

**United States Department of Agriculture** 

# Water and Climate Update

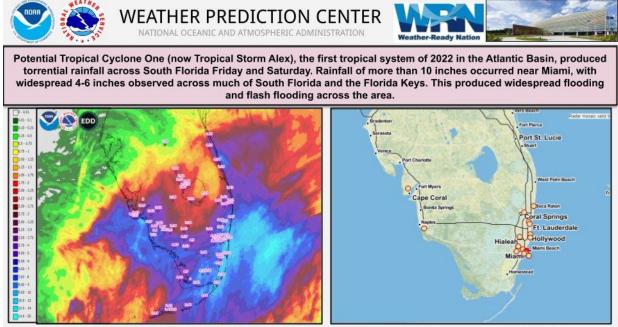
June 09, 2022

The Natural Resources Conservation Service produces this weekly report using data and products from the <u>National</u> <u>Water and Climate Center</u> and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

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# **Tropical Cyclone 1 delivered heavy rain to Florida**



48-hour rainfall ending 12am Sunday (EDT)

Flooding/Flash flooding reports Friday & Saturday

The first tropical storm of the season arrived in south Florida on June 3, bringing heavy rain, strong winds and flooding. The June 3-4 record setting rainfall totals were reported as high as 14.85 inches at Hollywood Florida and Miami received 11.05 inches. The storm reformed in the Atlantic and was named Alex with sustained winds of 50mph. NOAA is forecasting an above normal hurricane season this year.

#### **Related:**

 Half of Florida under Tropical Storm Warning as system expected to become Tropical Storm Alex –

 Orlando Sentinel (FL)

 Wednesday's flood watch a result of record-setting weekend rains – Sun Sentinel

 Potential Tropical Storm Alex to bring flooding rains to Florida – Washington Post

 Tropical Storm Alex forms in the Atlantic after the system drenched South Florida with flooding rain

 – CNN

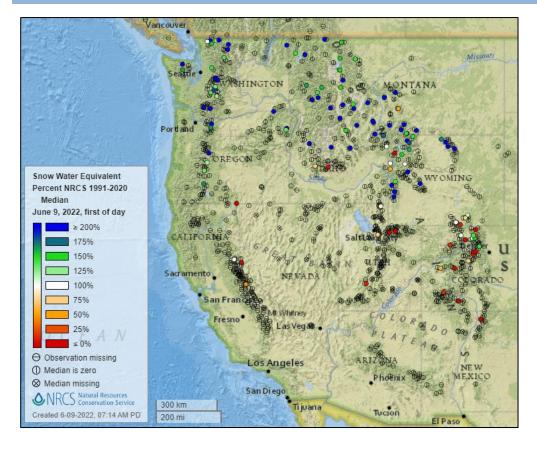
 Tropical Storm Alex Takes Aim at Bermuda After Flooding Florida – NY Times

 "Dangerous and life-threatening" flooding in Miami as tropical system drenches south Florida – CBS

 News

#### Water and Climate Update

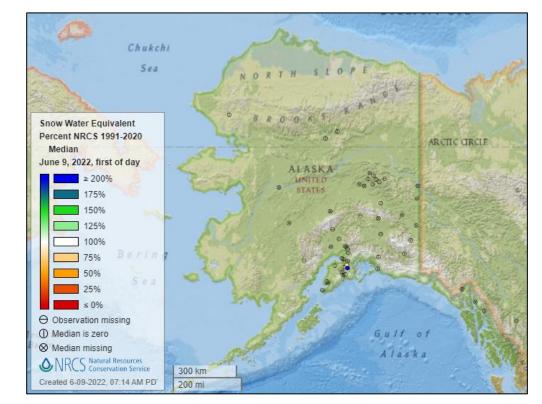
## Snow



Snow water equivalent percent of median map

See also:

<u>Snow water</u> equivalent values (inches) map

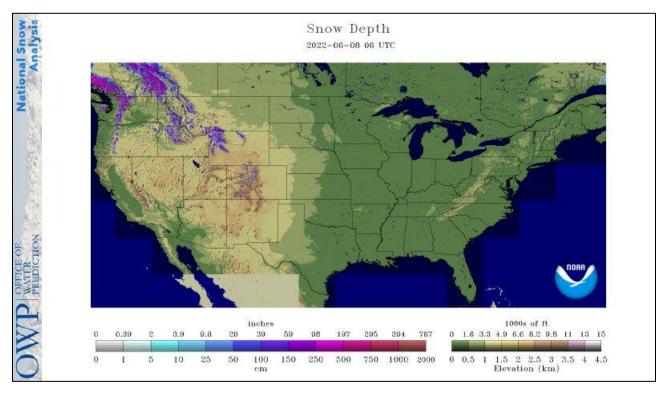


Alaska snow water equivalent percent of median map

See also: <u>Alaska snow</u> <u>water equivalent</u> <u>values (inches)</u> <u>map</u>

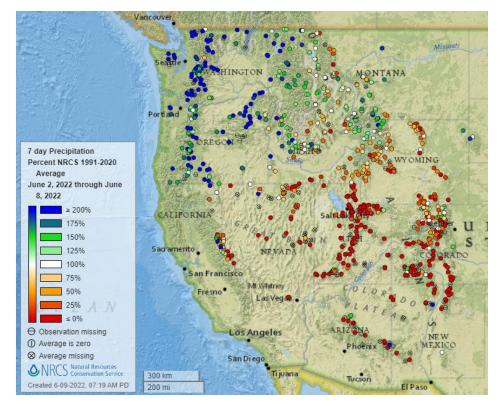
#### Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



# Precipitation

## Last 7 Days, NRCS SNOTEL Network



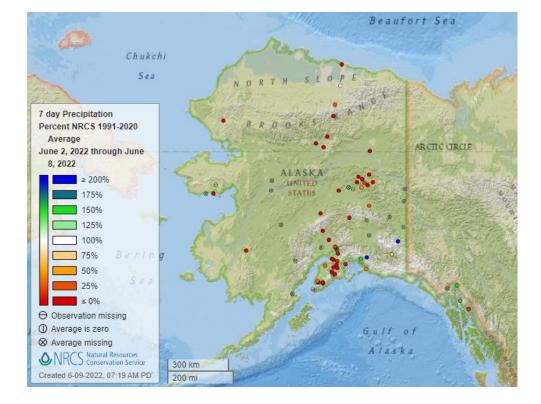
7-day precipitation percent of average map

#### 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

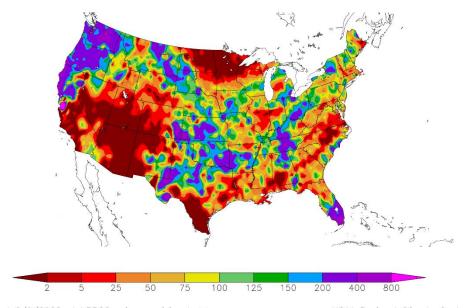


#### Last 7 Days, National Weather Service (NWS) Networks

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 (%) 6/2/2022 - 6/8/2022



Generated 6/9/2022 at HPRCC using provisional data.

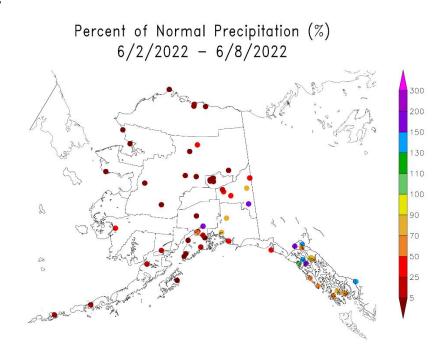
NOAA Regional Climate Centers

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

Source: Regional Climate Centers

<u>7-day precipitation</u> <u>anomaly map</u> for Alaska.

See also: 7-day total precipitation values (inches) map

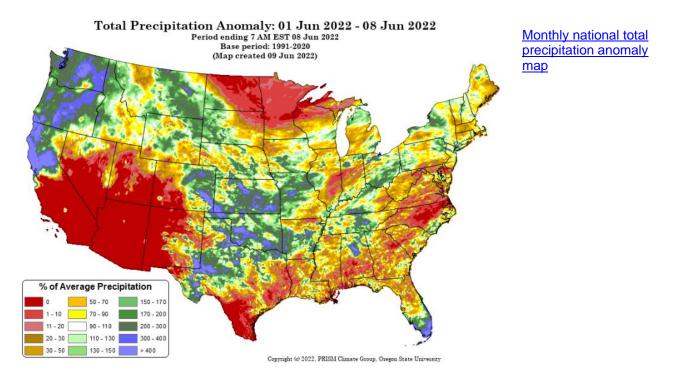




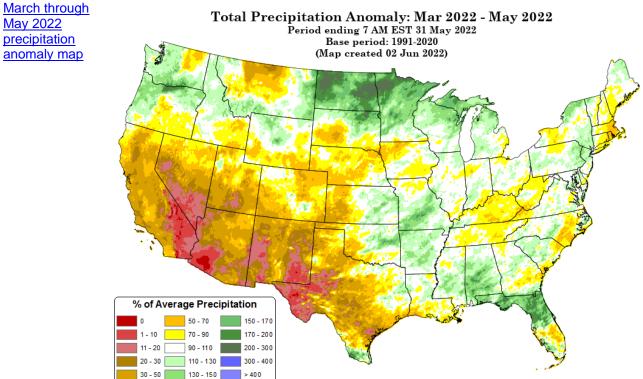
NOAA Regional Climate Centers

## Monthly, All Available Data Including SNOTEL and NWS Networks

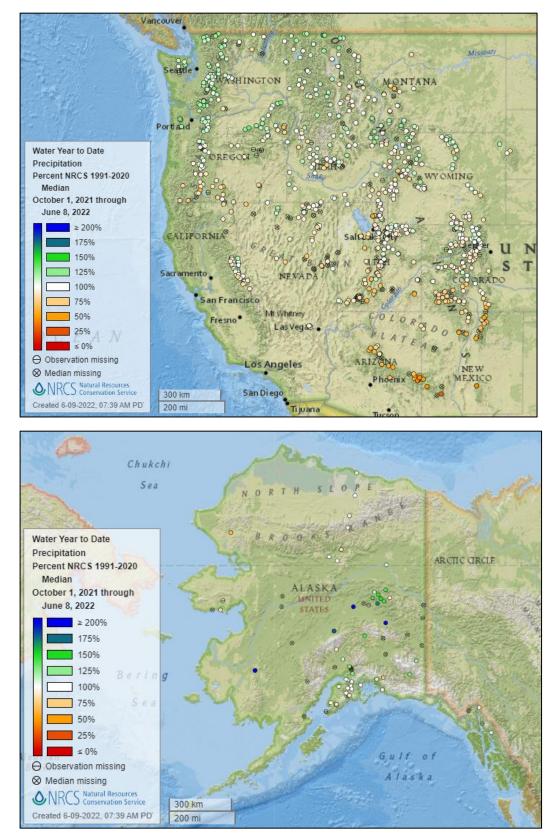
Source: PRISM



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



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



#### Water Year-to-Date, NRCS SNOTEL Network



#### See also:

2022 water year-to-date precipitation percent of average map

2022 water year-todate precipitation values (inches) map

Alaska 2022 water yearto-date precipitation percent of median map

See also:

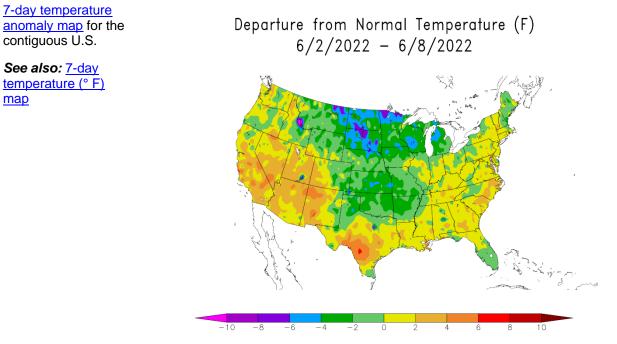
Alaska 2022 water year-todate precipitation percent of average map

Alaska 2022 water year-todate precipitation values (inches) map

## Temperature

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

Source: Regional Climate Centers



Generated 6/9/2022 at HPRCC using provisional data.

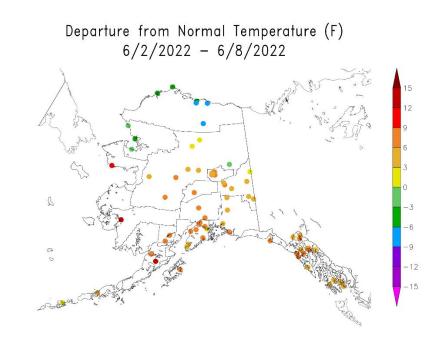
NOAA Regional Climate Centers

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

Source: Regional Climate Centers

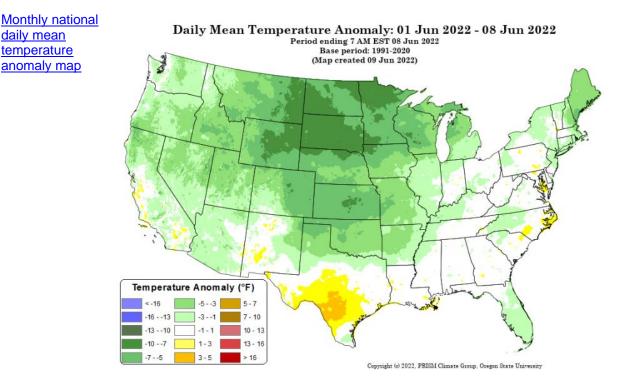
<u>7-day temperature</u> anomaly map for Alaska.

See also: 7-day temperature (° F) map



Generated 6/9/2022 at HPRCC using provisional data.

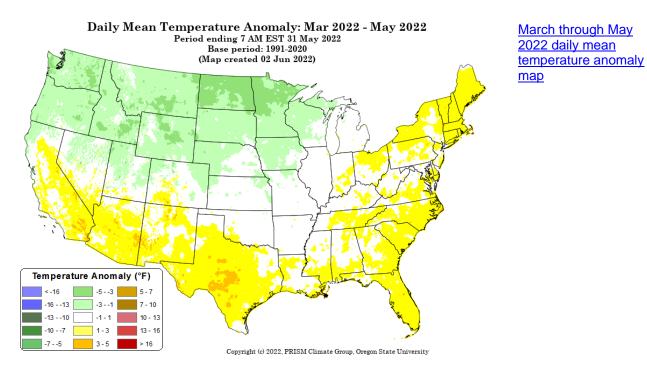
NOAA Regional Climate Centers



# Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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



# Drought

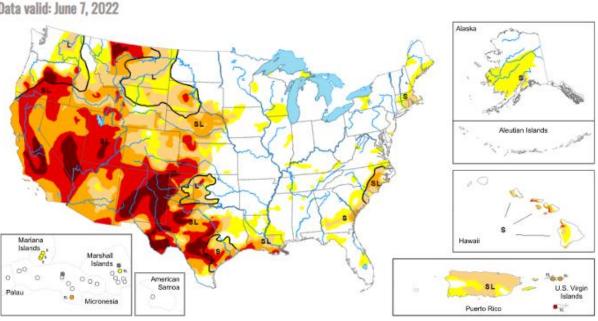
#### **U.S. Drought Monitor**

Source: National Drought Mitigation Center

# Map released: June 9, 2022

Data valid: June 7, 2022

**U.S. Drought Portal** Source: NOAA



United States and Puerto Rico Author(s): Brad Pugh, NOAA/CPC

Pacific Islands and Virgin Islands Author(s): Richard Tinker, NOAA/NWS/NCEP/CPC

□ View grayscale version of the map

The data cutoff for Drought Monitor maps is each Tuesday at 8 a.m. EDT. The maps, which are based on analysis of the data, are released each Thursday at 8:30 a.m. Eastern Time.

# **Intensity and Impacts**



D3 (Extreme Drought) D4 (Exceptional Drought) No Data

 $\sim$  - Delineates dominant impacts S - Short-term impacts, typically less than 6 months (agriculture, grasslands) L - Long-term impacts, typically greater than

6 months (hydrology, ecology)

SL - Short- and long-term impacts

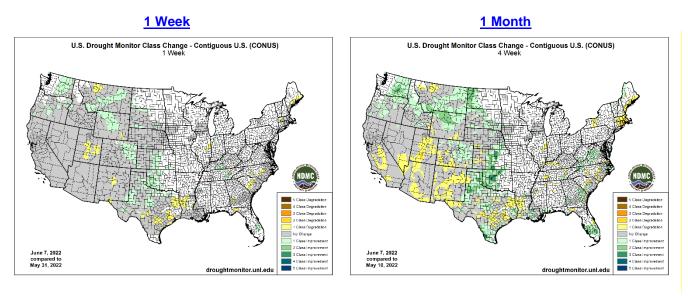
#### Current National Drought Summary, June 7, 2022

Source: National Drought Mitigation Center

"A slow-moving cold front resulted in thunderstorms with heavy rainfall (locally more than 3 inches) across the central to southern Great Plains, lower Mississippi Valley, and the Ozarks Region from May 31 to June 2. As this front progressed eastward, locally heavy rain also fell across the Ohio Valley and Northeast. Midlevel low pressure, which has persisted over the northeastern Pacific through much of the spring, continued to enhance onshore flow and precipitation from the Pacific Northwest eastward to the northern Rockies. 7day precipitation amounts from May 31 to June 6 exceeded 0.5 inches (locally 2 inches or more) over a broad spatial area of Oregon, Washington, Idaho, Montana, and northern Wyoming. After Hurricane Agatha made landfall on the southern coast of Mexico, its remnant low pressure system tracked northeast to the Yucatan Peninsula and reemerged over the southern Gulf of Mexico. This low-pressure system, which became Tropical Storm Alex, brought more than 5 inches of rainfall to southern Florida and triggered flooding in Miami. Seasonal dryness prevailed across southern California and the Desert Southwest. 7-day temperatures, from May 31 to June 6, averaged above-normal across much of the eastern and southern tier of the U.S., while cooler-than-normal temperatures prevailed throughout the northern to central Great Plains and upper Mississippi Valley. Mostly dry weather was accompanied by above-normal temperatures across Alaska during late May into the beginning of June. Trade wind showers brought beneficial wetness to the Big Island of Hawaii. Short-term precipitation deficits continue to increase across Puerto Rico, following another drier-than-normal week."

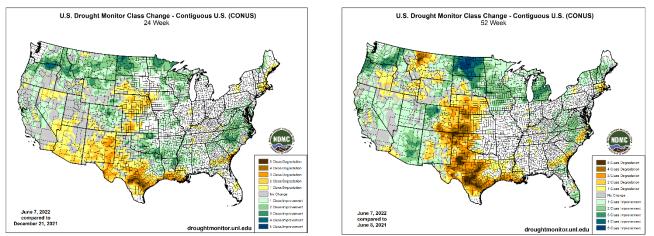
### **Changes in Drought Monitor Categories over Time**

Source: National Drought Mitigation Center



6 Months

1 Year



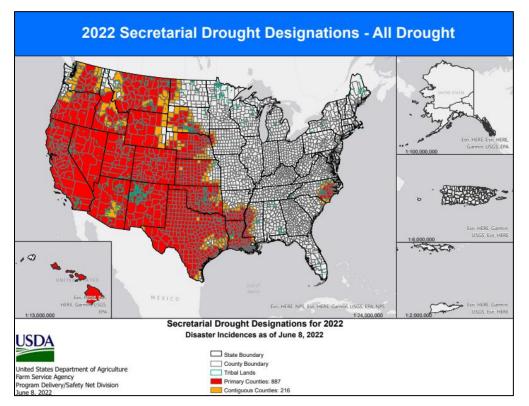
Changes in drought conditions over the last 12 months for the contiguous U.S.

#### **Highlighted Drought Resources**

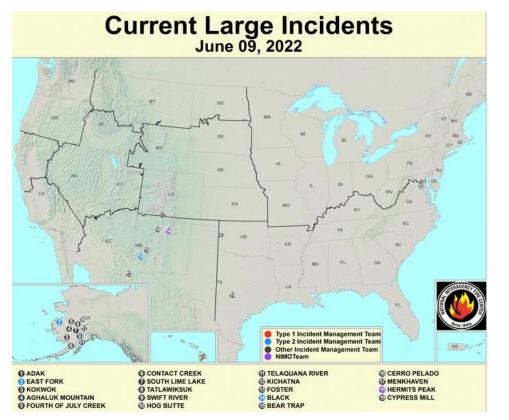
- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

#### USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



## Wildfires: USDA Forest Service Active Fire Mapping



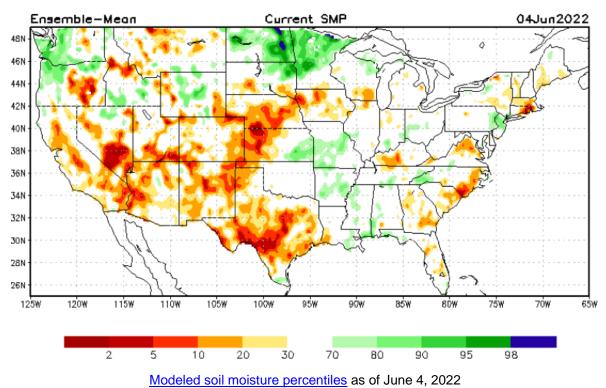
#### Highlighted Wildfire Resources

- <u>National</u>
   <u>Interagency</u>
   <u>Fire Center</u>
- InciWeb
   Incident
   Information
   System
- Significant Wildland <u>Fire</u> <u>Potential</u> <u>Outlook</u>

## **Other Climatic and Water Supply Indicators**

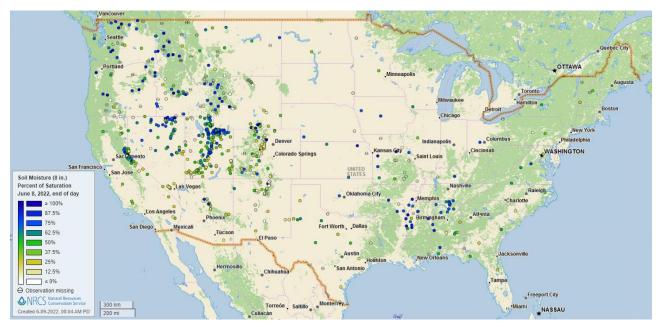
#### Soil Moisture

Source: NOAA National Centers for Environmental Prediction



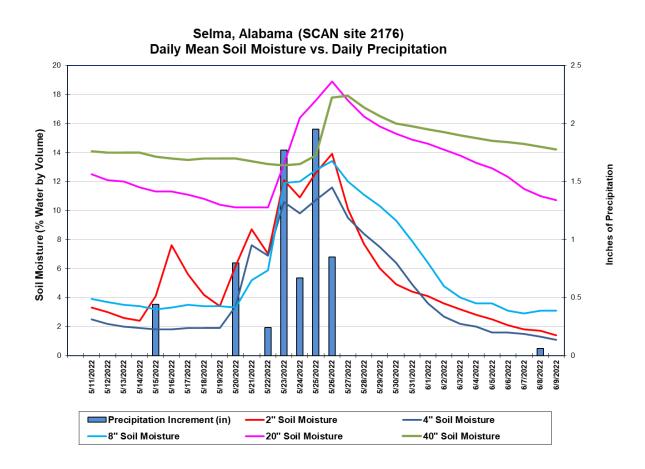
#### **Soil Moisture Percent of Saturation**

Source: NRCS SNOTEL and <u>Soil Climate Analysis Network</u> (SCAN) U.S. soil moisture map at 8-inch depth:



#### Soil Moisture

Source: NRCS Soil Climate Analysis Network (SCAN)



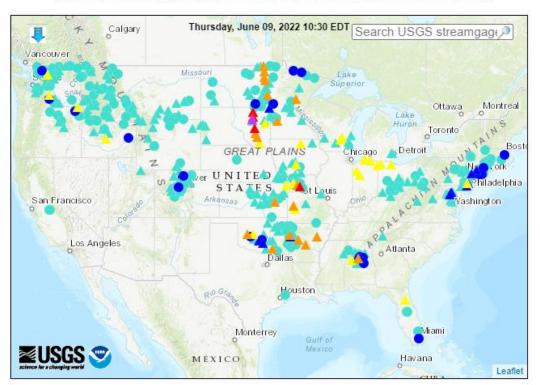
This chart shows the precipitation and soil moisture for the last 30 days at the <u>Selma</u> SCAN site in Alabama. The precipitation received during May 20-26 of 6.28 inches caused an increase of soil moisture at all sensor depths. The total precipitation for the period was 6.78 inches.

#### **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

(24 in floods [major: 1, moderate: 4, minor: 19], 30 in near-flood)

		Expla	anation - Per	rcentile	classes	
<95	95-98	>= 99	Above action stage flo	Above ood stage	Above moderate flood stage	Above major flood stage
	$\Delta$ s	treamgage w	ith flood stage O	Streamgage	e without flood stage	

WaterWatch: Streamflow, drought, flood, and runoff conditions

## **Reservoir Storage**

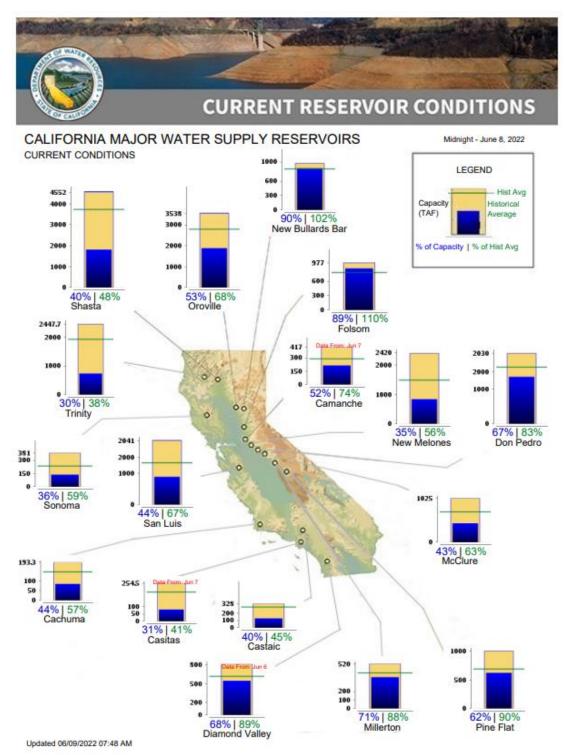
#### Hydromet Teacup Reservoir Depictions

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**

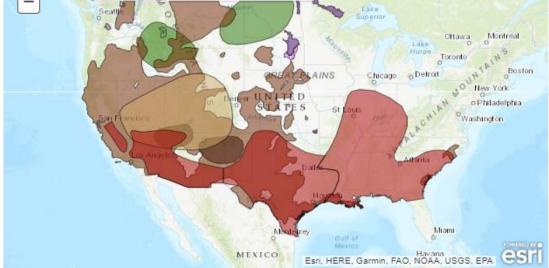
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, Thursday, June 09, 2022: "Intensifying Southwestern heat will result in low-elevation temperatures soaring to 110°F or higher through the weekend. Meanwhile, extreme heat will also return across the south-central U.S., with weekend temperatures possibly reaching 110°F in central Texas. By early next week, triple-digit heat (100°F or higher) could expand as far north as Nebraska and eastward across the Deep South into parts of Georgia and South Carolina. Meanwhile, warmer weather across the northern Plains and the Midwest should benefit summer crops. Elsewhere, frequent showers across the eastern half of the U.S. and across the nation's northern tier will contrast with mostly dry weather in the country's southwestern quadrant, from California to Texas. Five-day rainfall totals could reach 1 to 3 inches or more in Florida and from the Pacific Northwest to the northern Rockies. The NWS 6- to 10-day outlook for June 14 – 18 calls for the likelihood of near- or above-normal temperatures and near- or below-normal rainfall across most of the country. Unusual heat will prevail in the Southeast, while cooler-than-normal conditions will be confined to the Northwest. Meanwhile, wetter-than-normal weather should be limited to the Pacific Northwest and the Desert Southwest."

### Weather Hazards Outlook: June 11 – 15, 2022

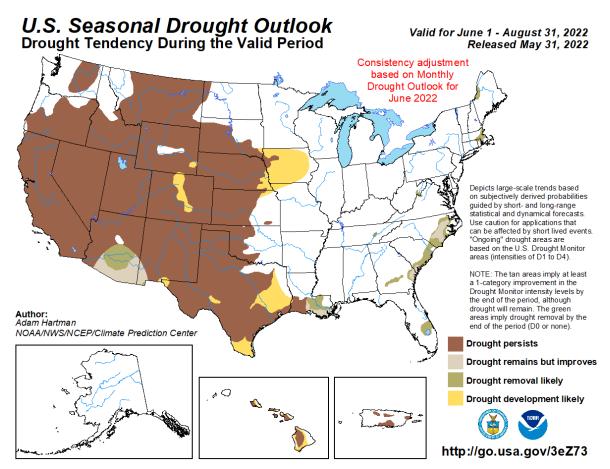
Source: NOAA Weather Prediction Center





### Seasonal Drought Outlook: June 01 – August 31, 2022

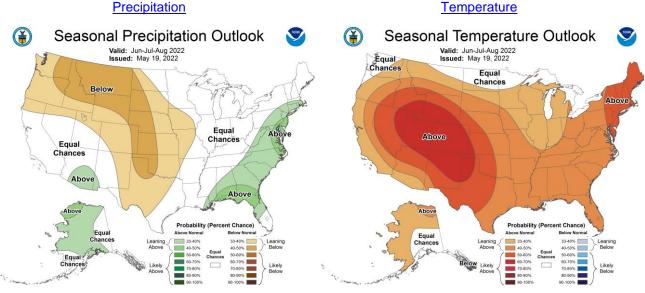
Source: National Weather Service



#### Climate Prediction Center 3-Month Outlook

Source: National Weather Service

#### Precipitation



June-July-August 2022 precipitation and temperature outlook summaries

# **More Information**

The NRCS <u>National Water and Climate Center</u> publishes this weekly report. We welcome your feedback. If you have questions or comments, please <u>contact us</u>.