



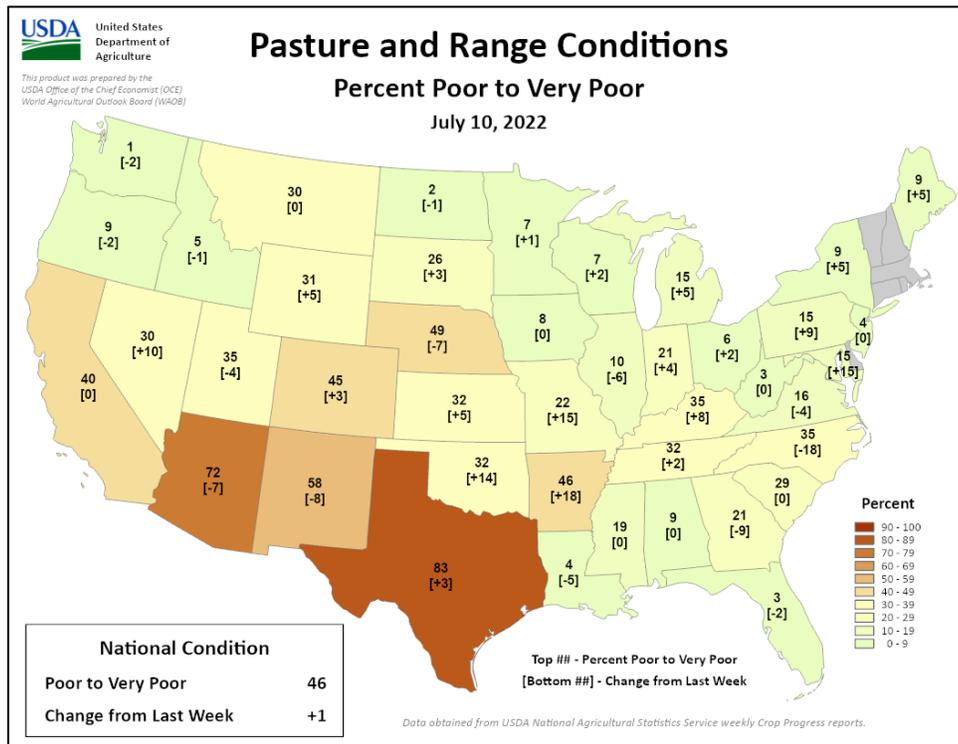
# Water and Climate Update

## July 14, 2022

The Natural Resources Conservation Service produces this weekly report using data and products from the [National Water and Climate Center](#) and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

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Temperature.....	6	More Information .....	18
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## Texas Rangeland Conditions Worsen Amid Drought and Heat



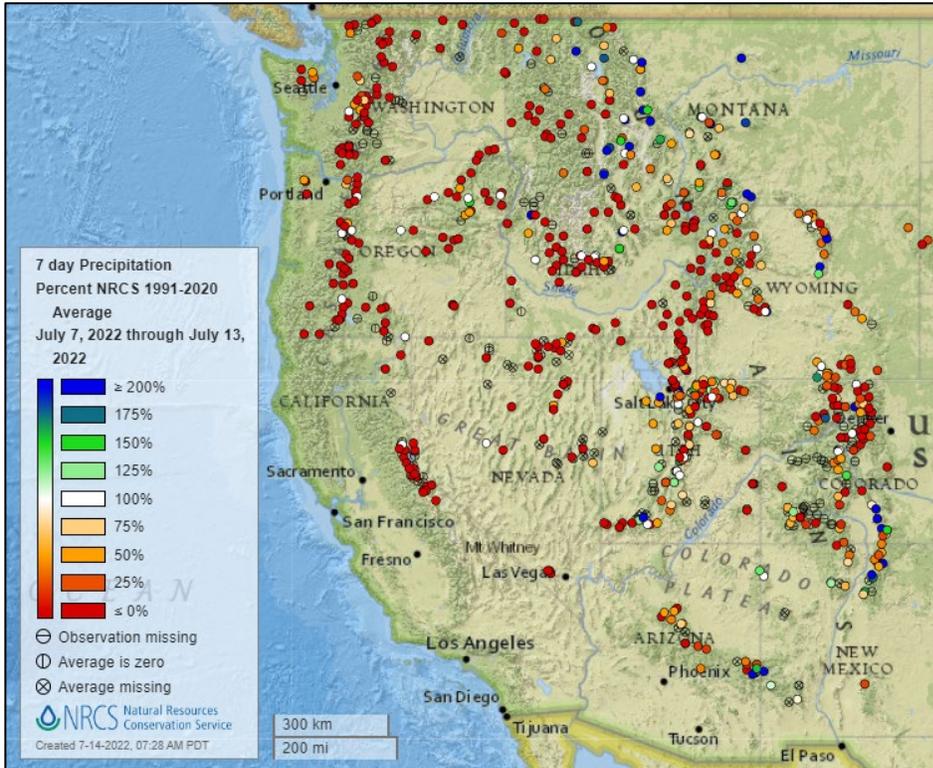
In the most recent Crop Progress report from the USDA-National Agricultural Statistics Service (NASS), 83 percent of pasture and rangeland in Texas is rated poor to very poor. Currently, over 93 percent of the state is experiencing moderate-to-exceptional drought conditions, according to the U.S. Drought Monitor. A heat dome has been impacting the southern Plains since the beginning of the week, causing record-breaking heat in cities across the region. The lack of precipitation and above-average heat in Texas is affecting farm and cattle operations alike, as water shortages are creating worsening crop conditions and stock ponds are depleting more rapidly. With the exception of 2012, overall U.S. pasture and rangeland conditions are in worse shape for this time of year than any other time in the 21<sup>st</sup> century, according to the NASS condition index.

### Related:

- [Heat wave deepens Texas drought](#) – AgriLife Today (TX)
- [Extreme heat pushes highs over 110 in Texas as power grid nears brink](#) – Washington Post
- [As grass and water supply dwindle, ranchers are selling off cattle](#) – CBS News DFW (TX)
- [Ongoing drought conditions hurting Central Texas farms](#) – KVUE (TX)
- ['Not much relief in sight': Temperatures from powerful 'heat dome' lead to record-breaking highs](#) – USA Today
- [Excessive heat warning in effect for Central Texas](#) – Austin American-Statesman (TX)

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

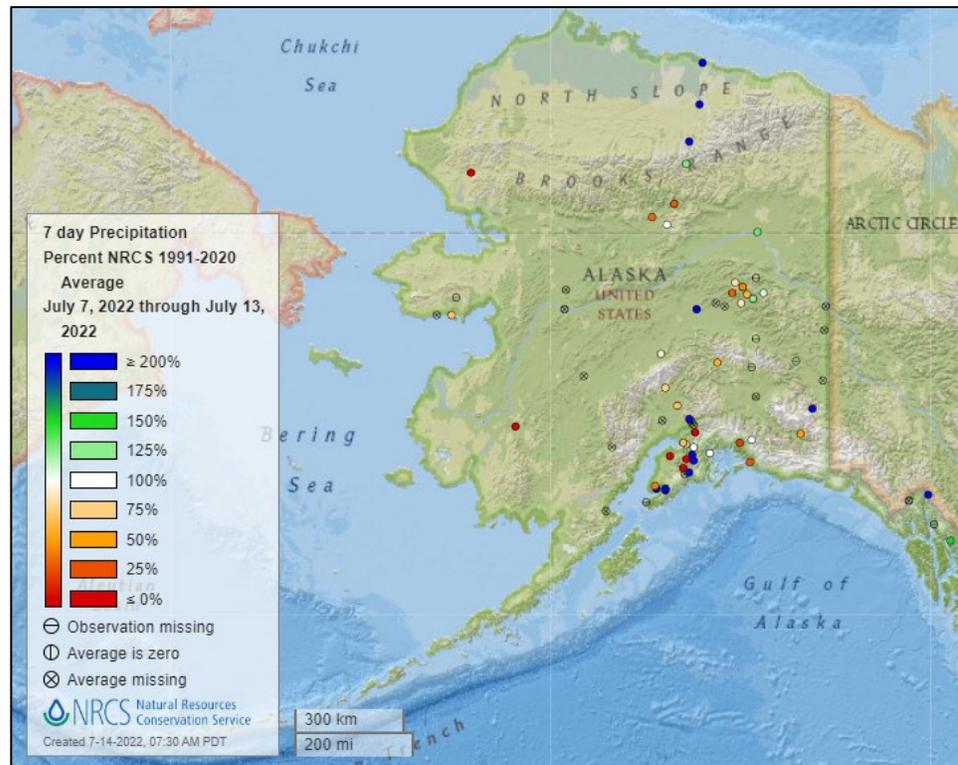


[7-day precipitation percent of average map](#)

**See also:**  
[7-day total precipitation values \(inches\) map](#)

[Alaska 7-day precipitation percent of average map](#)

**See also:**  
[Alaska 7-day total precipitation values \(inches\) map](#)



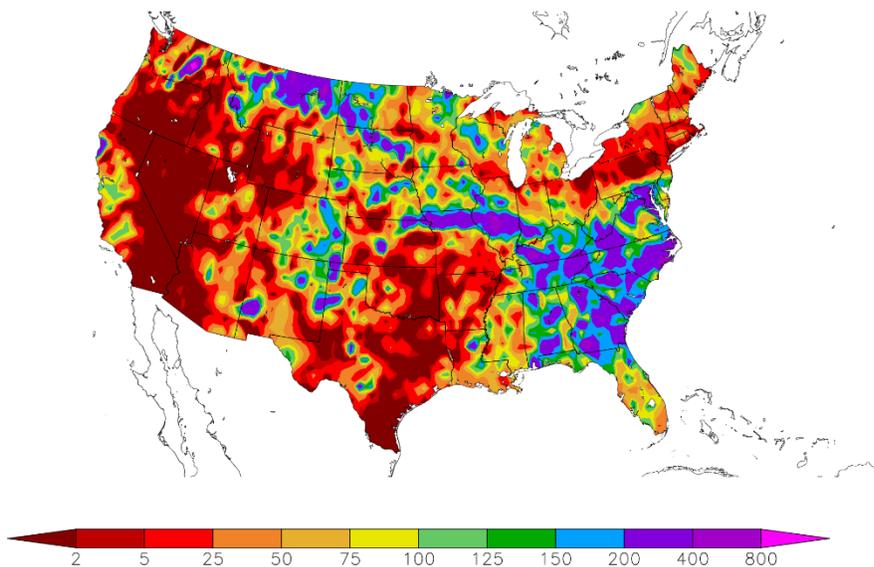
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for the continental U.S.

**See also:** [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)  
7/7/2022 – 7/13/2022



Generated 7/14/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

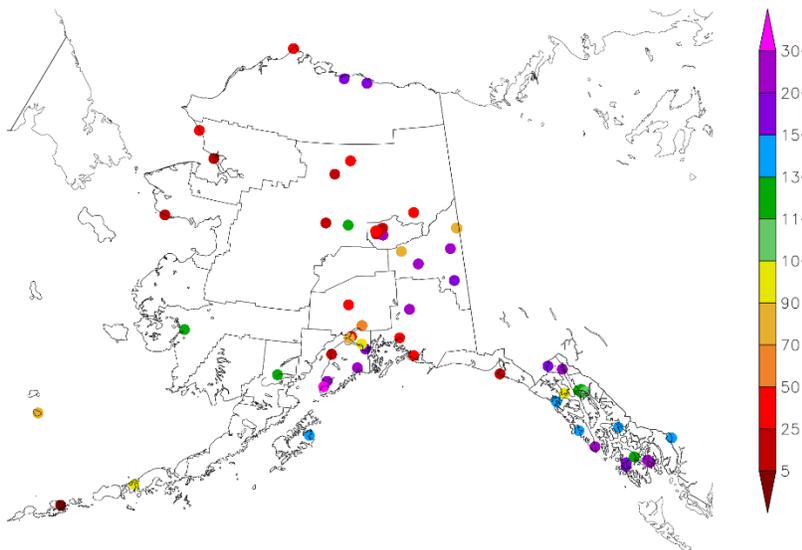
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation anomaly map](#) for Alaska.

**See also:** [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)  
7/7/2022 – 7/13/2022



Generated 7/14/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

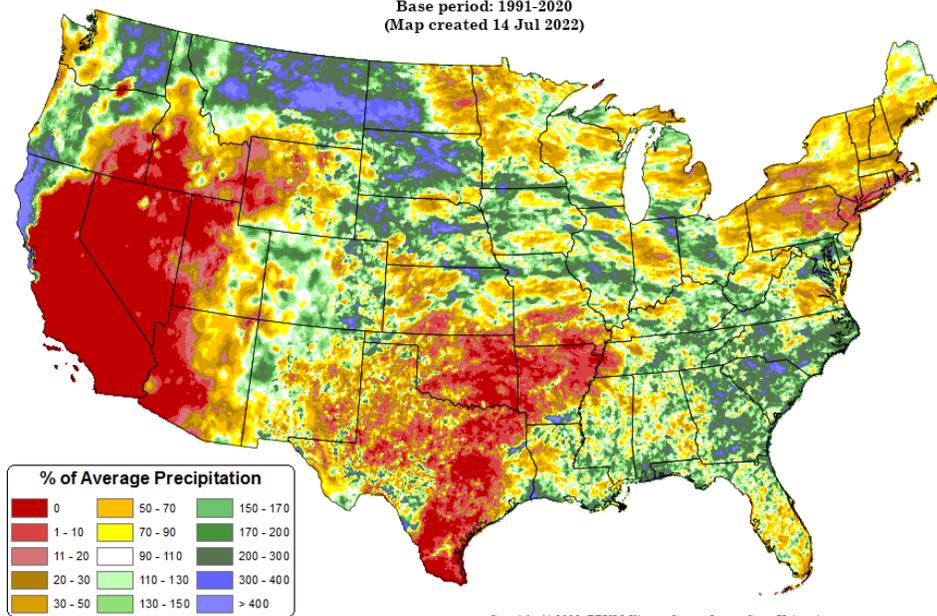
#### Total Precipitation Anomaly: 01 Jul 2022 - 13 Jul 2022

Period ending 7 AM EST 13 Jul 2022

Base period: 1991-2020

(Map created 14 Jul 2022)

[Month-to-date national total precipitation anomaly map](#)



Copyright (c) 2022, PRISM Climate Group, Oregon State University

### Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

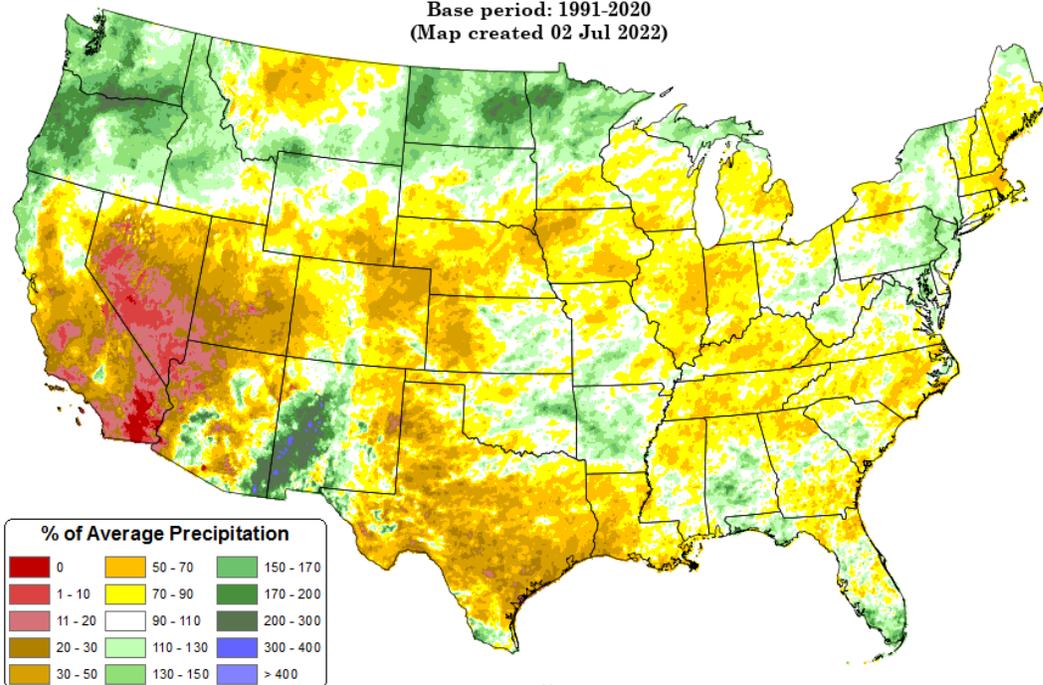
[March through May 2022 precipitation anomaly map](#)

#### Total Precipitation Anomaly: Apr 2022 - Jun 2022

Period ending 7 AM EST 30 Jun 2022

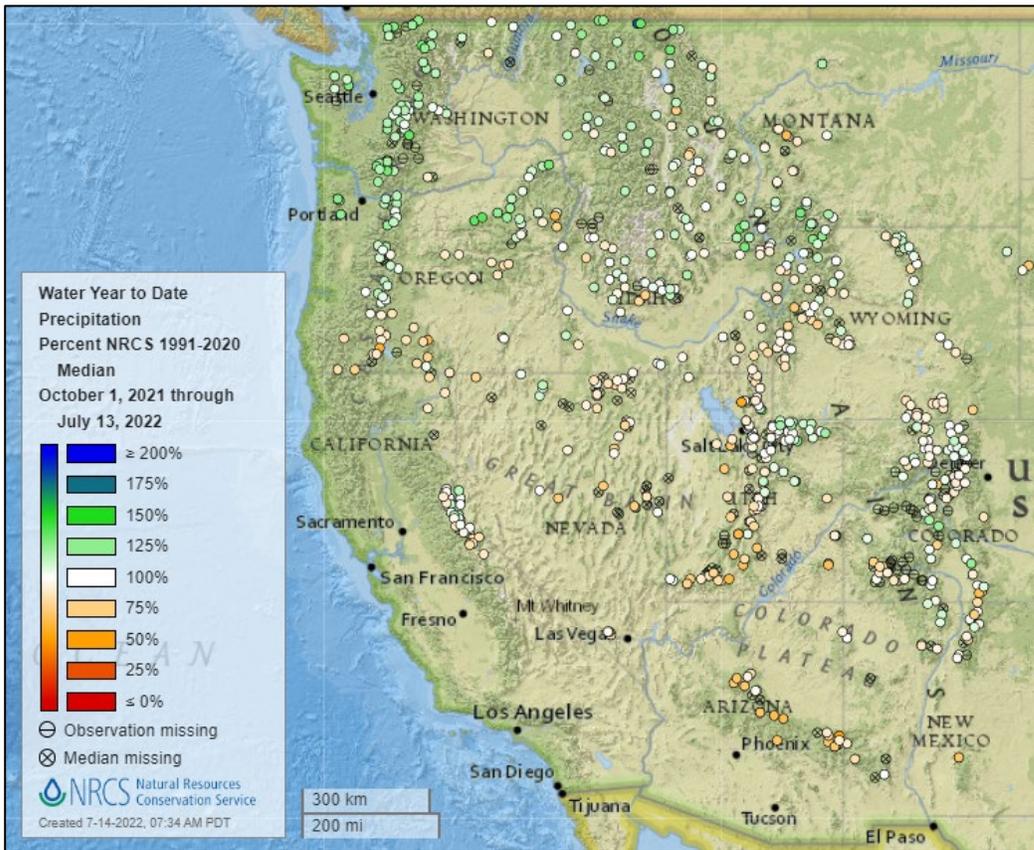
Base period: 1991-2020

(Map created 02 Jul 2022)



Copyright (c) 2022, PRISM Climate Group, Oregon State University

Water Year-to-Date, NRCS SNOTEL Network

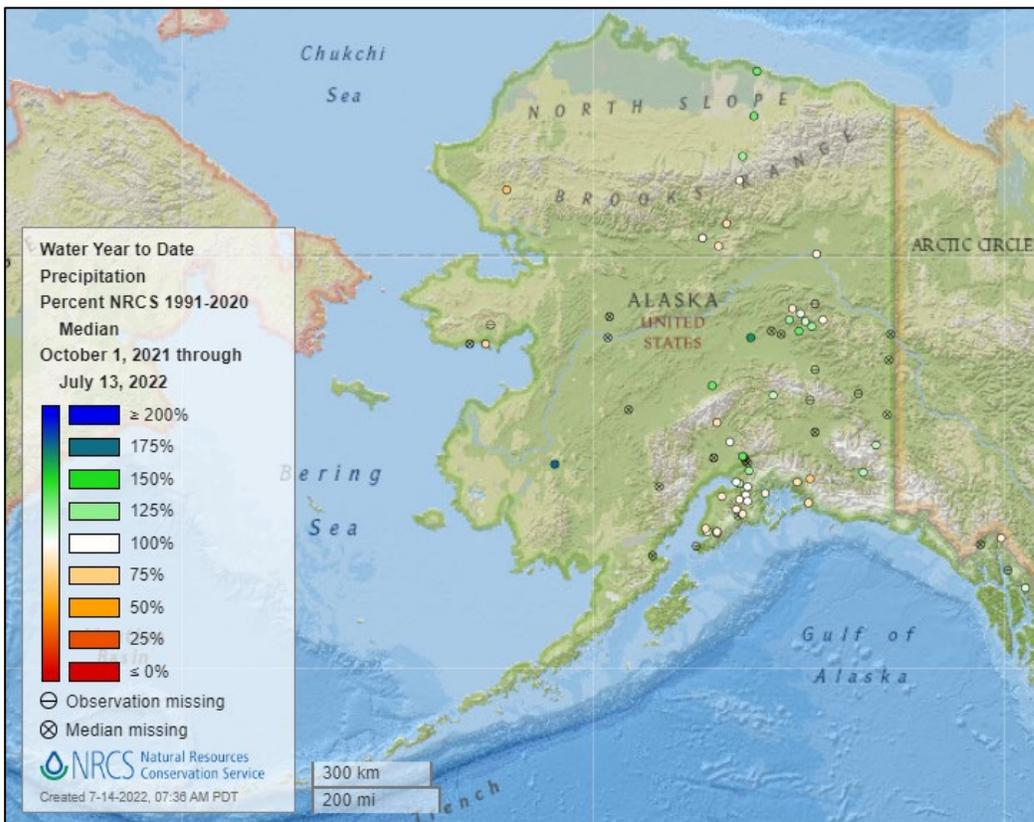


[2022 water year-to-date precipitation percent of median map](#)

**See also:**

[2022 water year-to-date precipitation percent of average map](#)

[2022 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2022 water year-to-date precipitation percent of median map](#)

**See also:**

[Alaska 2022 water year-to-date precipitation percent of average map](#)

[Alaska 2022 water year-to-date precipitation values \(inches\) map](#)

## Temperature

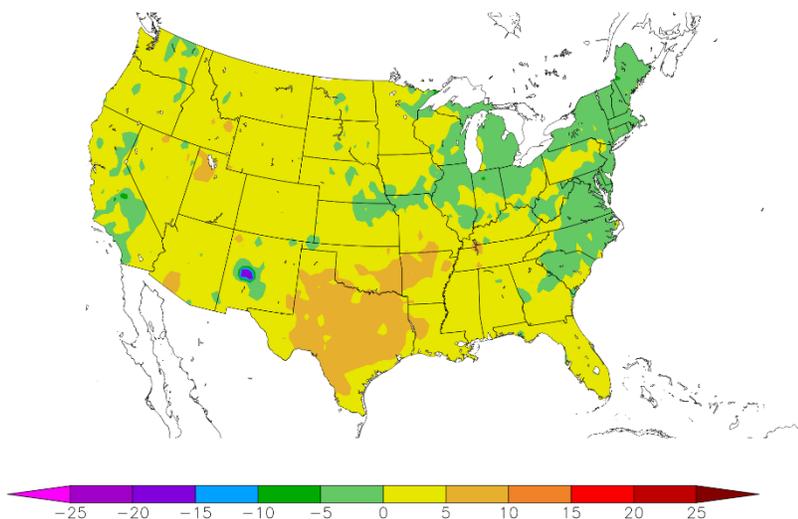
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the contiguous U.S.

**See also:** [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)  
7/7/2022 – 7/13/2022



Generated 7/14/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

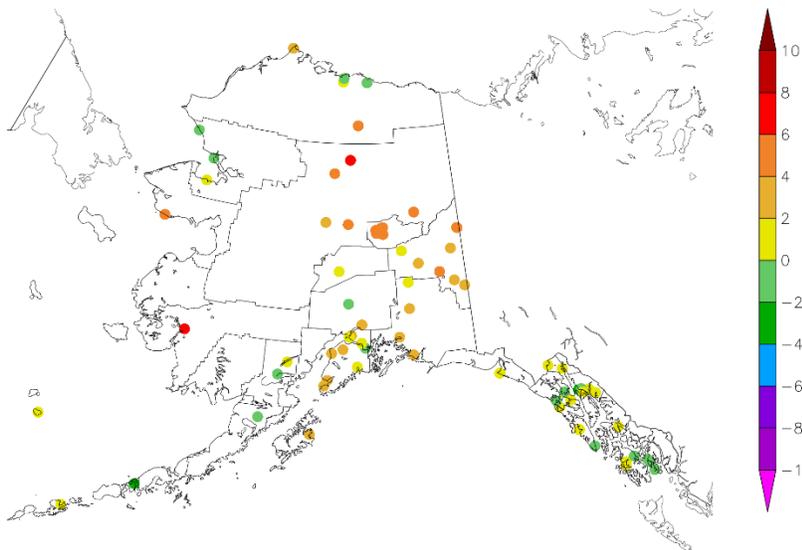
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for Alaska.

**See also:** [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)  
7/7/2022 – 7/13/2022



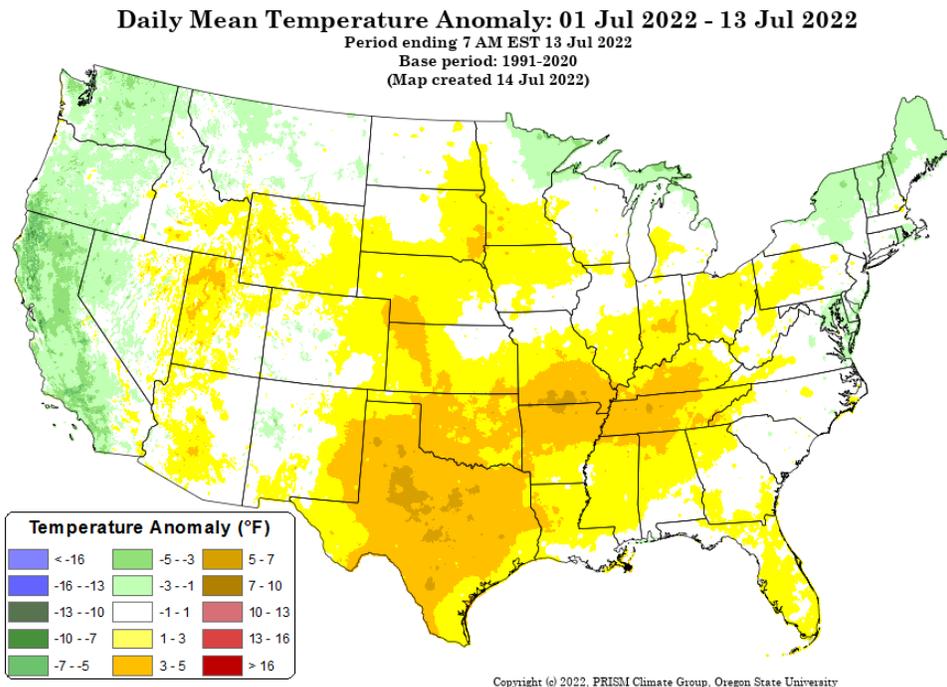
Generated 7/14/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

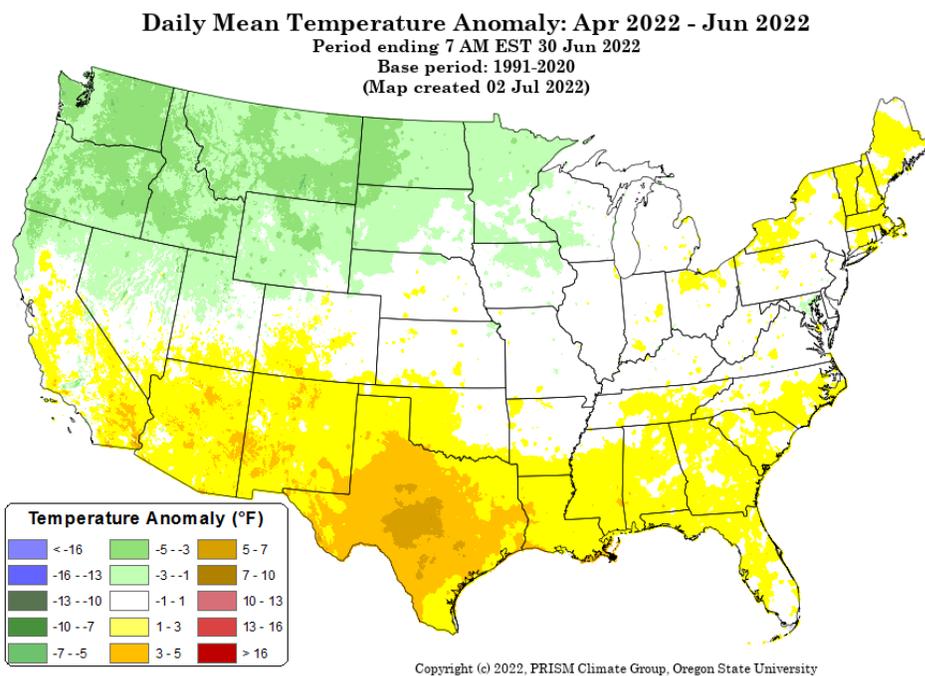
[Month-to-date national daily mean temperature anomaly map](#)



### Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[March through May 2022 daily mean temperature anomaly map](#)



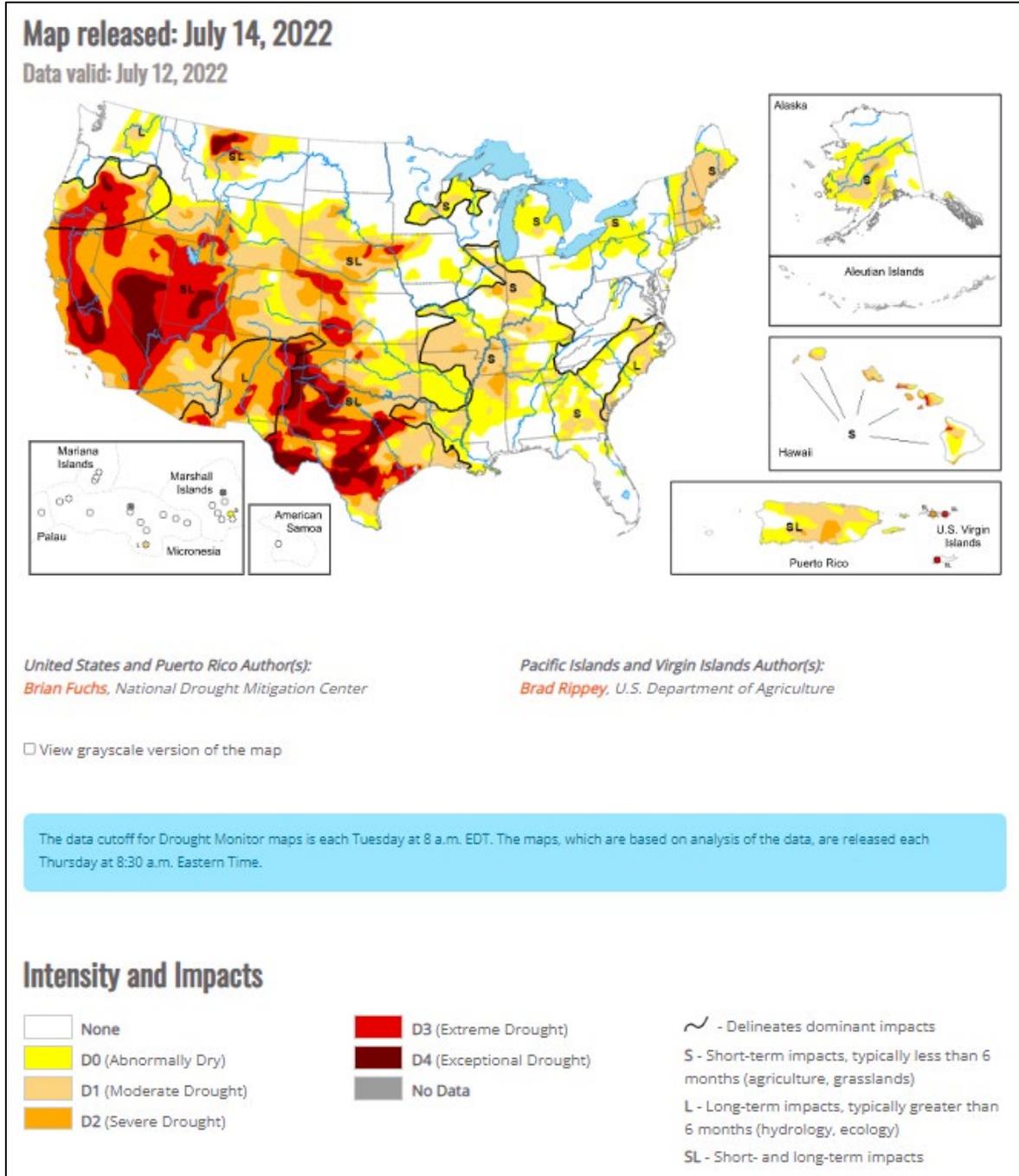
# Drought

## [U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

## [U.S. Drought Portal](#)

Source: NOAA



**Current [National Drought Summary](#), July 12, 2022**

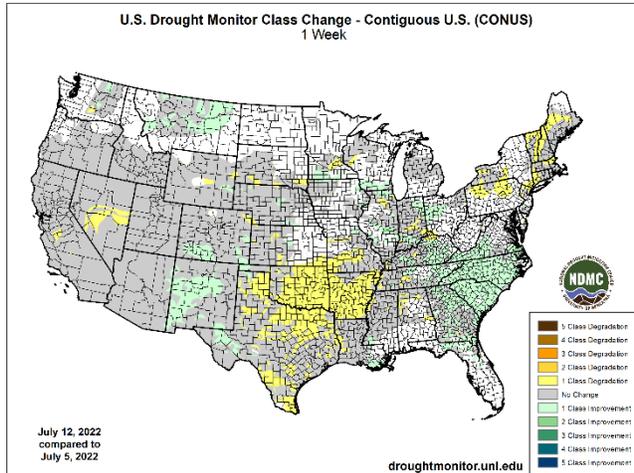
Source: National Drought Mitigation Center

“An active weather pattern over much of the Midwest and Southeast brought with it ample rain over many areas, with some places recording more than 5 inches for the week. Dry conditions were noted in the Northeast, West, and southern Plains where flash drought conditions were impacting vast portions of Texas, Oklahoma, Arkansas and into the lower Mississippi River valley. Monsoonal moisture continued to be spotty over much of Arizona and New Mexico, reaching into portions of west Texas as well as southern Colorado and Utah. Temperatures were near normal to slightly above over most of the U.S., with cooler-than-normal temperatures over portions of the West, Northeast, and Mid-Atlantic and above-normal temperatures over most of Texas, Oklahoma, Arkansas, and southern Missouri.”

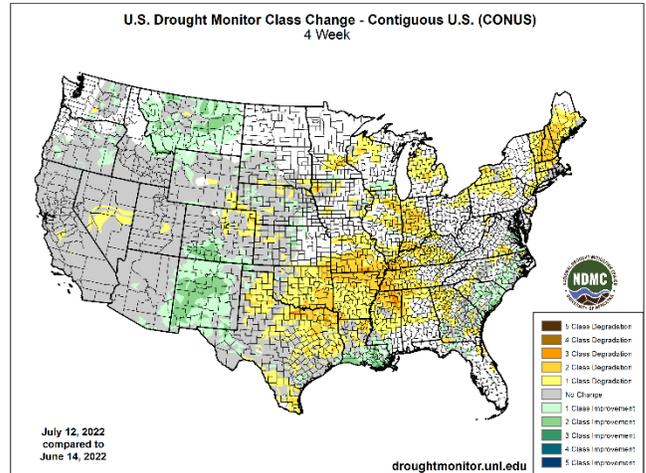
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

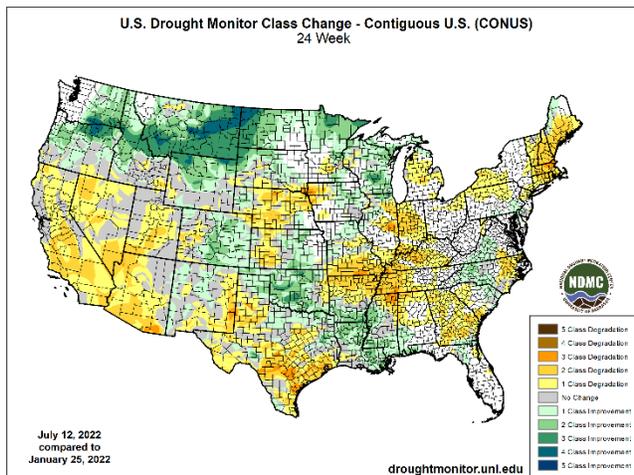
### 1 Week



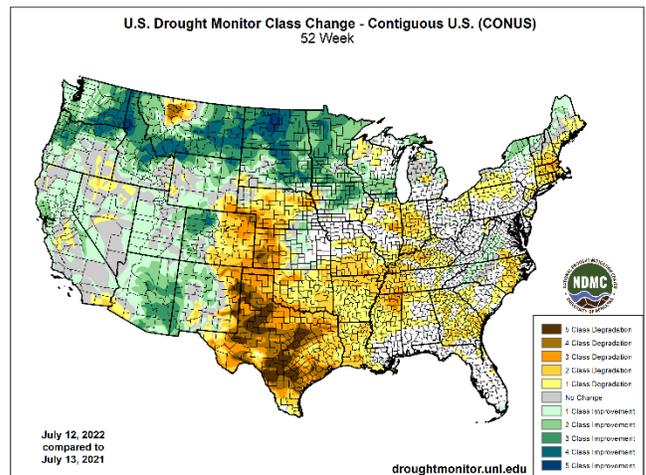
### 1 Month



### 6 Months



### 1 Year



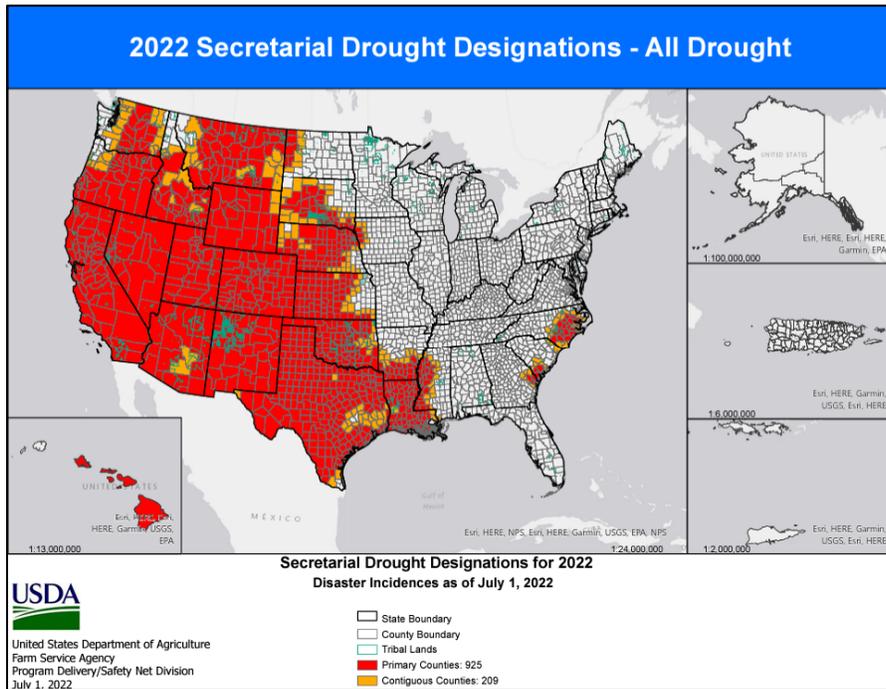
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## Highlighted Drought Resources

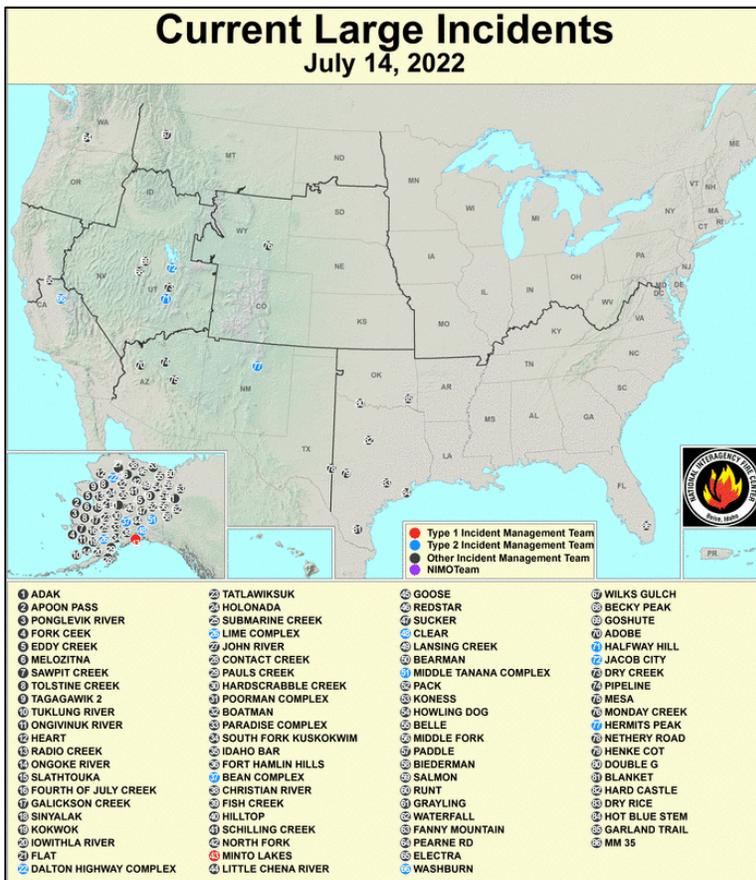
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

**USDA Secretarial Drought Designations**

Source: USDA Farm Service Agency



**Wildfires: USDA Forest Service Active Fire Mapping**



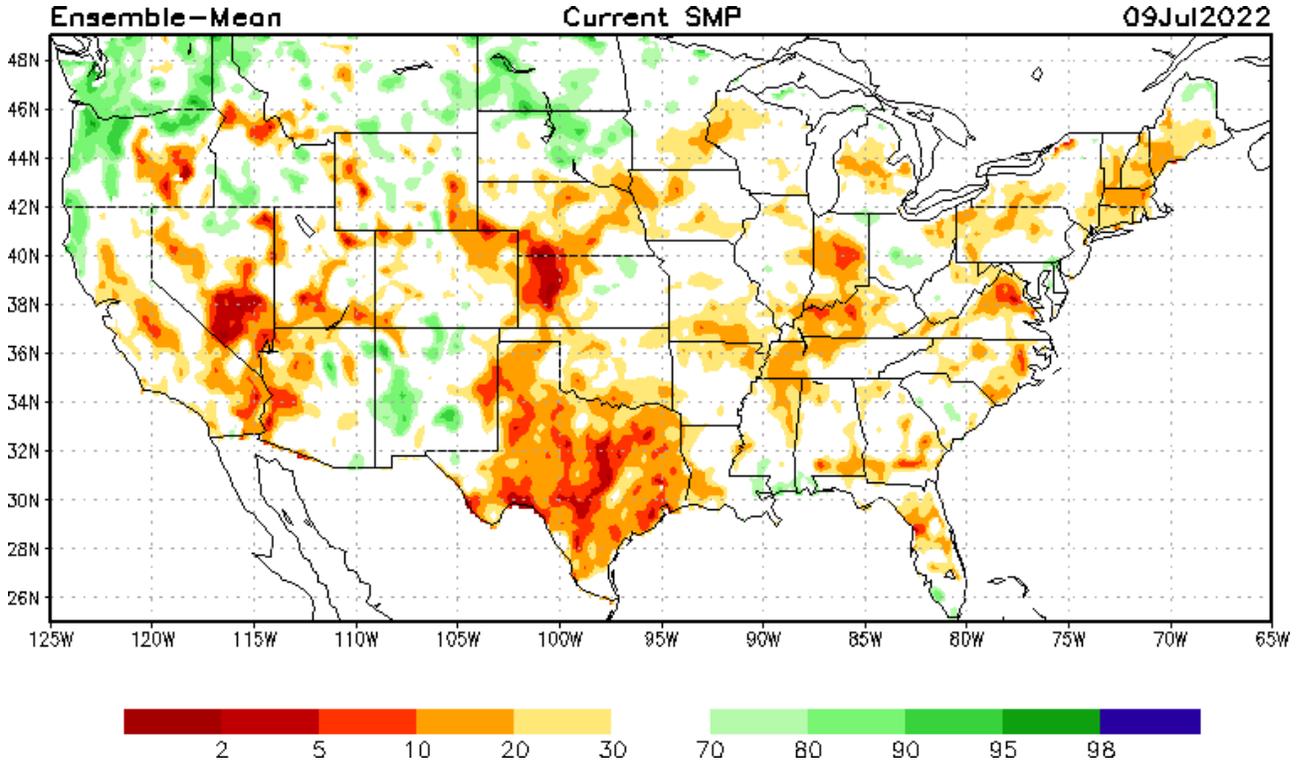
**Highlighted Wildfire Resources**

- [National Interagency Fire Center](#)
- [InciWeb Incident Information System](#)
- [Significant Wildland Fire Potential Outlook](#)

## Other Climatic and Water Supply Indicators

### Soil Moisture

Source: NOAA National Centers for Environmental Prediction

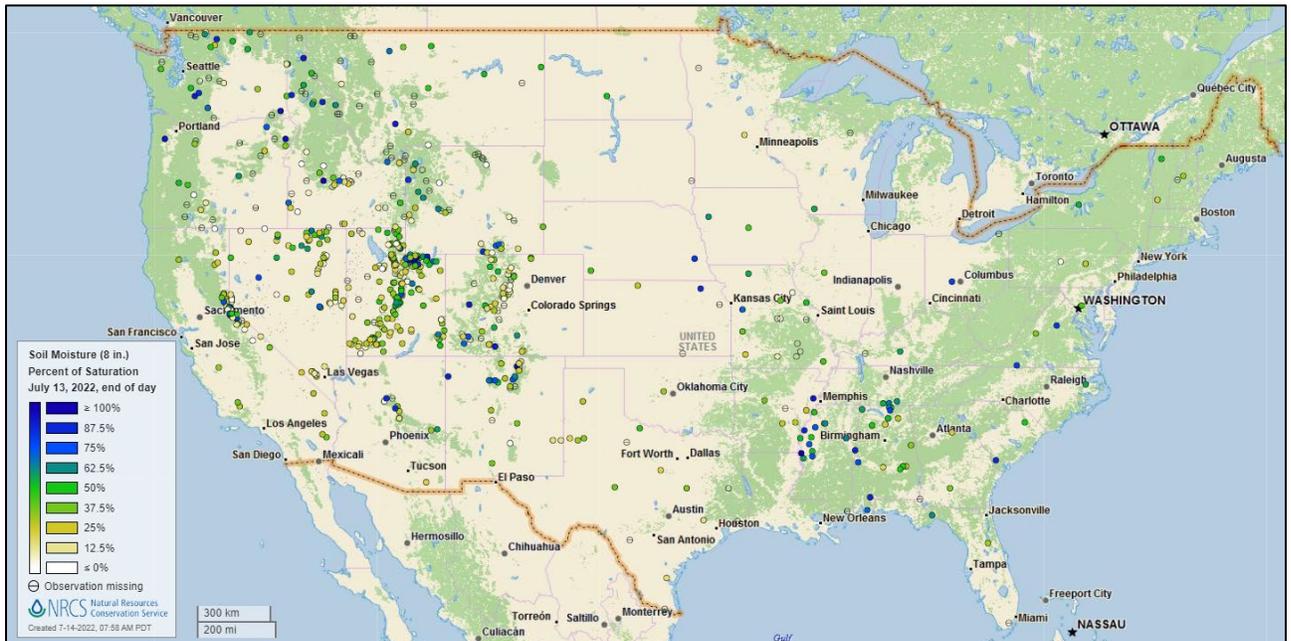


[Modeled soil moisture percentiles](#) as of July 09, 2022

### Soil Moisture Percent of Saturation

Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)

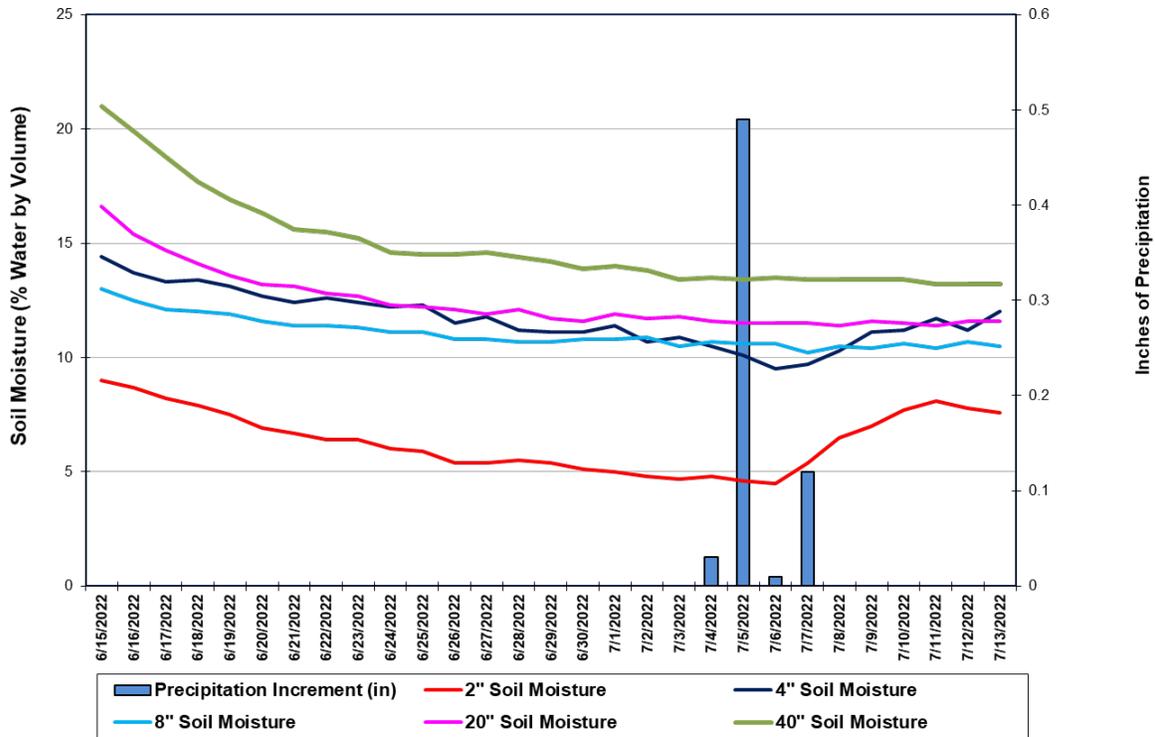
[U.S. soil moisture map at 8-inch depth:](#)



**Soil Moisture**

Source: NRCS [Soil Climate Analysis Network](#) (SCAN)

**Levelland, Texas (SCAN site 2105)  
Daily Mean Soil Moisture vs. Daily Precipitation**



This chart shows the precipitation and soil moisture for the last 30 days at the [Levelland](#) SCAN site in Texas. Soil moisture levels had been steadily decreasing over the period until precipitation falling between July 4-7 provided an increase in moisture for the -2 and -4-inch sensors. All sensor depths are currently reporting soil moisture levels below 15 percent water by volume.

**Soil Moisture Data Portals**

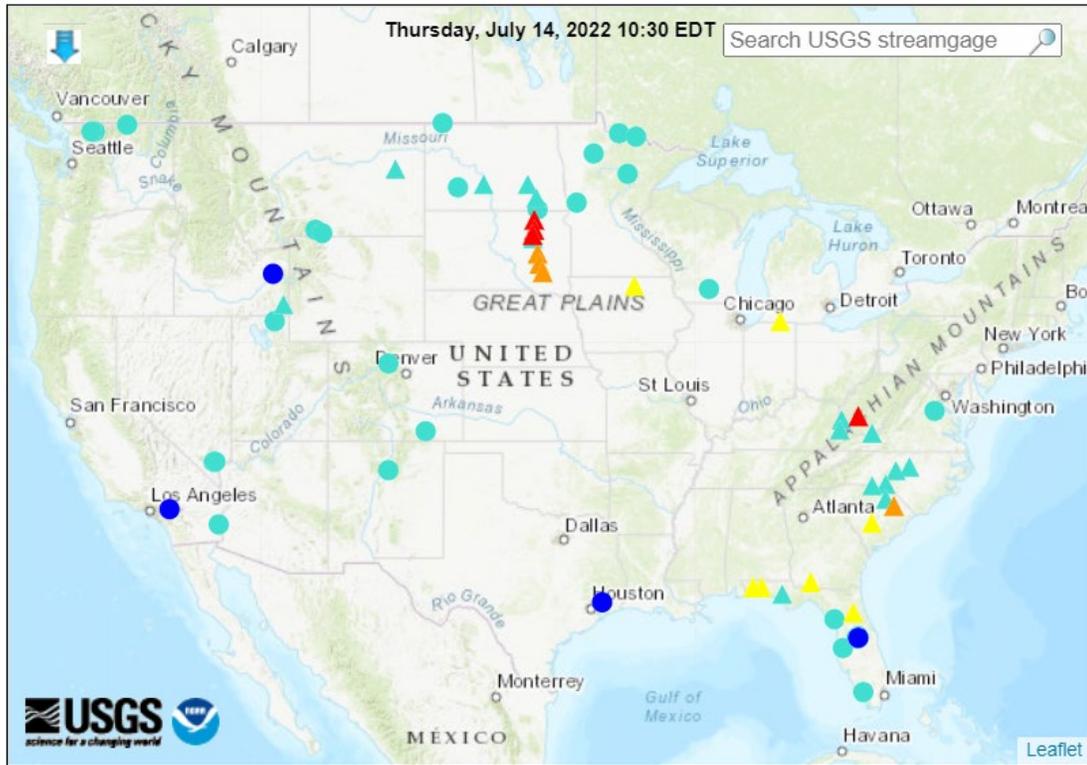
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

## Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey [WaterWatch Streamflow Map](#)

### Map of flood and high flow conditions

(8 in floods [moderate: 4, minor: 4], 9 in near-flood)



Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			▲ Streamgage with flood stage    ○ Streamgage without flood stage			

[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

## Reservoir Storage

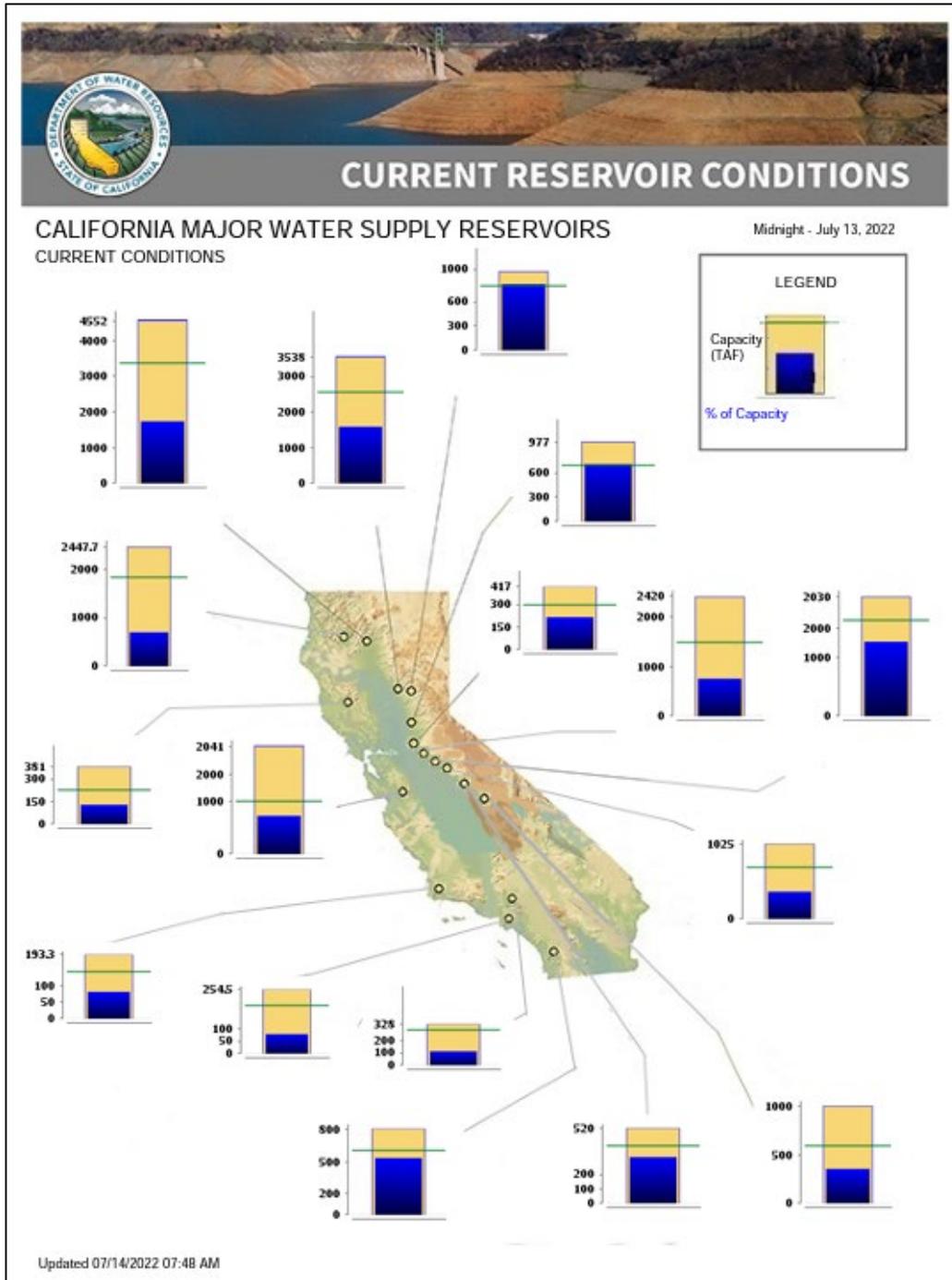
### Hydromet Teacup Reservoir Depictions

Source: U.S. Bureau of Reclamation

- [Upper Colorado](#)
- [Pacific Northwest/Snake/Columbia](#)
- [Sevier River Water, Utah](#)
- [Upper Missouri, Kansas, Oklahoma, Texas](#)

### Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

## Agricultural Weather Highlights

Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

**National Outlook, Thursday, July 14, 2022:** “Relentless heat will continue into next week throughout the south-central U.S., with occasional surges of hot weather reaching into mid-South, western Corn Belt, and northern Plains. Above-normal temperatures will also persist across most of the western U.S. During the next 5 days, only a few showers will occur from the Pacific Coast to the Plains, compounding the effects of the protracted heat wave. In contrast, occasional Midwestern showers may provide local relief from patchy drought. Elsewhere, locally heavy showers will continue from the Gulf Coast to the southern Atlantic States, with 5-day totals reaching 1 to 3 inches or more in many locations. The NWS 6- to 10-day outlook for July 19 – 23 calls for near- or above-normal temperatures nationwide. The greatest likelihood of extreme heat will cover the nation’s mid-section, including the Plains and the western Corn Belt. Meanwhile, near- or below-normal rainfall across most of the country should contrast with wetter-than-normal weather in the middle and southern Atlantic States and parts of the Southwest.”

## Weather Hazards Outlook: [July 16 – 20, 2022](#)

Source: NOAA Weather Prediction Center

### U.S. Day 3-7 Hazards Outlook

About the Hazards Outlook

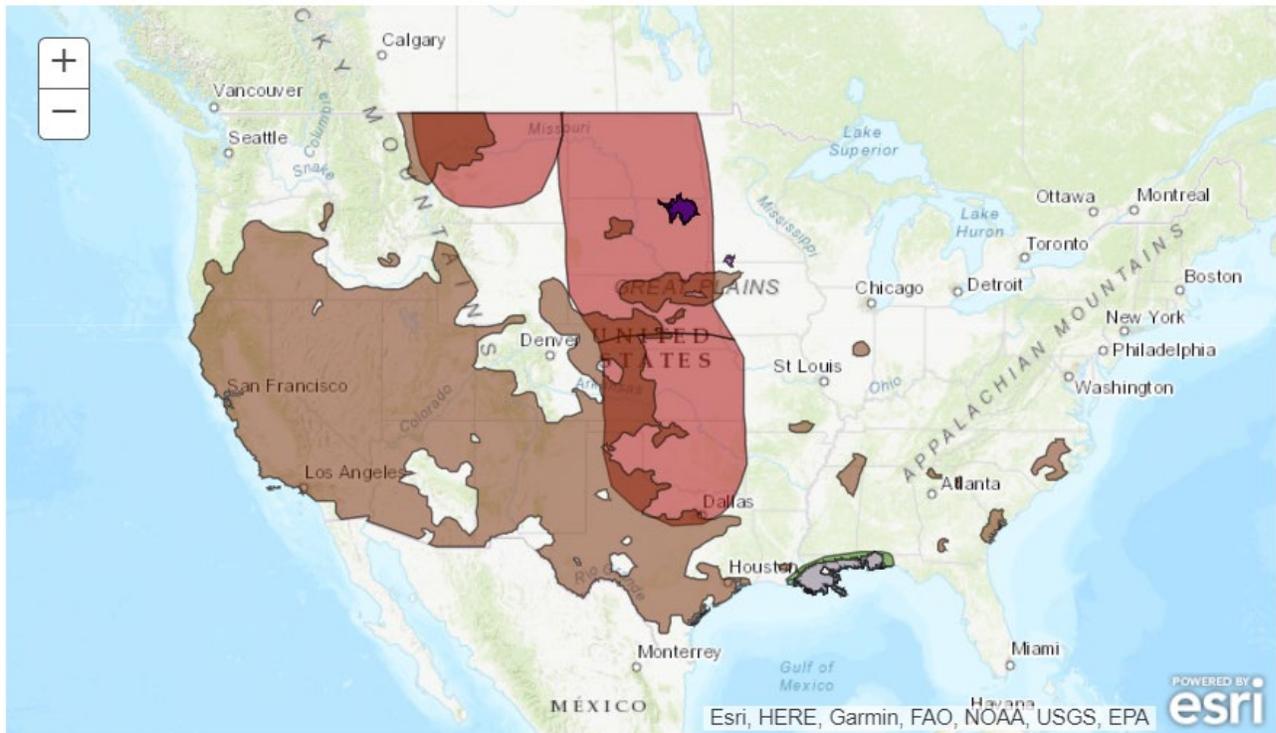
Created July 13, 2022

**NOTE:** These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	<input checked="" type="checkbox"/>
Temperature	<input checked="" type="checkbox"/>
Soils	<input checked="" type="checkbox"/>

Legend			
	Flooding Likely		Excessive Heat
	Flooding Occurring or Imminent		High Winds
	Flooding Possible		Much Above Normal Temperatures
	Freezing Rain		Much Below Normal Temperatures
	Heavy Ice		Significant Waves
	Heavy Precipitation		Enhanced Wildfire Risk
	Heavy Rain		Severe Drought
	Heavy Snow		
	Severe Weather		

Valid July 16, 2022 - July 20, 2022

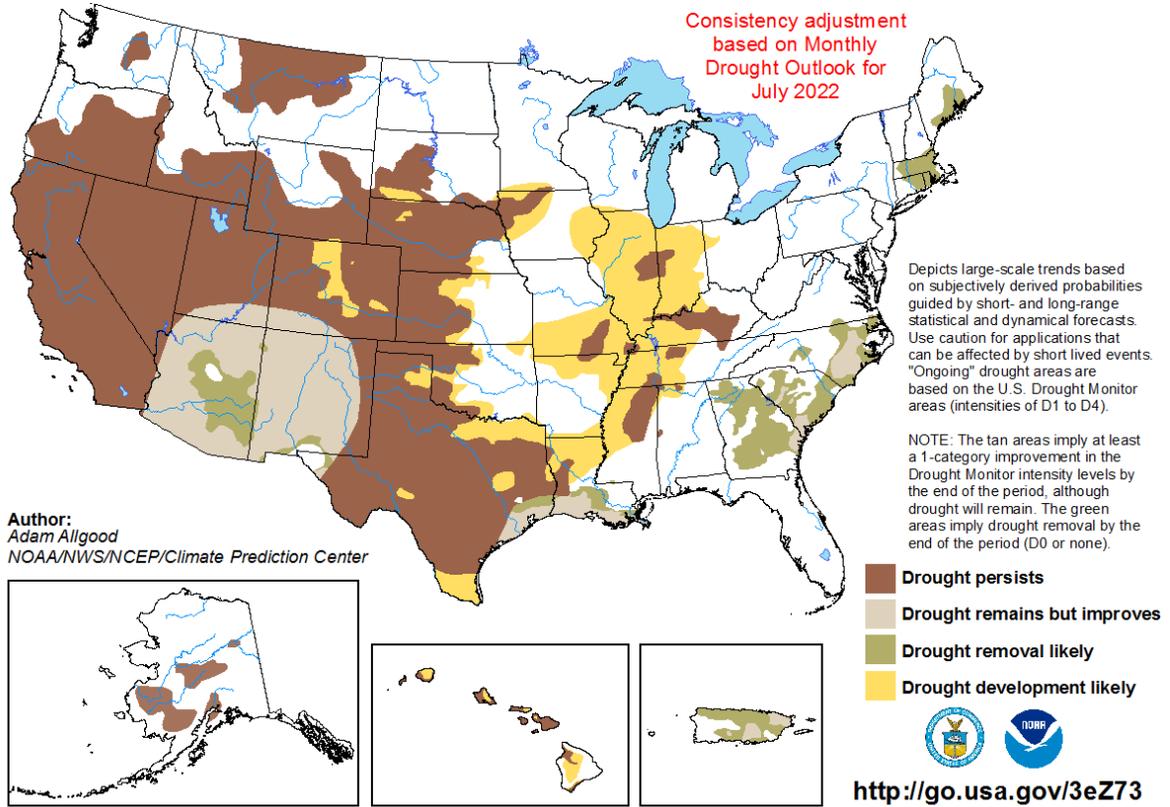


**Seasonal Drought Outlook: [July 01 – September 30, 2022](#)**

Source: National Weather Service

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

Valid for July 1 - September 30, 2022  
Released June 30, 2022

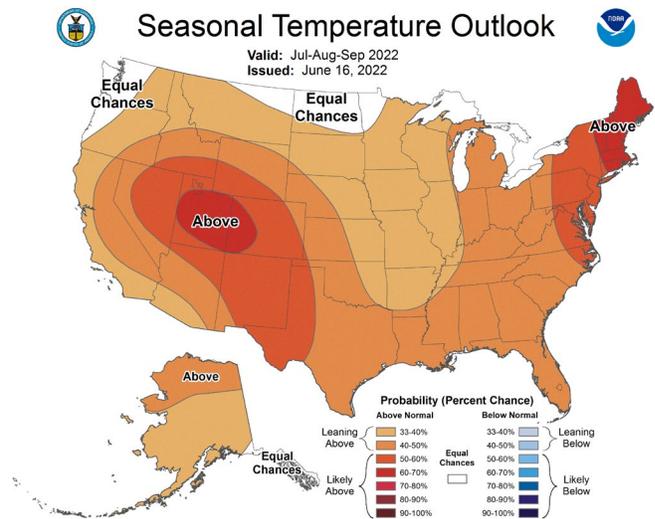
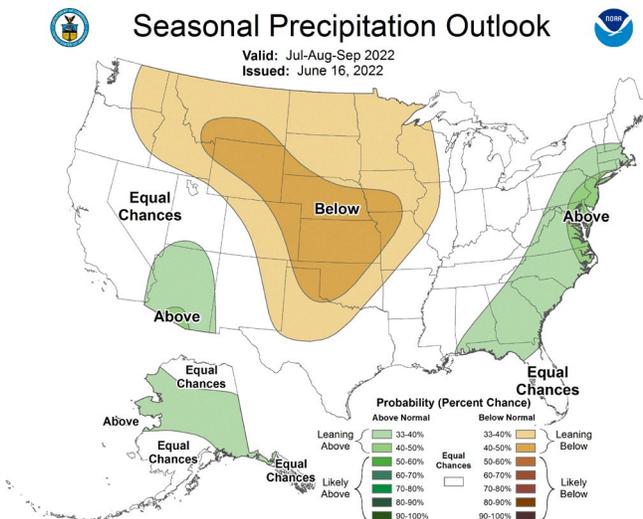


**Climate Prediction Center 3-Month Outlook**

Source: National Weather Service

Precipitation

Temperature



[July-August-September 2022 precipitation and temperature outlook summaries](#)

## More Information

The NRCS [National Water and Climate Center](#) publishes this weekly report. We welcome your feedback. If you have questions or comments, please [contact us](#).