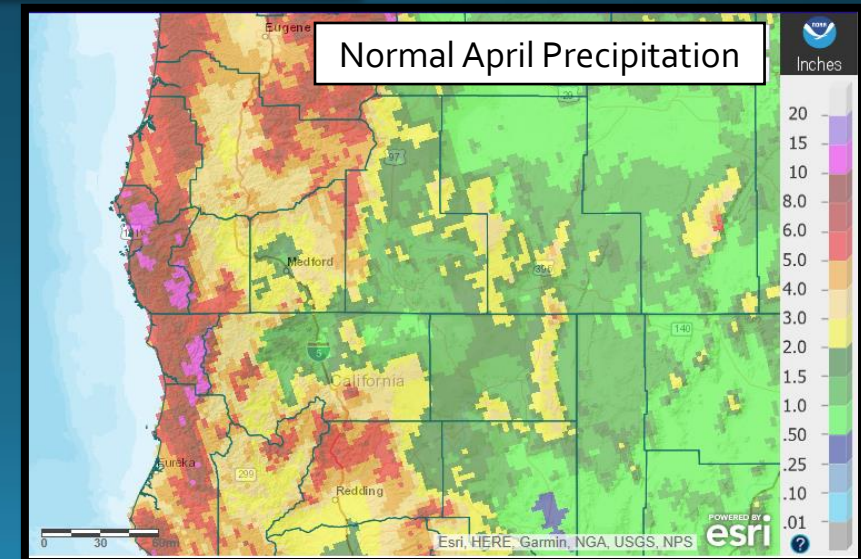
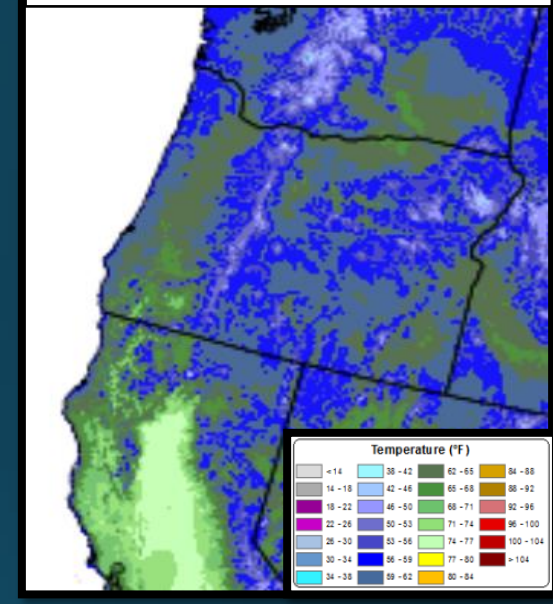
Looking Ahead: Normals for April (1991-2020)

- **Temperatures:** Along the coast, lows are typically in 40s with highs in the upper 50s to lower 60s. Valleys west of the Cascades usually experiences average lows in the mid 30s to mid 40s and highs 55 to 65 degrees . Lows in the upper teens to mid 20s occur across the higher, more typically snow packed mountains, with lows in the 20s to lower 30s for the valleys east of the Cascades. Highs in the higher terrain are typically in the upper 30s to mid 40s, while across the valleys east of the Cascades, highs are typically in the upper 40s to upper 50s.
- **Precipitation:** Curry County usually gets 6 to 15 inches of water. South and southwest flow favored areas of west of the Cascades, the Mount Shasta area, and the Cascades and Siskiyou typically get 4 to 8 inches. The remainder of the West Side has a wide range in normals, from as low as 0.50 to 4 inches. East of the Cascades, the drier portions of Lake County can expect 0.50" to an inch, while the remainder of the East Side gets 1 to 4 inches of water, with up to around 5 inches in the some of the mountains.
- **Snow:** With peak snow water equivalent normally having occurred in mid-March, we expect the snowpack to begin melting off in April. In some years the snowpack peaks in April. Also, we do often get snow in April that slows the melting process. The snowpack typically melts off much faster on southerly aspects than northerly ones due to exposure and related temperatures. Crater Lake NP HQ normal snowfall for April is 48.7 inches.

Average Minimum Temperatures



Average Maximum Temperatures





*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 may have records 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 may 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
- **Medford: 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**
- **Alturas, CA: 05/1935 – Present**