

WESTERN DROUGHT STATUS UPDATE

JULY 15, 2021

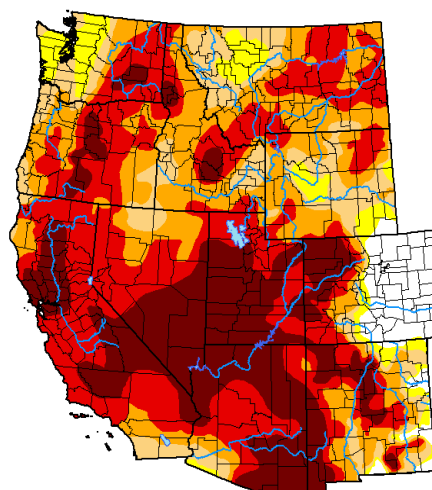


Long-Term Drought in the West Impacts Water Supplies and Increases Wildfire Risk

- 89% of the West is in drought and 25% is in Exceptional (D4) Drought. Both are U.S. Drought Monitor records.
- Much of the West was drought free just over 14 months ago, but drought conditions began developing around May 2020.
- A poor summer 2020 monsoon season followed by snow drought in winter 2020-21 worsened conditions in California and the Southwest.
- Record-shattering temperatures and dry conditions in the Northwest in early summer 2021 caused conditions to rapidly deteriorate in a region that was already facing multi-year precipitation deficits.

U.S. Drought Monitor Western U.S.

July 13, 2021
(Released Thursday, Jul. 15, 2021)
Valid 8 a.m. EDT

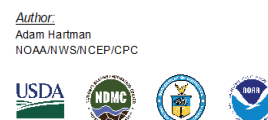


Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.72	94.28	89.16	77.82	56.75	24.58
Last Week 07-06-2021	5.62	94.38	88.34	78.62	53.18	23.35
3 Months Ago 04-13-2021	8.01	91.99	78.21	60.88	41.66	21.05
Start of Calendar Year 12-29-2020	11.57	88.43	78.63	65.18	46.49	22.16
Start of Water Year 09-29-2020	8.51	91.49	76.07	54.55	33.11	2.31
One Year Ago 07-14-2020	31.11	68.89	47.81	23.98	5.91	0.00

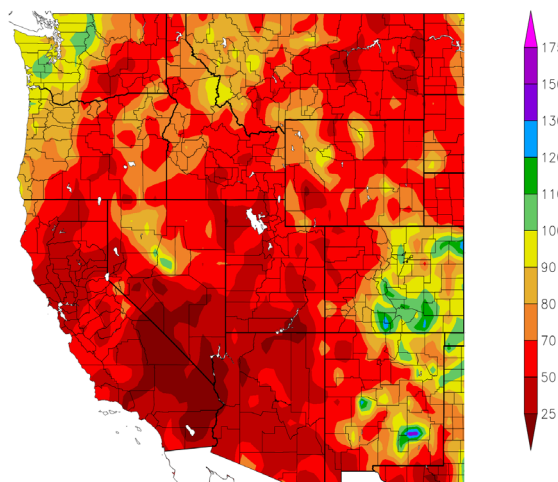
Intensity:
 None (White)
 D0 Abnormally Dry (Yellow)
 D1 Moderate Drought (Orange)
 D2 Severe Drought (Red-Orange)
 D3 Extreme Drought (Red)
 D4 Exceptional Drought (Dark Red)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



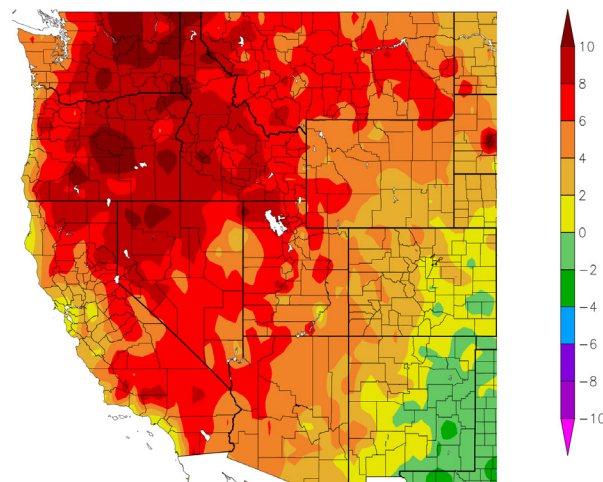
▲ Fig 1. July 13, 2021 U.S. Drought Monitor. Source: National Drought Mitigation Center

Percent of Normal Precipitation (%)
7/12/2020 – 7/11/2021



▲ Fig 2. Percent of normal precipitation in the last year as of July 11, 2021. Source: High Plains Regional Climate Center

Departure from Normal Temperature (F)
6/13/2021 – 7/12/2021



▲ Fig 3. Departure from normal temperature in the last month as of July 12, 2021. Source: High Plains Regional Climate Center

STREAMFLOW AND RESERVOIR LEVELS ARE BELOW OR MUCH BELOW NORMAL

As of July 11, 2021, most streamflow and reservoir levels in the West are below or much below normal, in many cases from long-term drought. Lake Powell is at 34% capacity while Lake Mead is at 35% of capacity. In California, Lake Shasta is at 36% of capacity and Lake Oroville is at just 29% of capacity. In the Klamath River Basin in Oregon and California, major reservoir storage levels range from 10-42%. River and streamflow in parts of the Southwest have seen some minor improvements recently, particularly parts of southern Arizona and New Mexico where seasonal monsoon rains have begun. However, streamflows for the last 28 days are below average for most of the West, with many at record low flows.

CURRENT RESERVOIR LEVELS

Lake Mead (AZ/NV):

35%
of capacity

Lake Powell (AZ/UT):

34%
of capacity

Lake Shasta (CA):

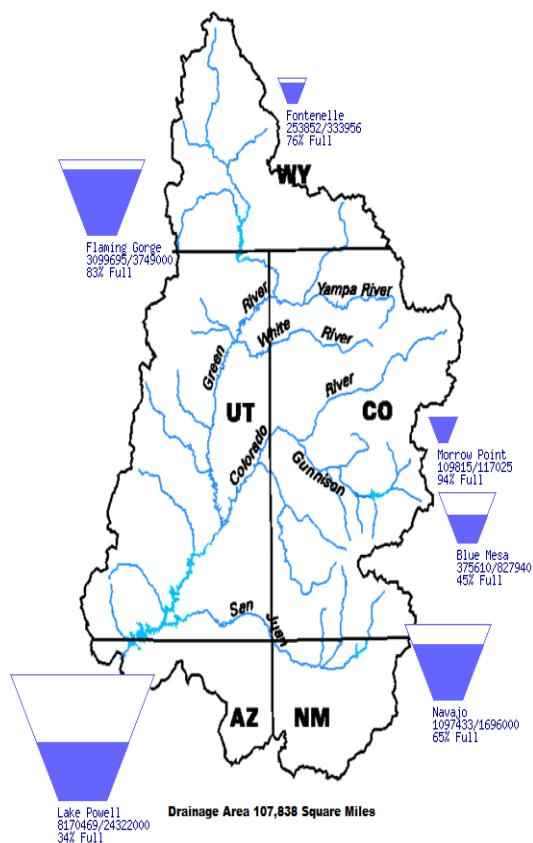
36%
of capacity

Lake Oroville (CA):

29%
of capacity

Data Current as of:
07/11/2021

Upper Colorado River Drainage Basin

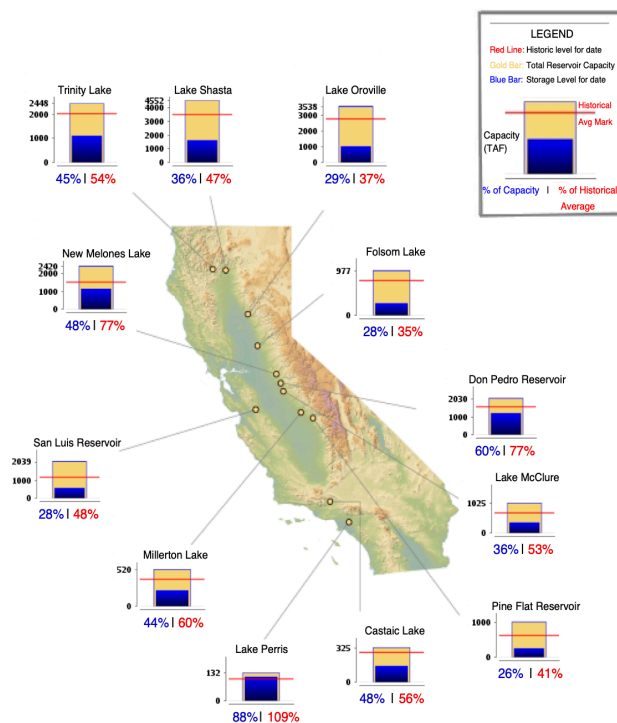


▲ **Fig 4.** Upper Colorado River Drainage Basin as of July 11, 2021 showing level of fill in reservoirs, ratio of the volume of water currently in the reservoir compared to the volume of water in the reservoir when it is full, and the percent full. Source: Bureau of Reclamation



SELECTED WATER SUPPLY RESERVOIRS

Midnight: July 11, 2021

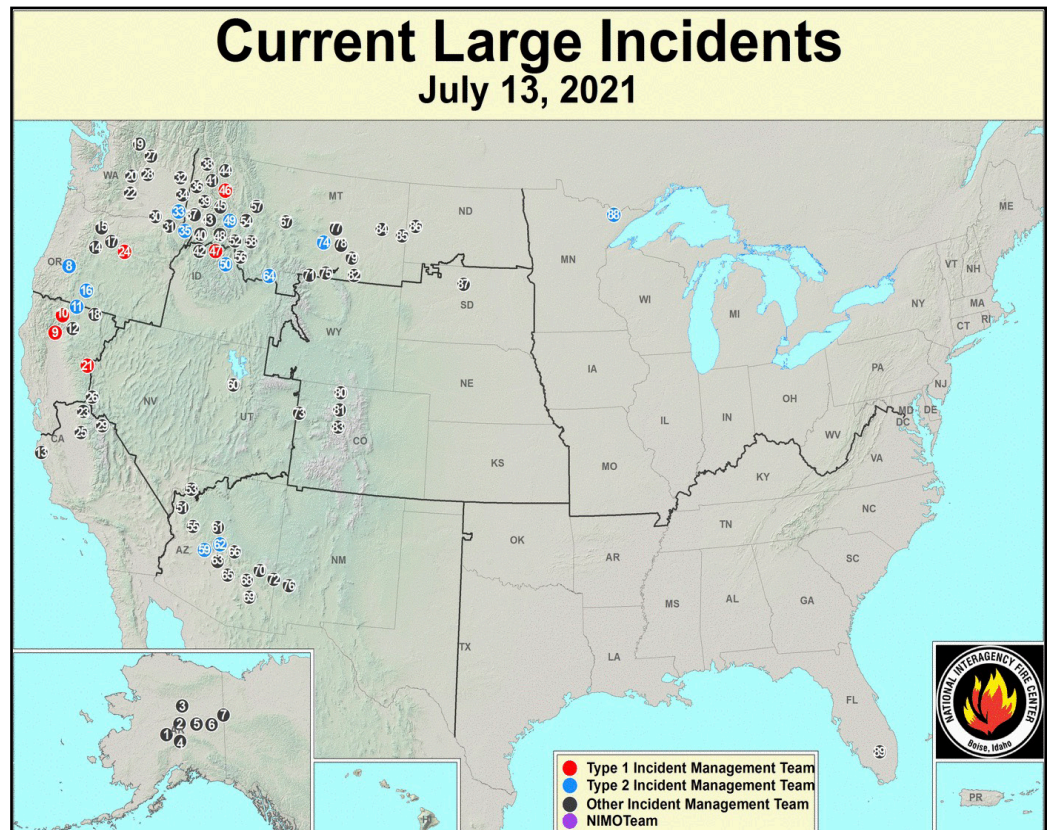


Updated 07/12/2021 01:48 PM

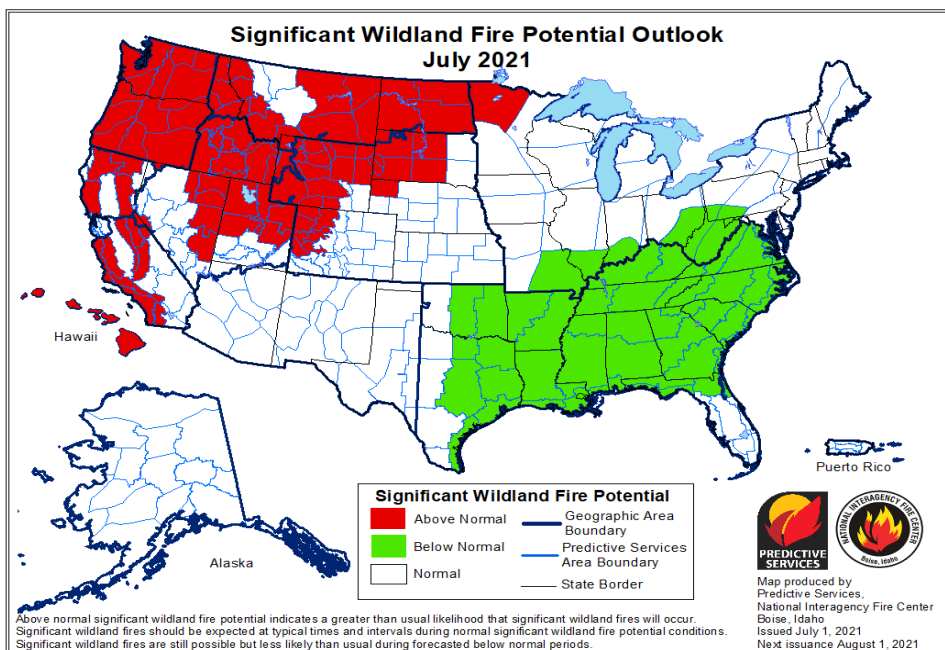
▲ **Fig 5.** Conditions for major California reservoirs as of July 11, 2021. The blue bars show the storage level for the date, the gold bar total reservoir capacity, and the red line historic average level for date. Below the diagrams are % of capacity in blue and % of historic capacity in red. Source: California Department of Water Resources

2020 WAS A DEVASTATING WILDFIRE YEAR, 2021 COULD BE WORSE

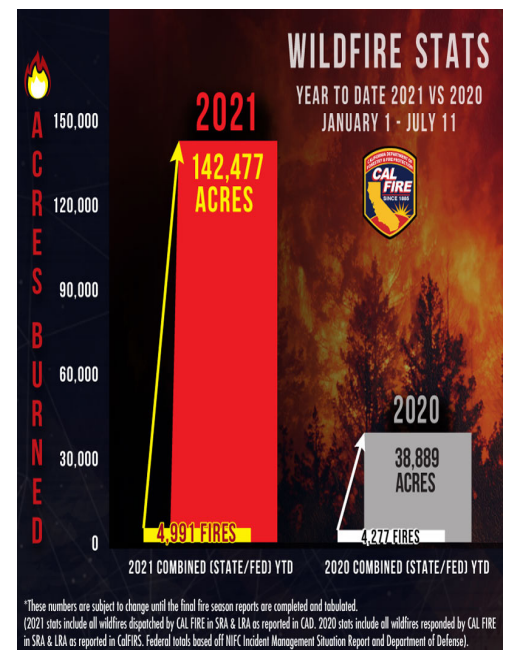
- 58,258 fires covering a record-setting 10,274,679 acres burned in 2020. The number of acres burned was much above the average of 6,789,149.
- As of July 13, there were 89 large fires burning in the U.S., with most in the Pacific Northwest. Smoke from these fires has moved across the West.
- California has experienced many more wildfires and acres burned compared to this time last year.
- Above normal significant fire potential continues in all of the Pacific Northwest and parts of California, the Rockies, Southwest, and Northern Plains.



▲ Fig 6. Current large wildfire incidents as of July 13, 2021. Data from National Interagency Fire Center.



▲ Fig 7. Significant Wildland Fire Potential Outlook for July 2021. Source: National Interagency Fire Center



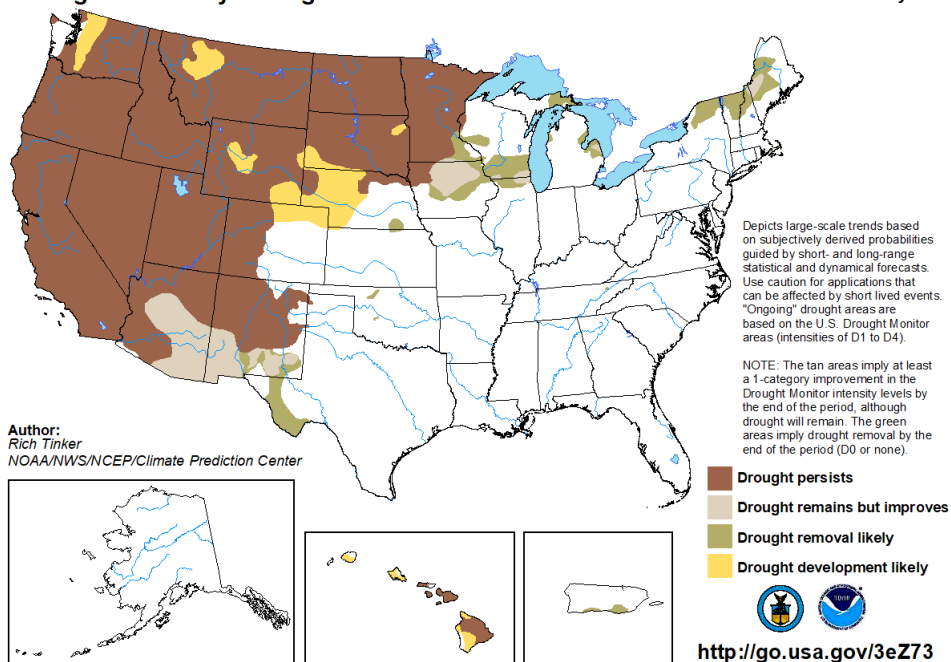
▲ Fig. 8. Number of acres burned so far in California in 2021 as of July 11, compared to the same time period in 2020. Source: Cal Fire

OUTLOOK SHOWS DROUGHT CONDITIONS CONTINUING

- NOAA's National Weather Service Climate Prediction Center sees drought persisting in California where the climatology is relatively dry through the end of September.
- The Southwest is now seeing robust summer monsoon rains. Drought is still expected to persist, with some improvement, even if monsoon rainfall continues.
- Drought is expected to continue to develop or persist in the Pacific Northwest, Rockies, and Northern Plains.

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

Valid for July 15 - October 31, 2021
Released July 15



▲ Fig 9. Seasonal Drought Outlook from July 15 through September 2021. Source: NWS CPC

NIDIS AND PARTNERS ARE RESPONDING TO THE WESTERN DROUGHT

Throughout the 2020-21 drought, NIDIS has been working with federal, state, and tribal partners, plus organizations including the the Western States Water Council and the American Water Works Association, to ensure that stakeholders have the drought information they need. NIDIS' efforts include posting the latest drought information on the new drought.gov and social media, regular drought status updates, webinars, and regional coordination meetings. Additionally, NIDIS has a number of ongoing initiatives to address current drought and future droughts and related impacts. For example, the [NIDIS Drought and Wildland Fire Nexus \(NDAWN\) Strategy](#) defines the needs and challenges of fire managers to effectively utilize drought information and to establish a robust drought and wildland fire decision-support information network. All of these efforts involve bringing together the most knowledgeable national and regional drought experts and helping to disseminate their knowledge in easy to understand language. On drought.gov, NIDIS has created interactive maps, tools, and other resources that don't exist anywhere else, building on data from a vast network of partners to provide easily accessible drought information all in one place. These outreach efforts also share over a decade's worth of NIDIS-funded research and tools on preparing for, predicting, monitoring, and assessing drought.

NIDIS will continue to provide useful and accurate information for as long as the current drought persists. Furthermore, NIDIS is already thinking ahead to the next drought by developing drought impact assessments, integrating lessons learned, and filling gaps and needs. Our ongoing activities and coordination efforts aim to build resilience and provide value to stakeholders across the region who are trying to manage through these exceptional drought conditions.