National Weather Service Medford

# 2023: January 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).

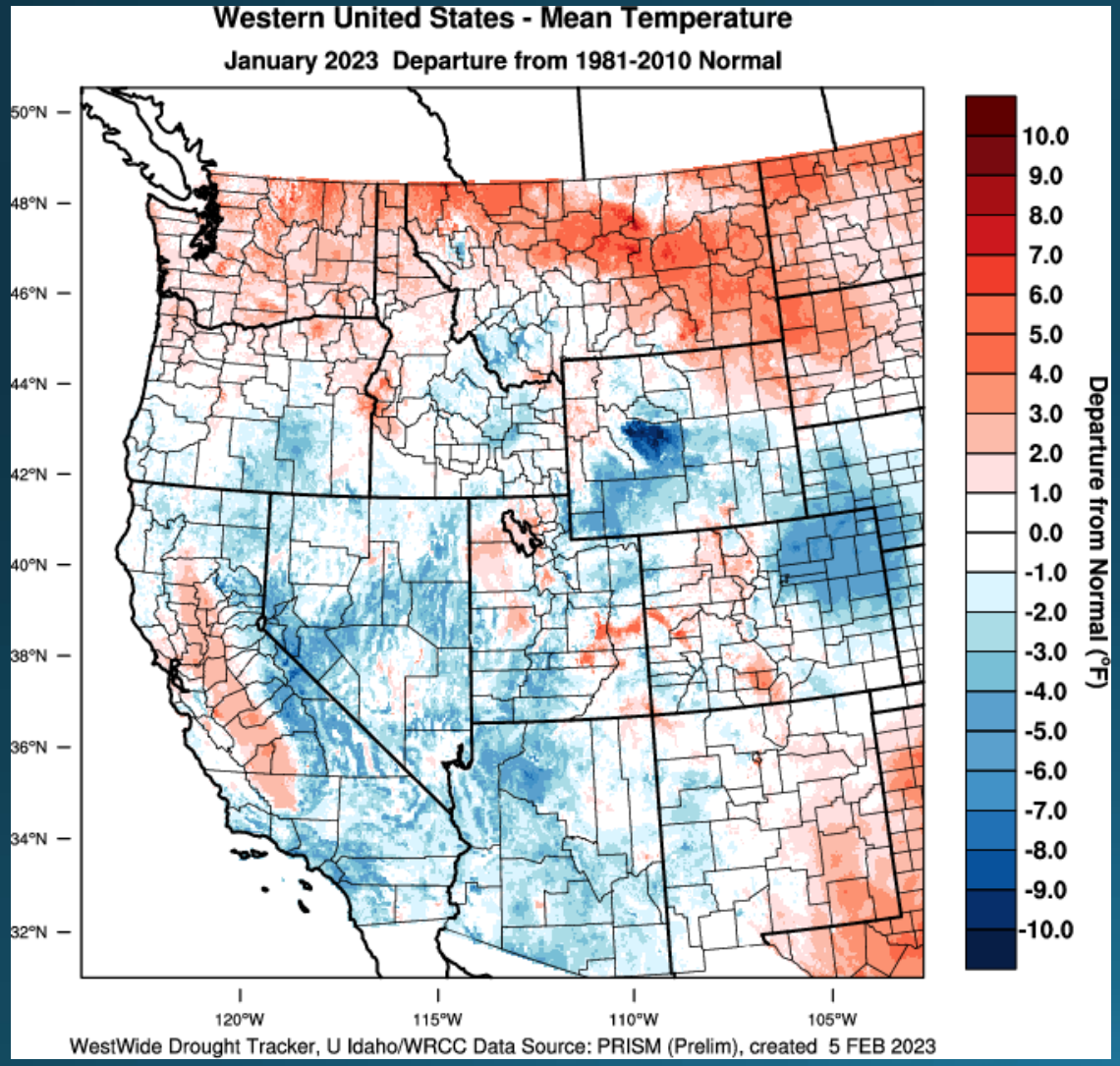
# January 2023 Weather Review

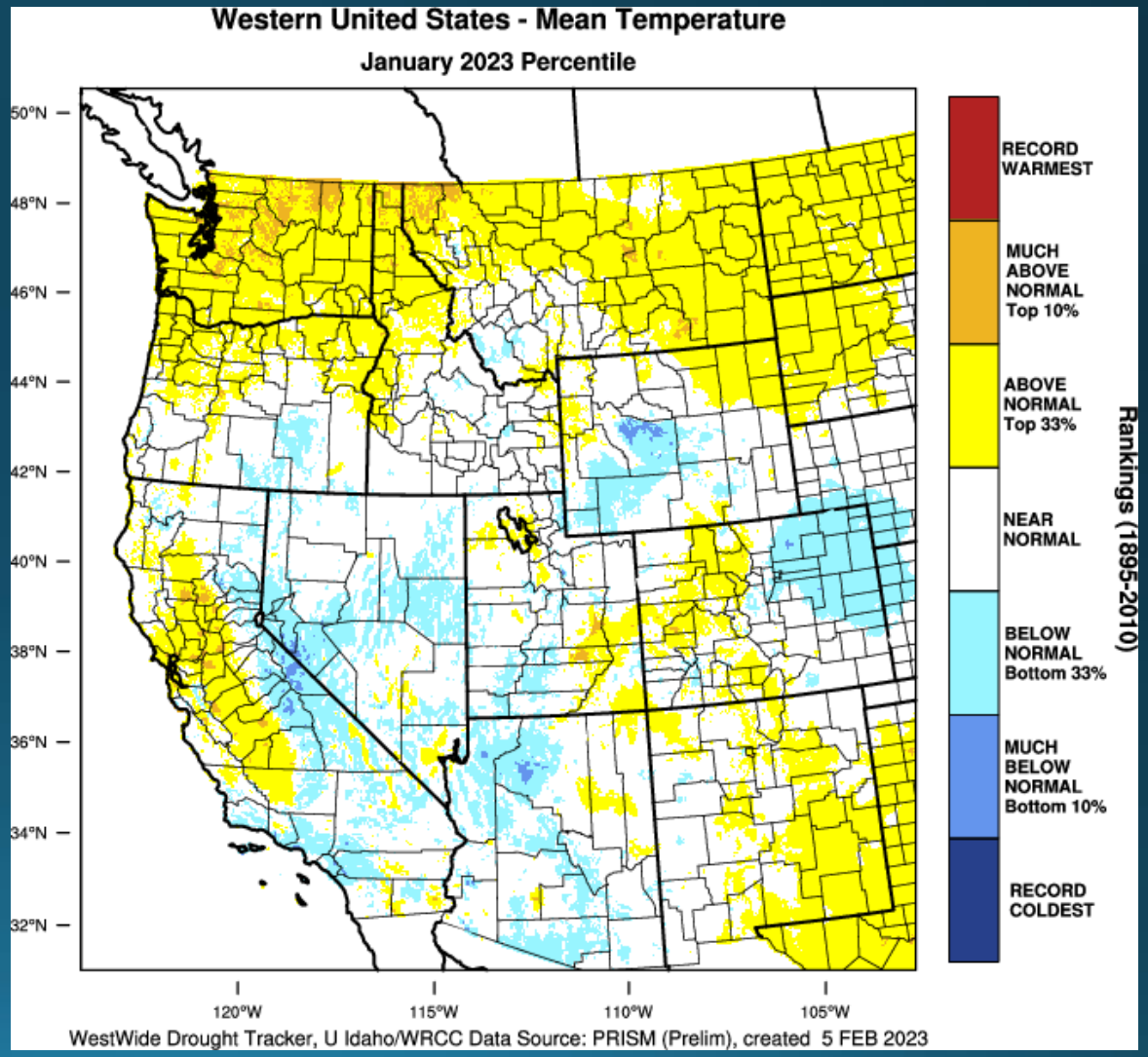
January was an interesting month. With ongoing drought area wide, many were hoping for the wet December to carry into January. However, during the first part of January, the storm track shifted and was directed more into northern California. This brought copious moisture to our southern areas like Mt. Shasta City, where more than 16 inches of rain and melted snow fell during an 11-day stretch from the 4th to the 14th. Amazingly, with all that precipitation, the rivers, streams and creeks in that area were able to handle the higher flows with minimal flood issues.

Instead of the rain, however, the main weather impact in Southern Oregon, especially in the Rogue Valley, was the wind. For those same 11 days, Medford saw wind storm after wind storm with winds from the southeast ideally aligned with the valley. Recorded wind speeds were commonly higher than 35 mph on all but one of those days with a peak wind gust of 55 mph recorded on the 4th. This brought considerable wind damage and local power outages. Southern Oregon wasn`t without precipitation though, and the Coquille River at Coquille rose near and above flood stage from the 15th to the 17th prompting flood warnings. But, precipitation just wasn`t nearly to the magnitude of what occurred in NorCal due to downslope terrain effects.

Medford was also quite mild during that stretch of windy weather with highs commonly 55 degrees or greater. The peak of the warmth occurred on the 12th with a high of 66 degrees. The storm door closed for the entire area from mid-month onward and little additional precipitation was measured. Several cold high pressure systems built in east of the Cascades resulting in bouts of air stagnation. The cold nights were the story in Medford with lows commonly in the 20s, while some areas east of the Cascades had low temperatures of 10 to 15 degrees below zero.

# January 2023 Observed Temperatures



# Average Temperatures

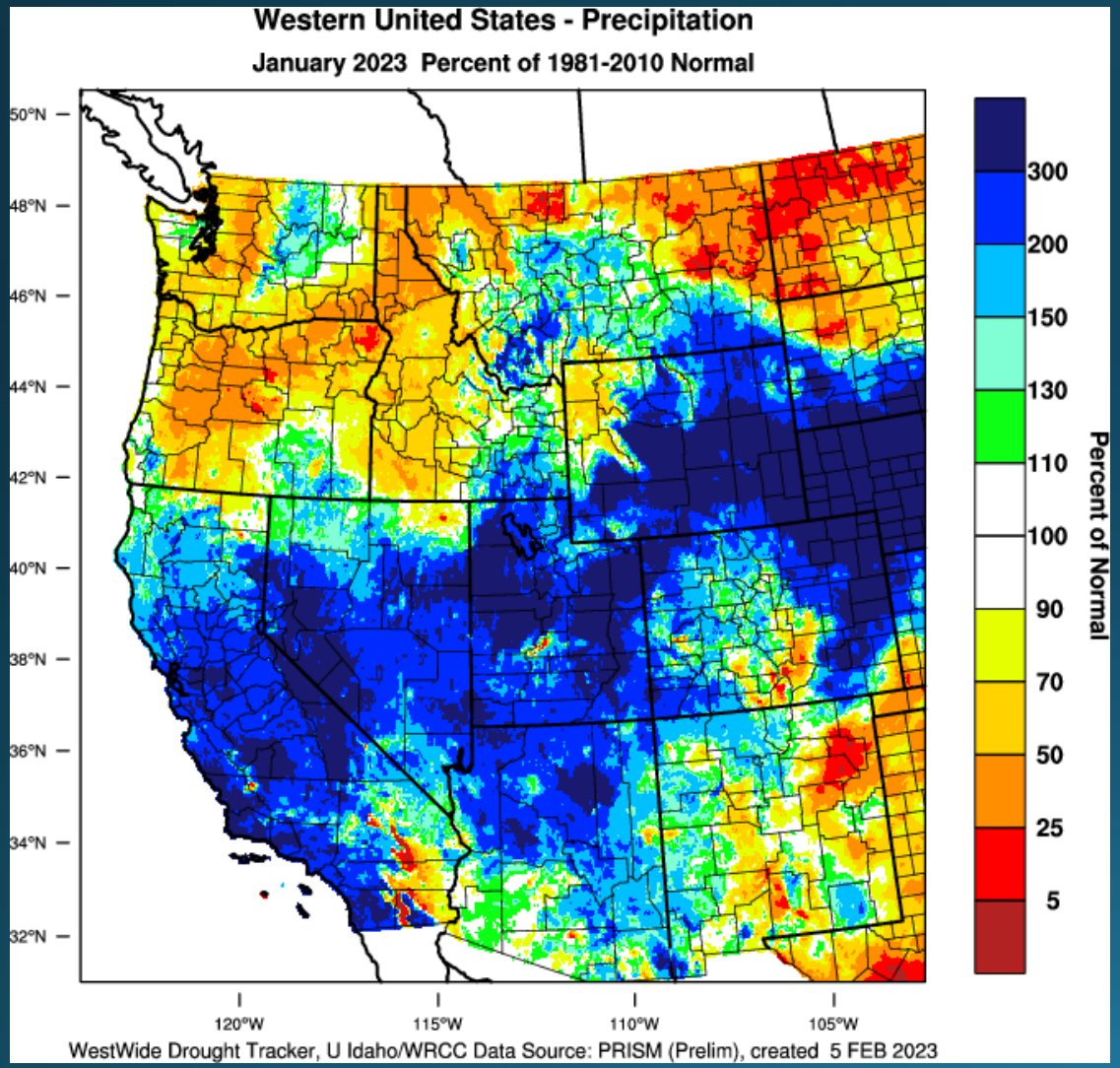
| | Average (°F) | Departure from Normal | Average Max (°F) | Departure from Normal | Average Min (°F) | Departure from Normal |
|---|---|---|---|---|---|---|
| North Bend | 45.6 | -1.7°F | 52.7 | -0.8°F | 38.4 | -2.6°F |
| Roseburg | 42.8 | -0.8°F | 50.3 | 0.2°F | 35.3 | -1.8°F |
| Medford | 41.3 | 0.9°F | 51.1 | 2.9°F | 31.6 | -0.9°F |
| Klamath Falls | 30.9 | -0.6°F | 40.4 | -1.1°F | 21.3 | -0.2°F |
| Montague, CA | 37.2 | 0.5°F | 46.4 | -0.8°F | 28.1 | 1.9°F |
| Mt. Shasta City, CA | 35.6 | -0.8°F | 42.5 | -1.7°F | 28.6 | 0.0°F |
| Alturas, CA | 27.5 | -4.3°F | 38.3 | -4.7°F | 16.7 | -3.9°F |

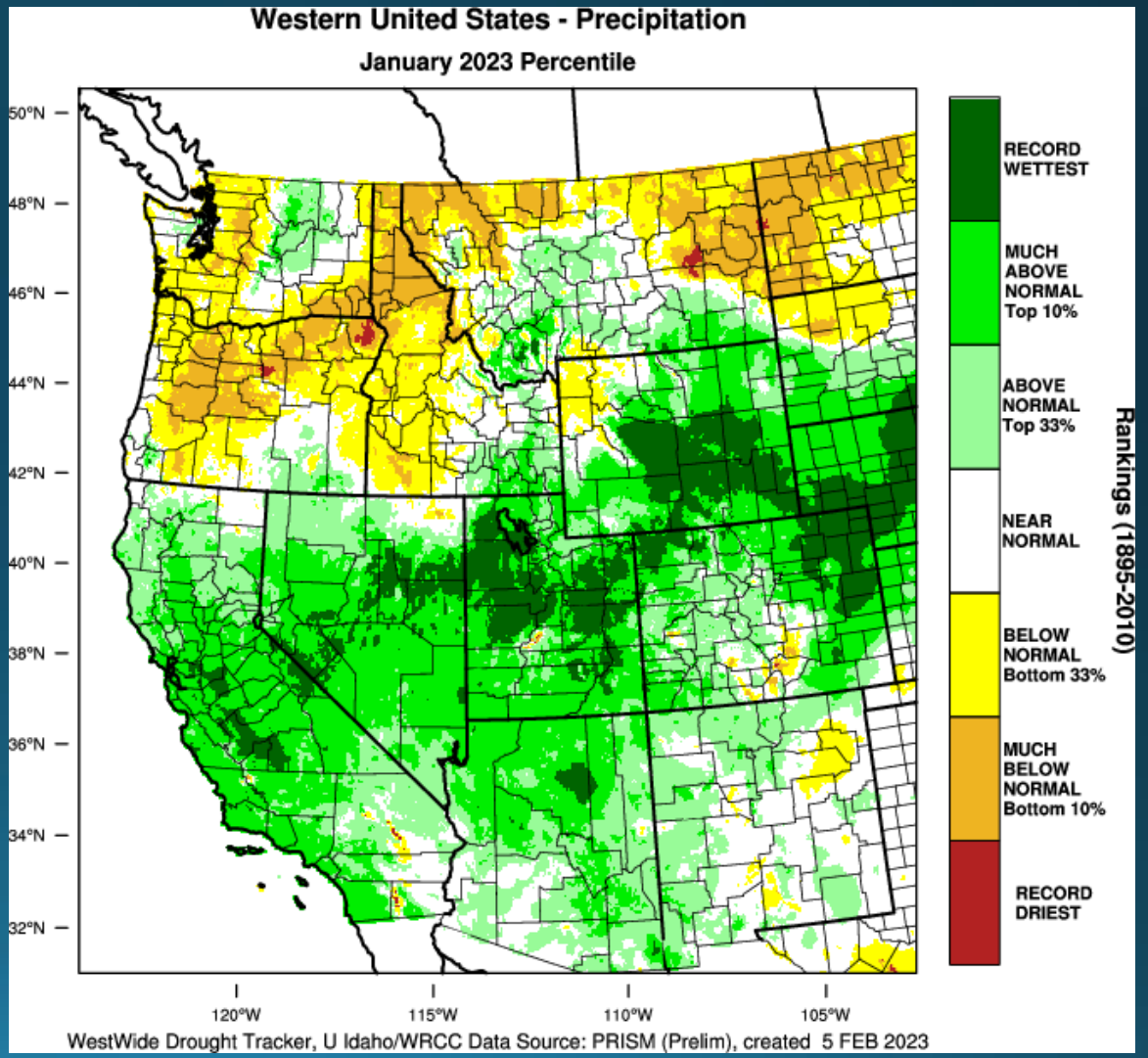
# Monthly Max & Min Temperatures

| | Max (°F) | Date(s) | Min (°F) | Date(s) |
|---|---|---|---|---|
| North Bend | 63° | 12th | 26° | 30th |
| Roseburg | 66° | 12th | 20° | 30th |
| Medford | 66° | 12th | 17° | 30th |
| Klamath Falls | 48° | 25th & 26th | 5° | 30th |
| Montague, CA | 55° | 5th & 12th | 12° | 30th |
| Mt. Shasta City, CA | 55° | 26th | 12° | 30th |
| Alturas, CA | 52° | 12th & 13th | -6° | 20th |

| | Date | Record High | Old Record/Year |
|---|---|---|---|
| **Roseburg** | 12th | 66° | 63° / 2021 |
| **Medford** | 12th | 66° | 66° / 1986 |

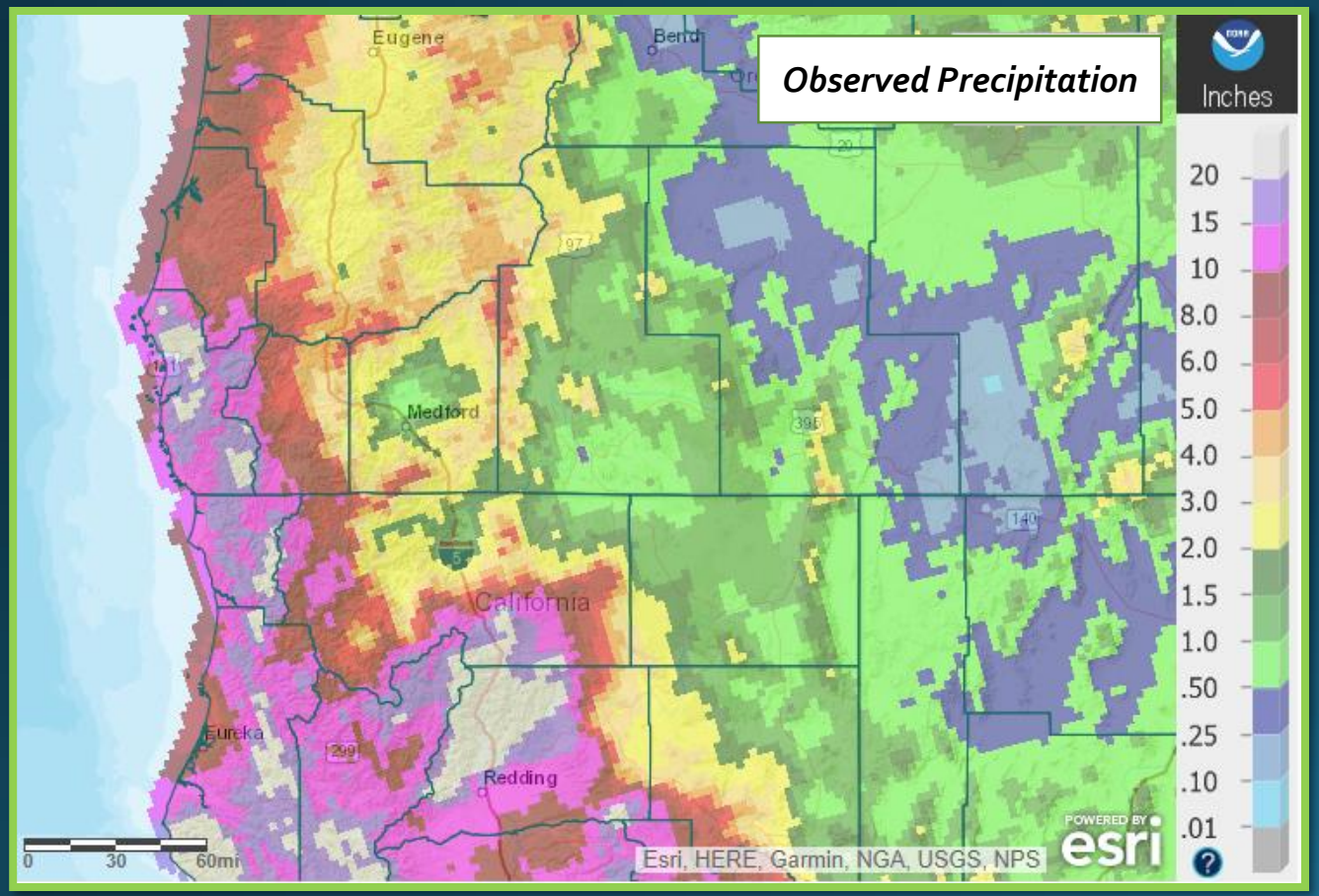
# January 2023 Observed Precipitation

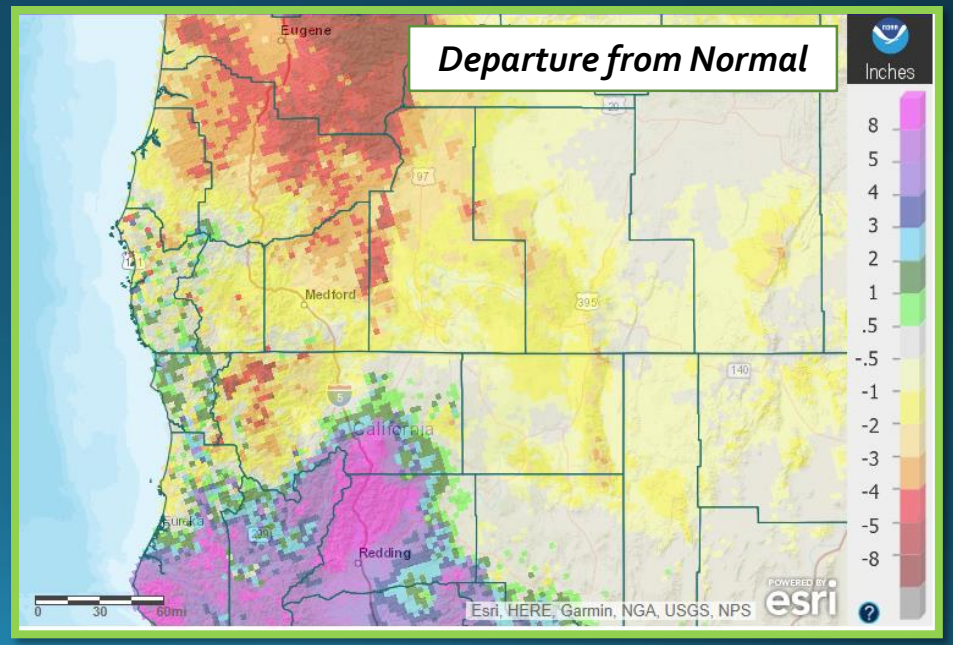


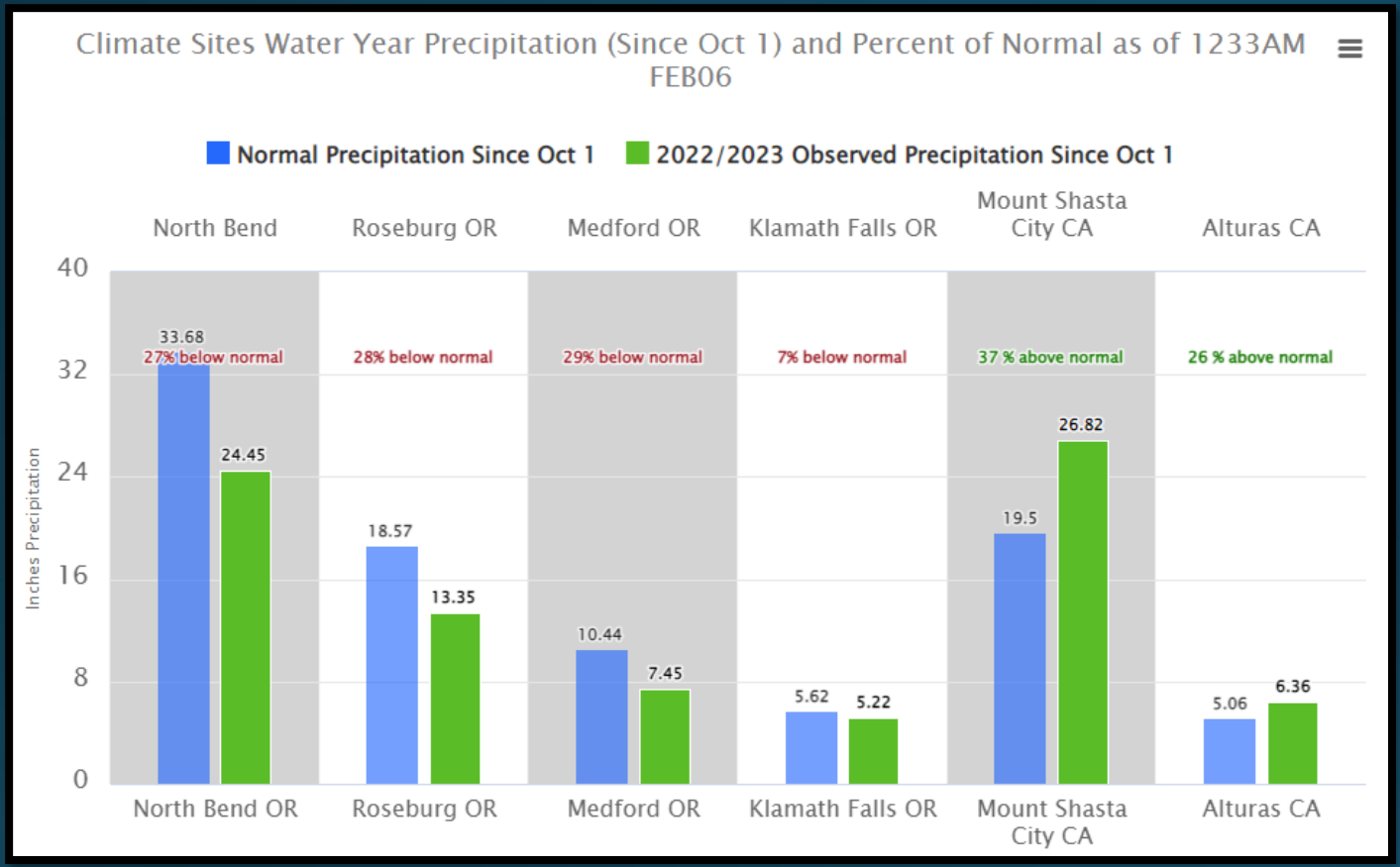
# Monthly Precipitation

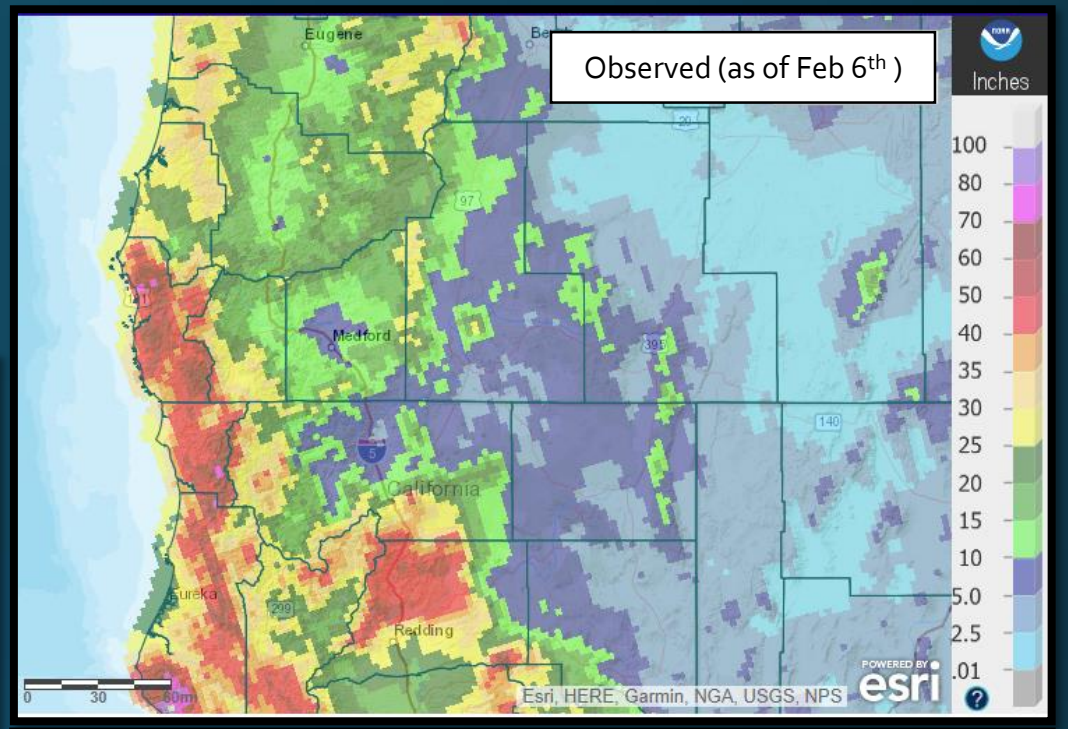
| | Total | Departure from Normal | Greatest 24-hr Total | Date(s) |
|---|---|---|---|---|
| North Bend | *7.61"* | *-1.82"* | *M* | *M* |
| Roseburg | *2.53"* | *-2.29"* | *M* | *M* |
| Medford | *0.76"* | *-1.96"* | *M* | *M* |
| Klamath Falls | *0.67"* | *-0.84"* | *M* | *M* |
| Montague, CA | *1.23"* | *-0.20"* | *M* | *M* |
| Mt. Shasta City, CA | *16.75"* | *10.46"* | *M* | *M* |
| Alturas, CA | *1.45"* | *0.14"* | *M* | *M* |

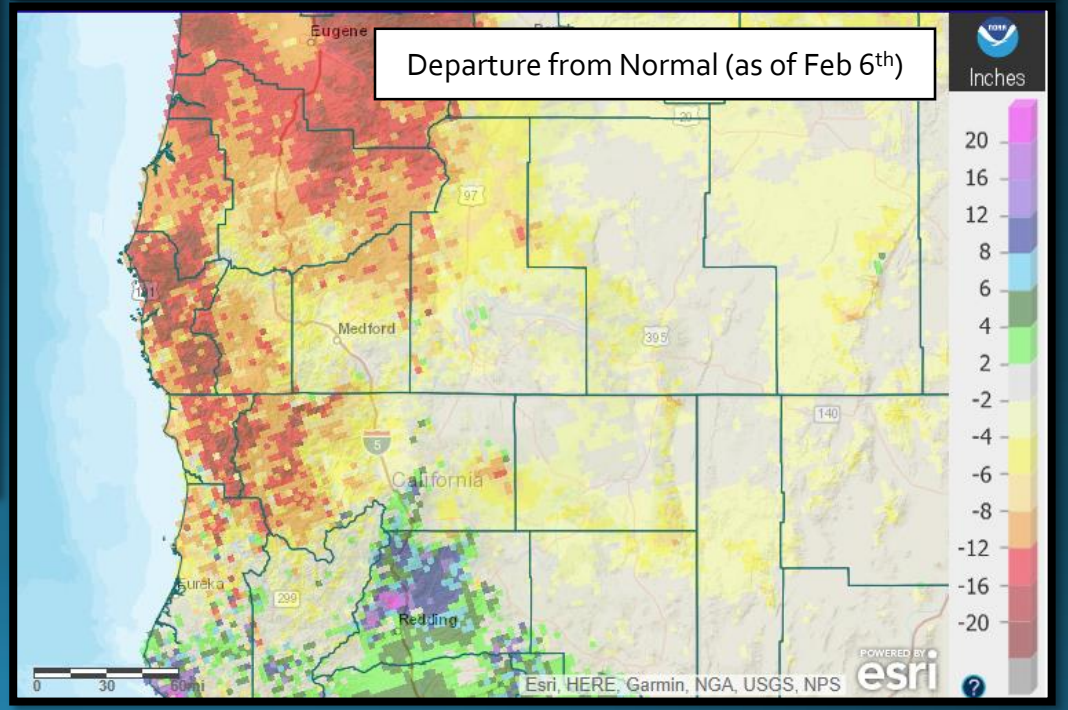


# Water Year Status (As of Feb 6th)

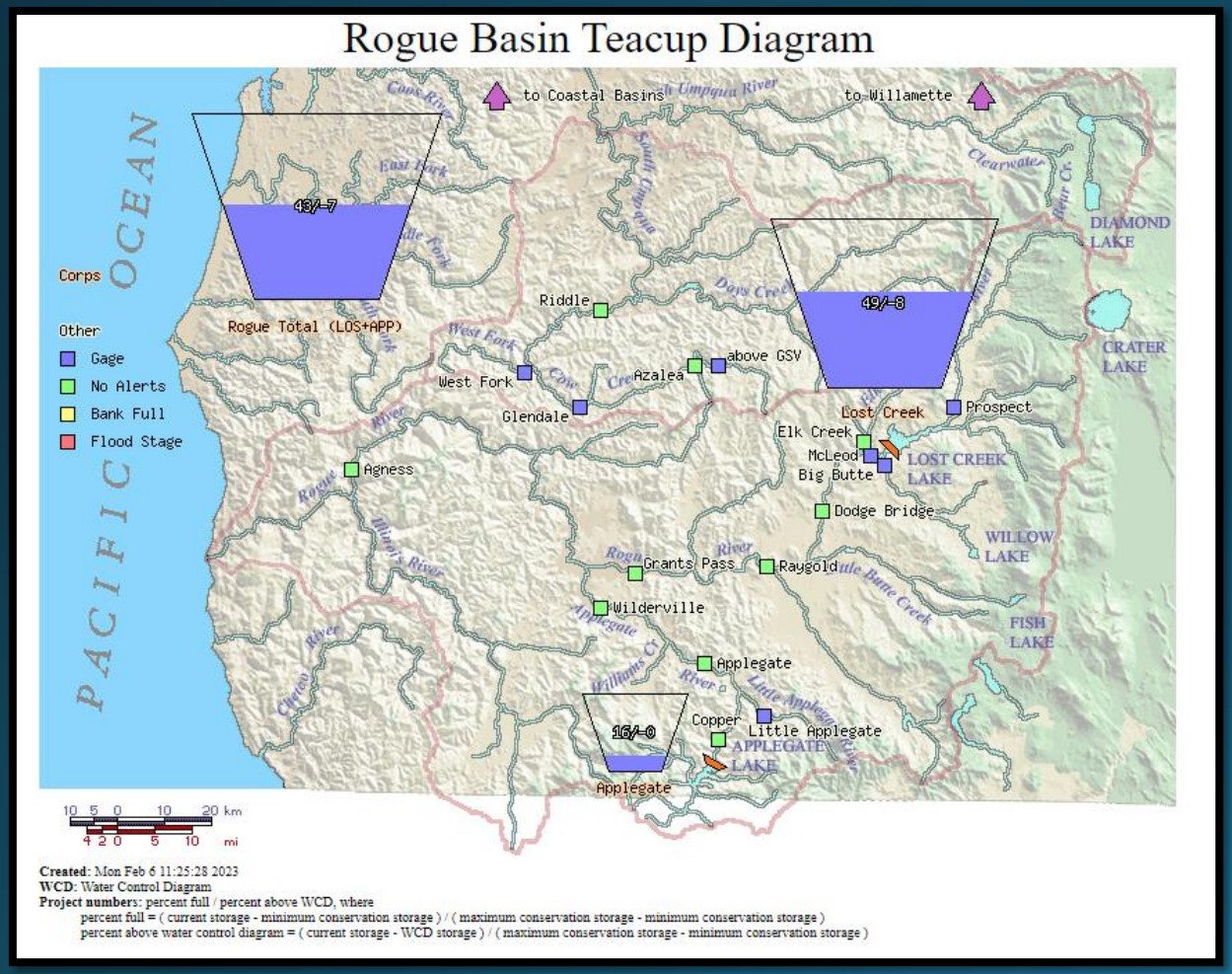


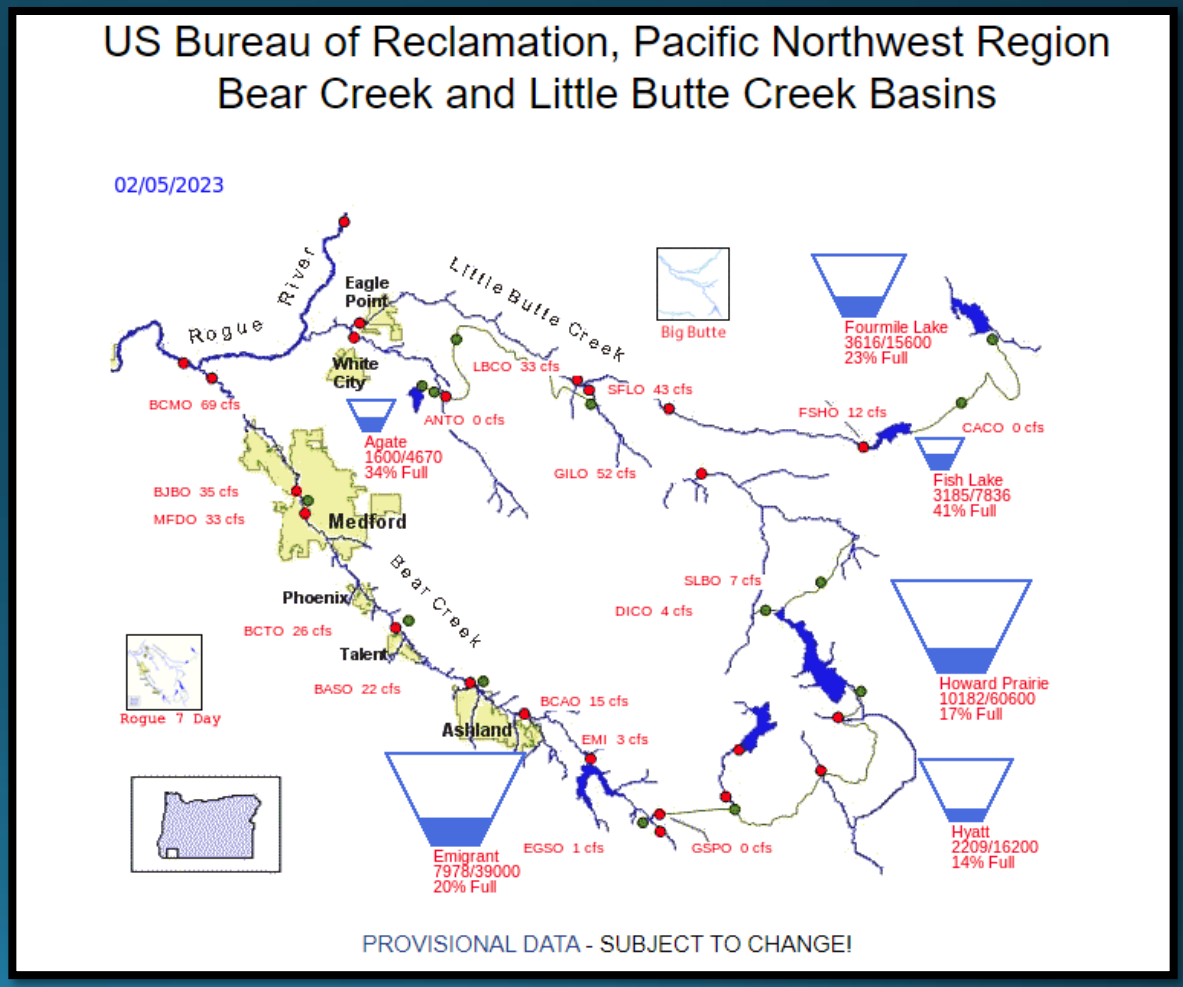



# Reservoir Status

Data courtesy of US Army Corps of Engineers

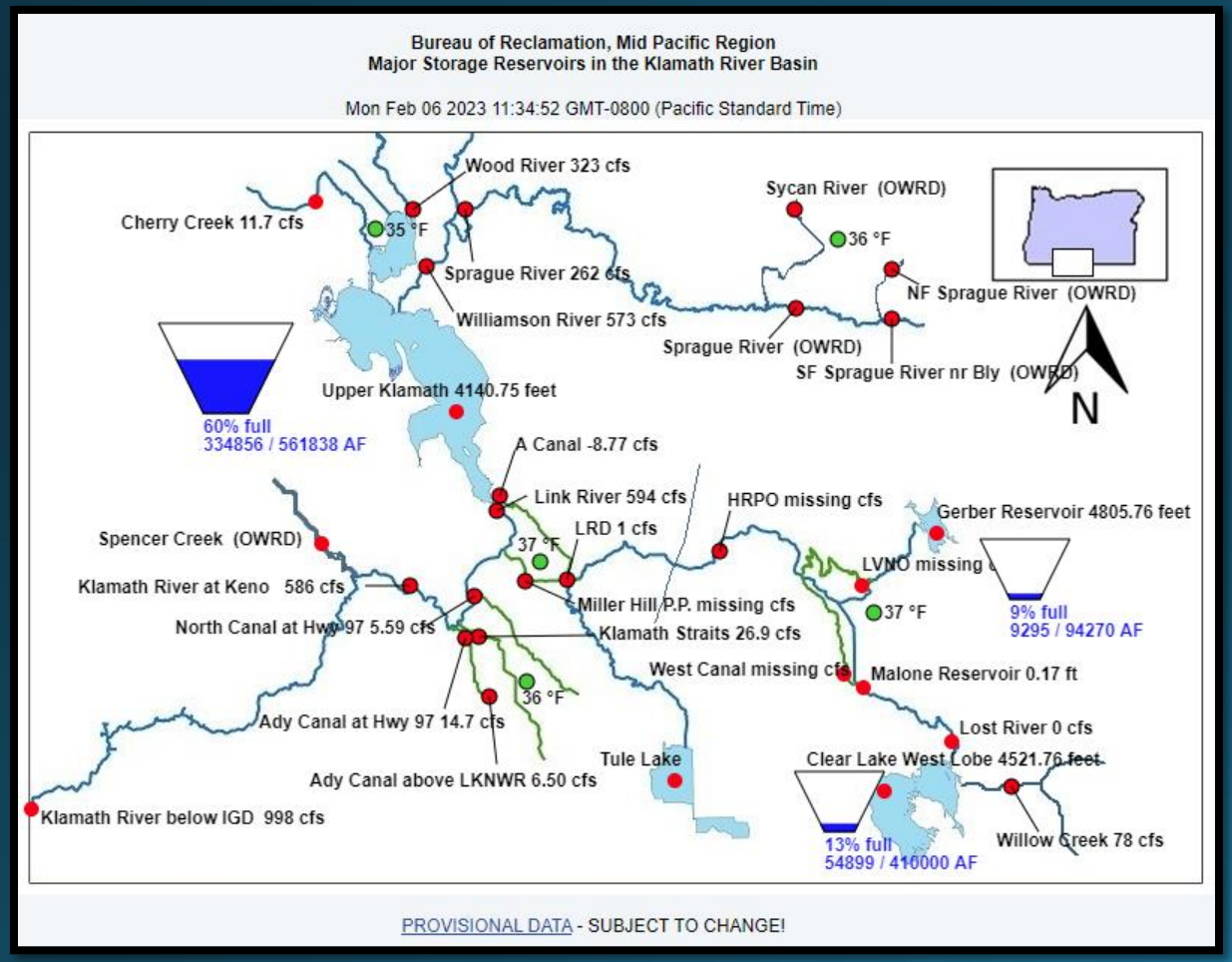


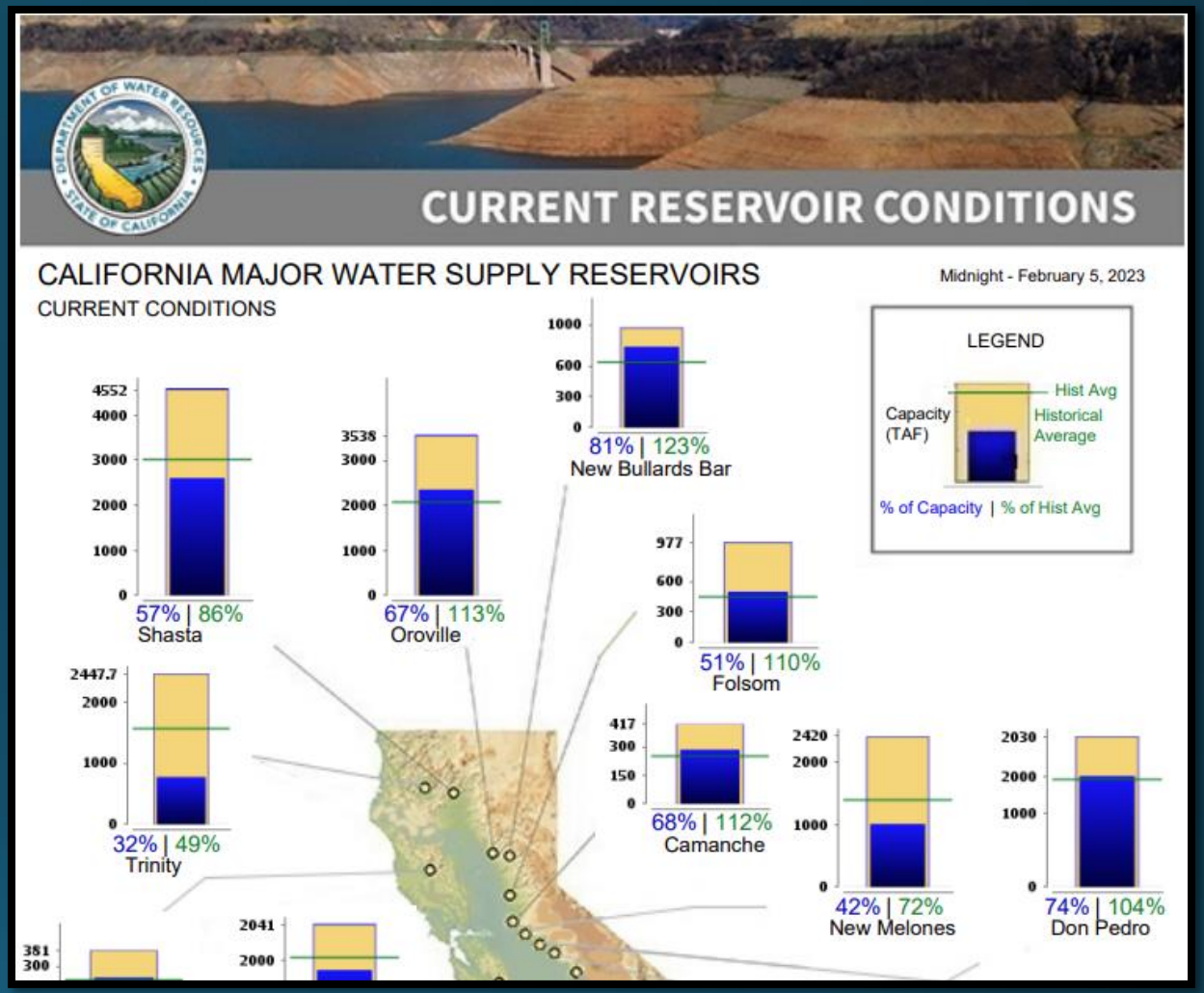

Data courtesy of Bureau of Reclamation



# Reservoir Status

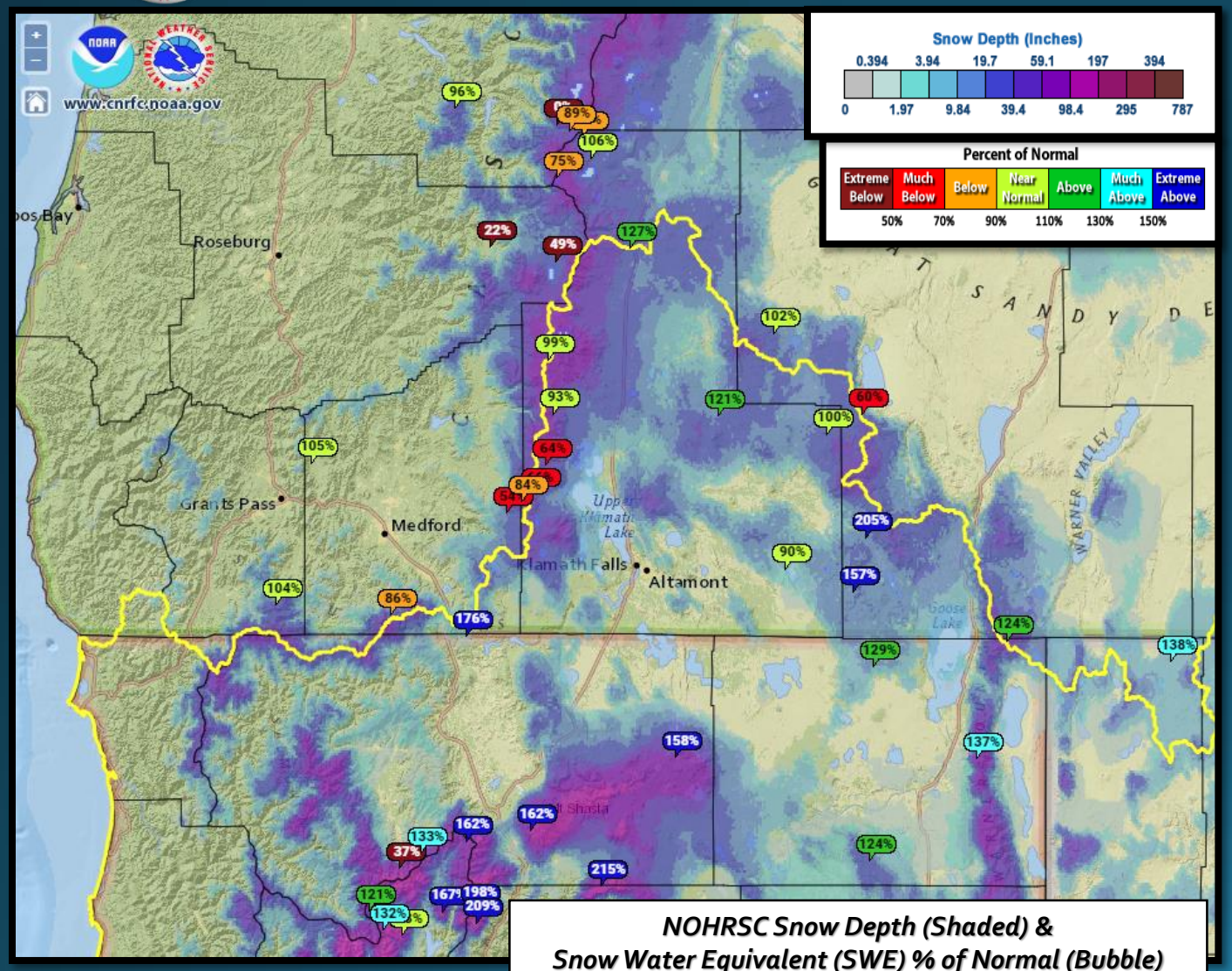
Klamath River Basin. Data courtesy of Bureau of Reclamation



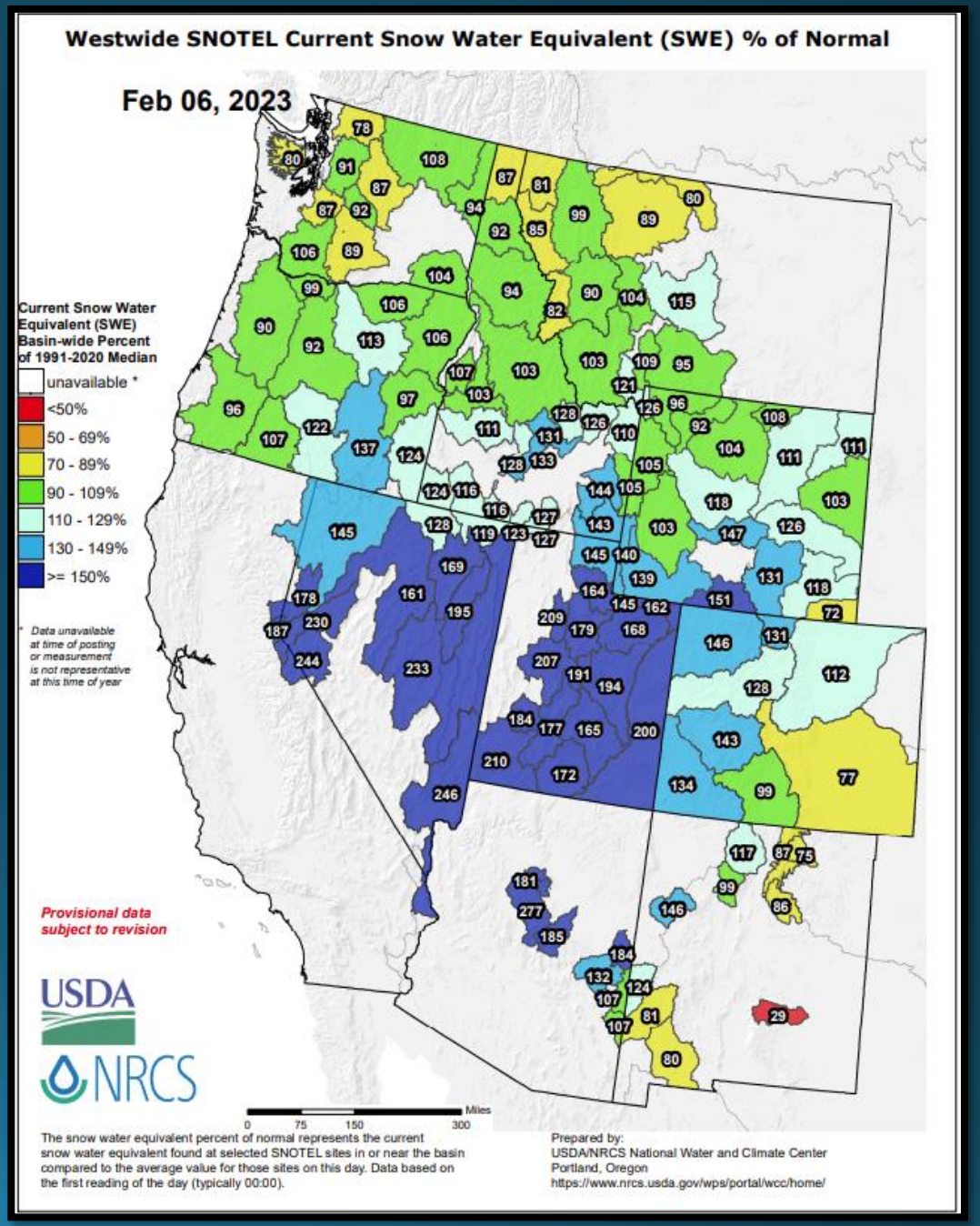




Northern California. California Data Exchange Center

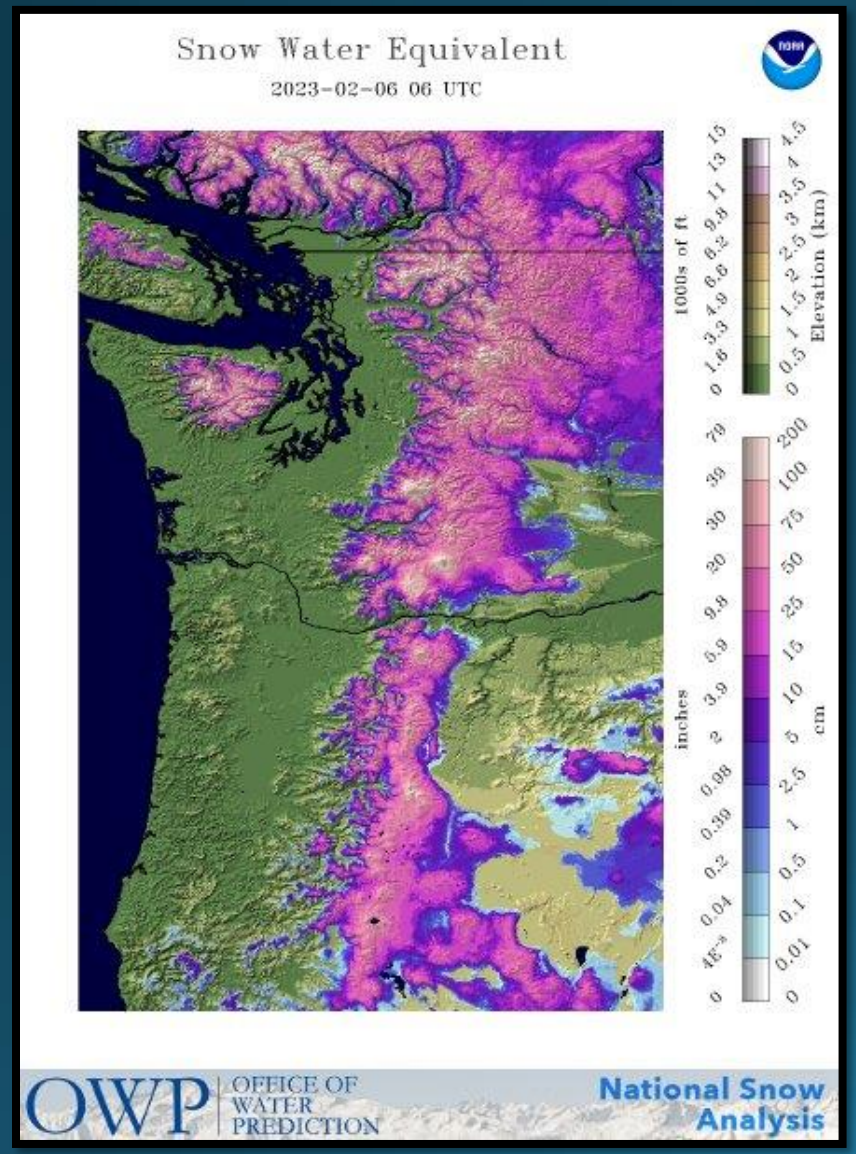
# Snowpack Status

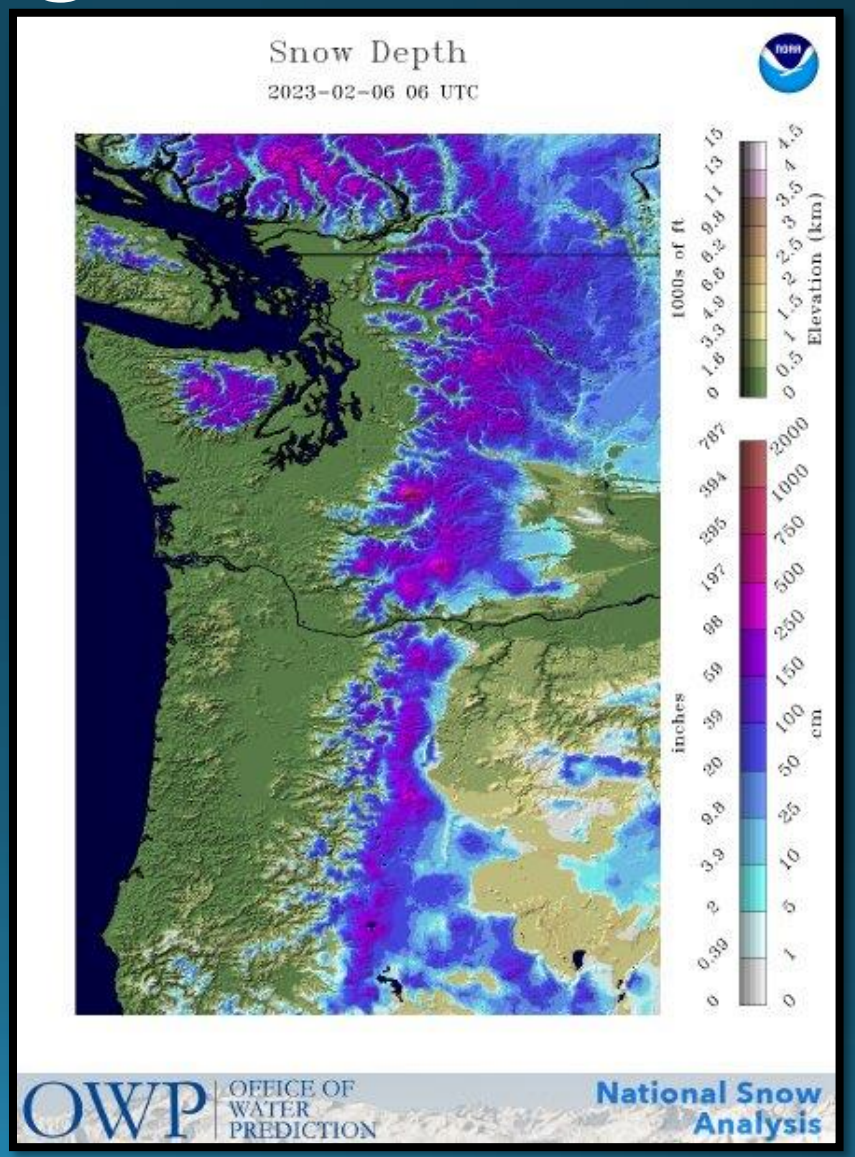



***NOHRSC Snow Depth (Shaded) & Snow Water Equivalent (SWE) % of Normal (Bubble) as of 2/6/2023***

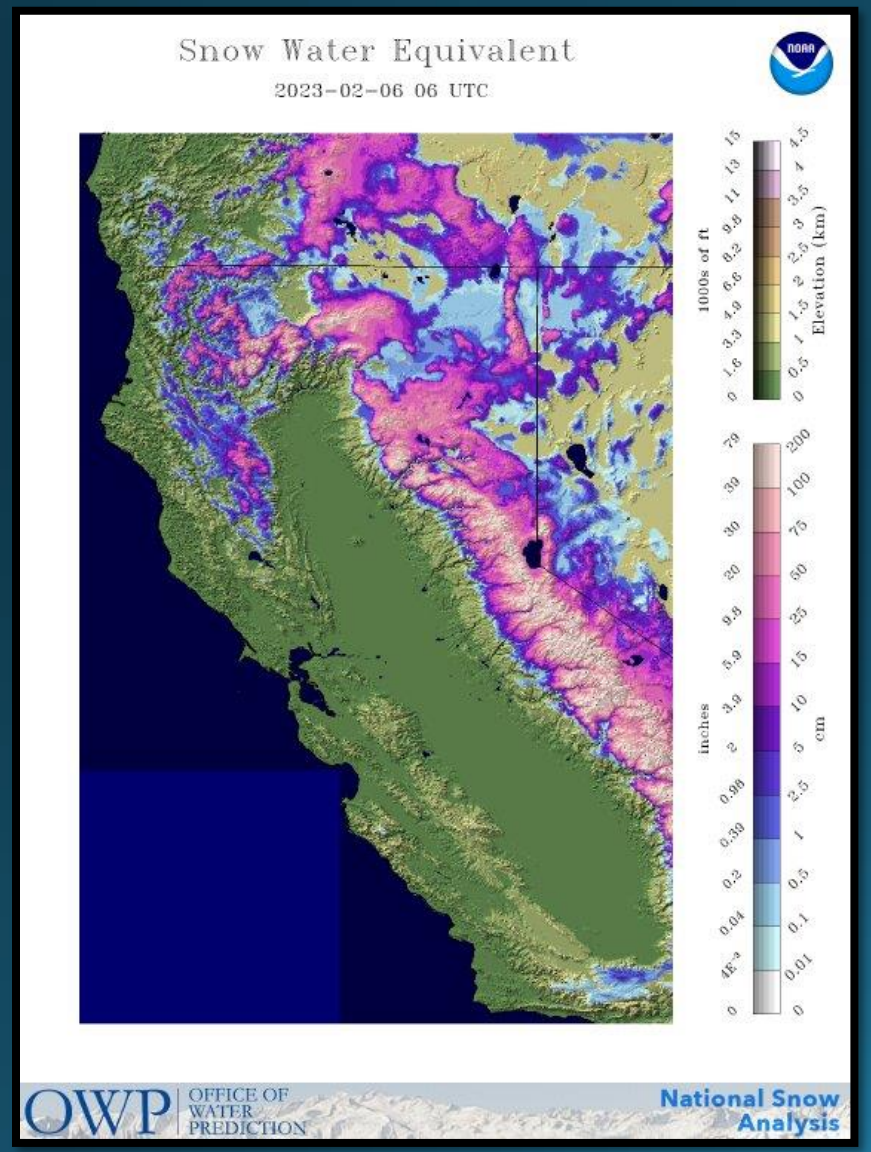


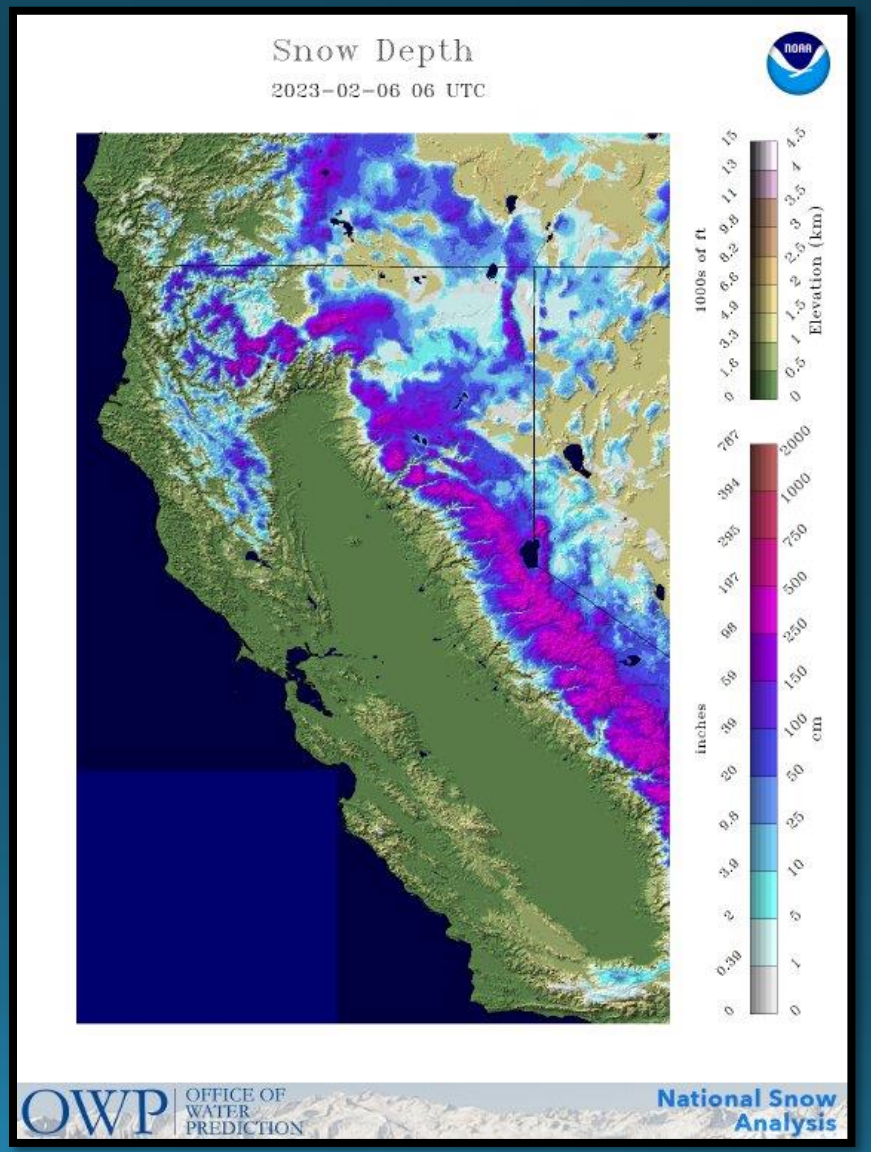
# Pacific NW SWE & Snow Depth as of 2/6/23



# California SWE & Snow Depth as of 2/6/23



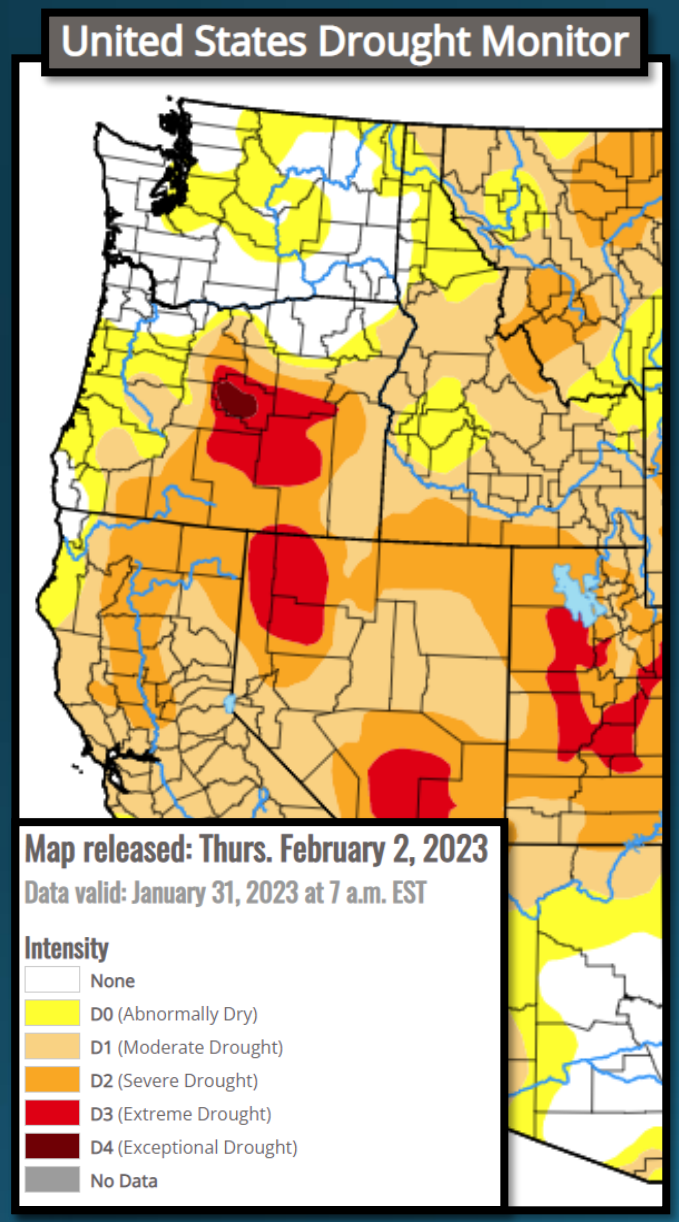



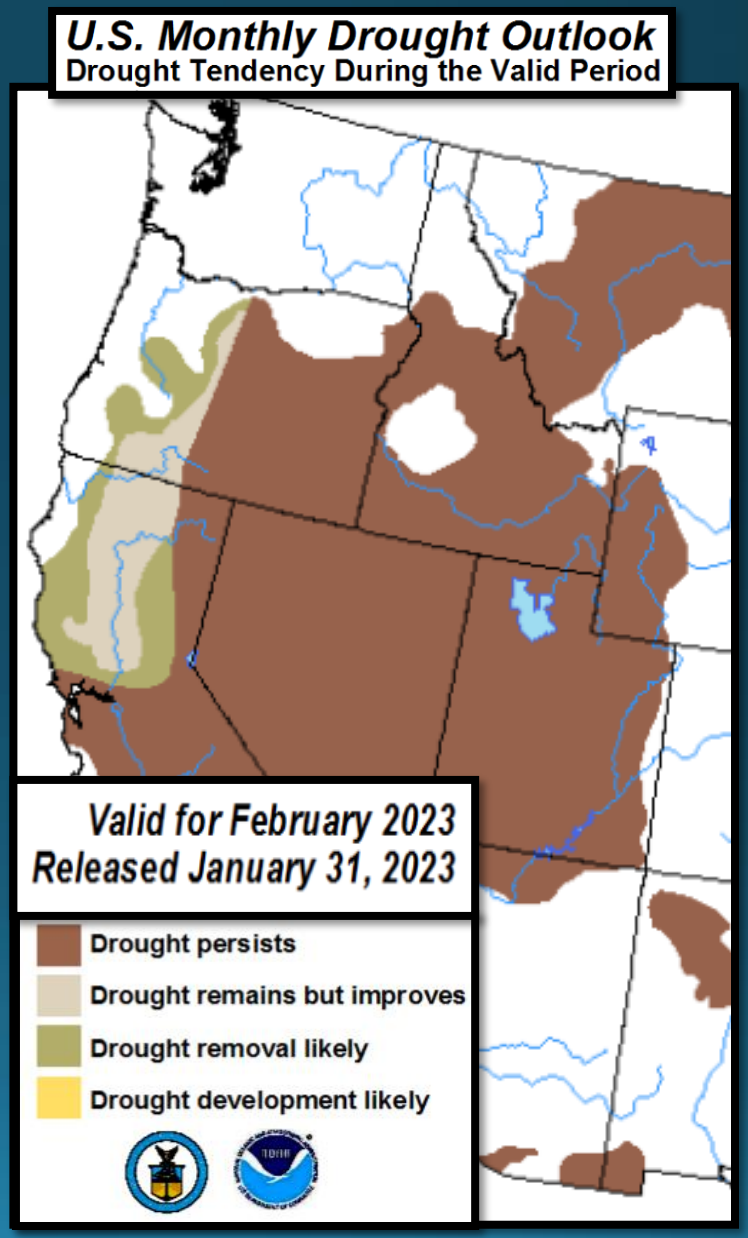
# Crater Lake

Image Courtesy: NPS

| | Average Max Temp (°F) | Average Min Temp (°F) | Total Precipitation | Total Snowfall | Snow Depth as of: 01/31/23 | Highest Max/ Lowest Min |
|---|---|---|---|---|---|---|
| January | 31.1° | 18.7° | 8.12" | 64.7" | 78" | 47° on 27th / 2° on 30th |
| Normal (1991-2020) | 33.4° | 19.8° | 10.10" | 86.5" | 80" | N/A |

# Drought Monitor (Current) & Outlook (Feb)



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

Per the 1981-2010 climate normals, February is a very notable month, as temperatures begin their climb out of the winter minimums that are typical of December and January. As a whole, while the monthly average temperatures along the coast nudge upward only a degree or less from January to February, temperatures inland rise 3-5 degrees, with high temperatures showing the most appreciable rise when compared to January.

***Minimum Temps:*** Lows on the East Side, in the Cascades, Siskiyous, and Trinity Alps are typically in the upper teens and 20s, except for the upper reaches of Mount Shasta, where it's colder. Lows are typically in the 30s for the interior West Side, while upper 30s and 40s are most common along and near the coast.

***Maximum Temps:*** Highs at lower elevations on the East Side are typically in the 40s. In the Cascades, Siskiyous, Trinity Alps, and mountains east of the Cascades, daily maximums are typically in the 30s. Highs on the West Side and along and near the coast are typically in the 45 to 55 degree range, on average, though it is a bit cooler in some West Side mountainous area..

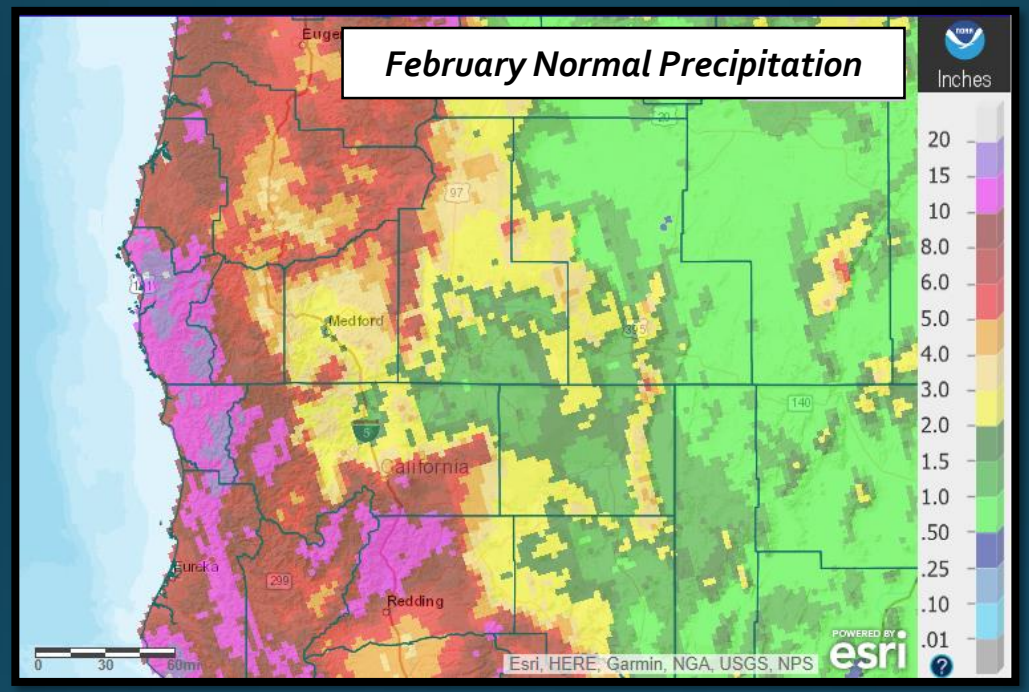
***Precipitation:*** For most of the forecast area, February is certainly still a wet month, but not as wet as November through January and, in some areas, March. Interestingly, however, data indicates that February is the second wettest month of the year for Klamath Falls and Mount Shasta City and is the third wettest for other locations near those two cities. The combination of this wetness and the cool conditions of late winter mean that mountain snowfall is still typically very significant across the area. Mountain snowpack typically continues to grow through mid-March.

As for rainfall and snow water equivalent amounts, the lower elevations east of the Cascades receive at least 1”-3” of water, except in the northeastern half of Lake County, where amounts are a half inch to one inch. Higher elevations east of the Cascades and the Chemult area typically get 2”-6” of water. The Cascades, much of the Siskiyous, and Trinity Alps get 5”-10” of water, although portions of Mount Shasta get a little more. The West Side sees a wide spread in precipitation, with 2”-6” over much of the Interior West Side, with a bit less for Medford and in parts of the Shasta Valley. Douglas, southwestern Josephine, western Siskiyou, Coos, and Curry Counties get 5”-15”, on average, although some locations in the Coast Range typically get over 20” of water during the month of February.

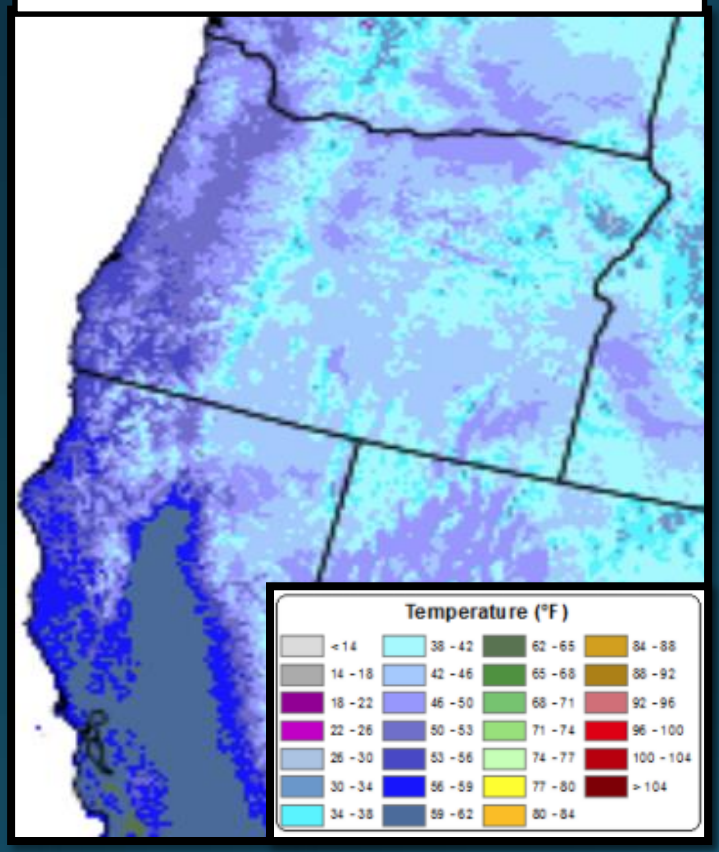
Much of this water typically falls as snow above about 5,000-6,000 feet MSL. For instance, the 1981-2010 average February snowfall for Crater Lake National Park Headquarters is 71.3”. The average snow depth there is usually 88 inches on February 1$^{st}$ and 106 inches on the last day of the month.

# Normals for February (1991-2020)

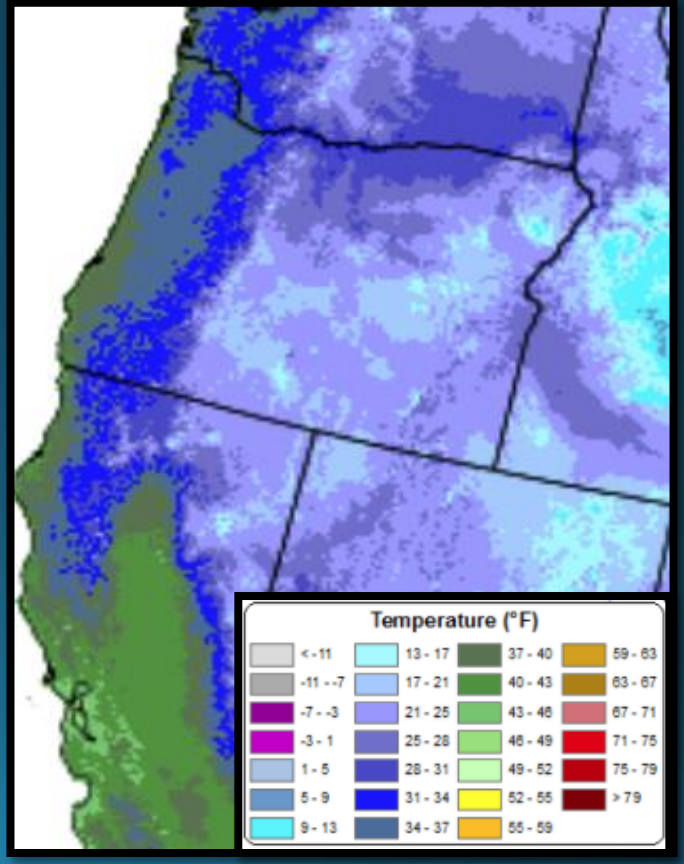
***February Normal Precipitation***




***Average Maximum Temperatures***




***Average Minimum 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**