

# Water and Climate Update

September 28, 2017

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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# Active western wildfires currently covering one million acres



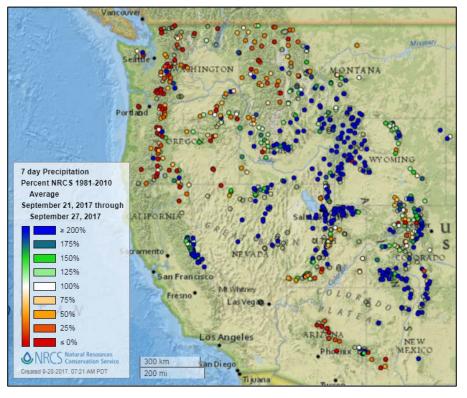
Burned Area Emergency Response (BAER) team soil scientist examining the damage to forest soils in the Eagle Creek fire in northern Oregon.

According to the <u>National Interagency Fire Center</u>, there are currently 23 active, large wildfires burning over one million acres in the West. Wildfires thus far in 2017 have scorched 8,446,055 acres. Firefighters in the West have had some help from recent cooler temperatures, snow, and rain, which has slowed or stopped the spread of many fires. Evacuation orders for 1,000 people were lifted for the 2,000-acre Canyon fire in southern California. The largest currently-active fire is the Chetco Bar fire in southwestern Oregon at over 191,000 acres.

### **Related:**

<u>Wildfires Rage in California</u> <u>Evacuation orders lifted as schools remain closed due to California wildfire</u> <u>The Latest: Crews racing winds at California wildfire</u> <u>Rain and Snow Help Montana Wildfires But Won't End Season</u> <u>9 Iconic Places Burned By Oregon Wildfires This Season</u>

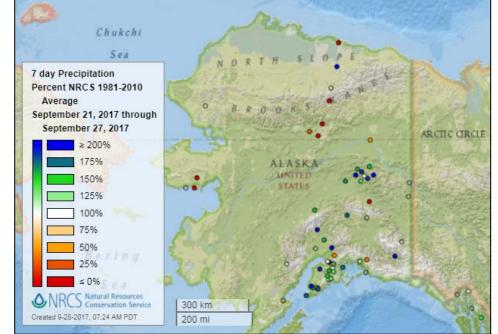
# Precipitation



### Last 7 Days, Western Mountain Sites (NRCS SNOTEL Network)

7-day precipitation percent of average map

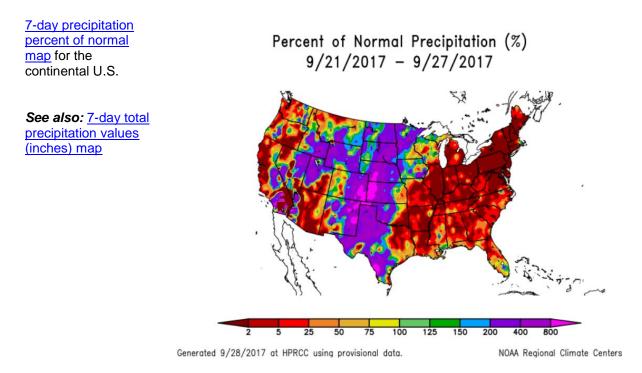
See also: 7-day total precipitation values (inches) map



Alaska 7-day precipitation percent of average map

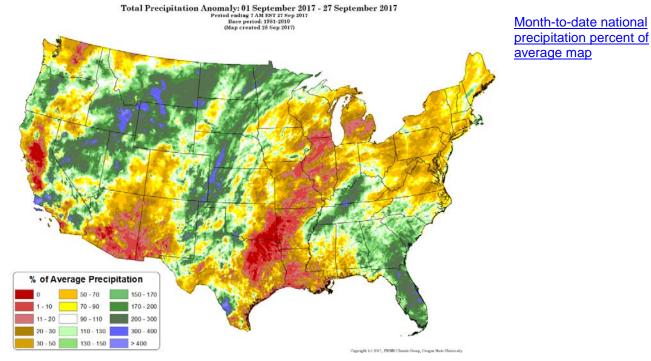
See also: Alaska 7day total precipitation values (inches) map

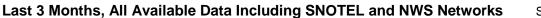
### Last 7 Days, National Weather Service (NWS) Networks



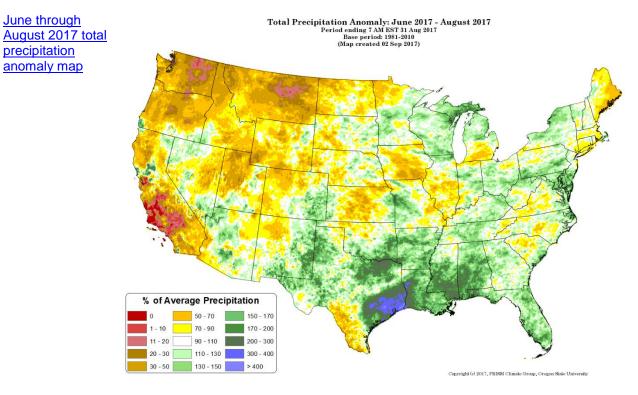
#### Month-to-Date, All Available Data Including SNOTEL and NWS Networks Source: PRISM

Month-to-date national

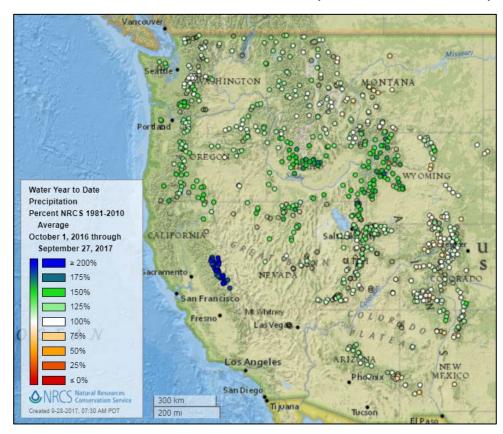




Source: PRISM



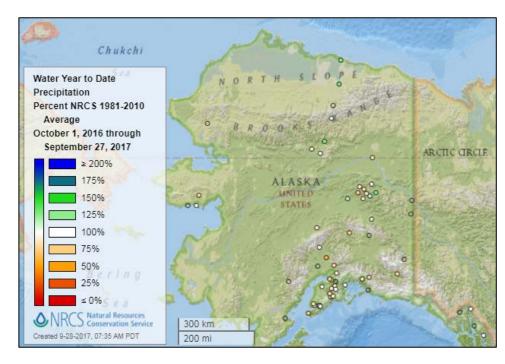
### Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



**Note:** It's nearing the end of the 2017 Water Year.

2017 water year-todate precipitation percent of average map

See also: 2017 water year-to-date precipitation values (inches)



Alaska 2017 water year-to-date precipitation percent of average map

See also: <u>Alaska</u> 2017 water year-todate precipitation values (inches) map

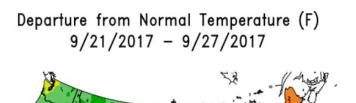
# Temperature

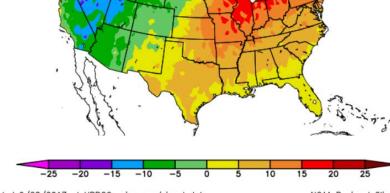
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers



See also: 7-day temperature (° F) map





Generated 9/28/2017 at HPRCC using provisional data.

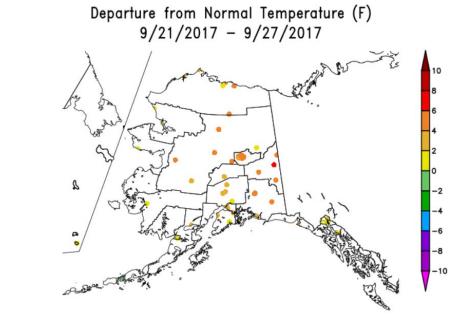
NOAA Regional Climate Centers

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

Source: Regional Climate Centers

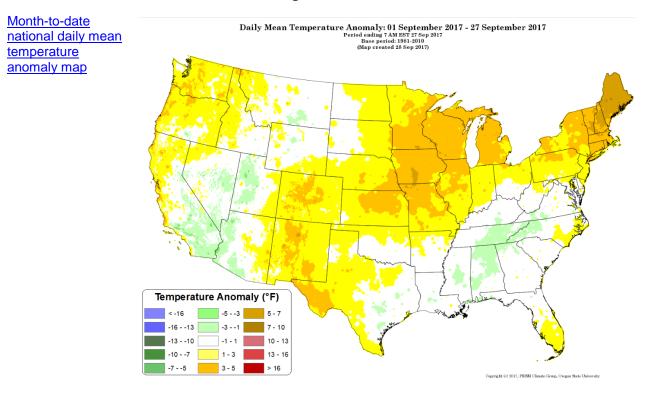
<u>7-day temperature</u> anomaly map for Alaska.

See also: <u>7-day</u> temperature (° F) map

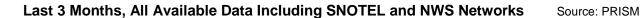


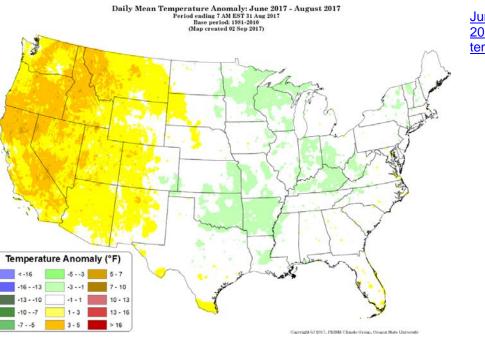
Generated 9/28/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers



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





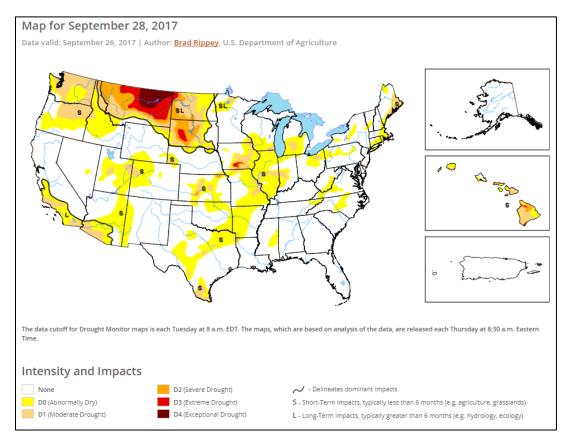
June through August 2017 daily mean temperature anomaly map

# **Drought and Wildfires**

U.S. Drought Monitor Select map below.

U.S. Drought Portal Comprehensive drought resource.

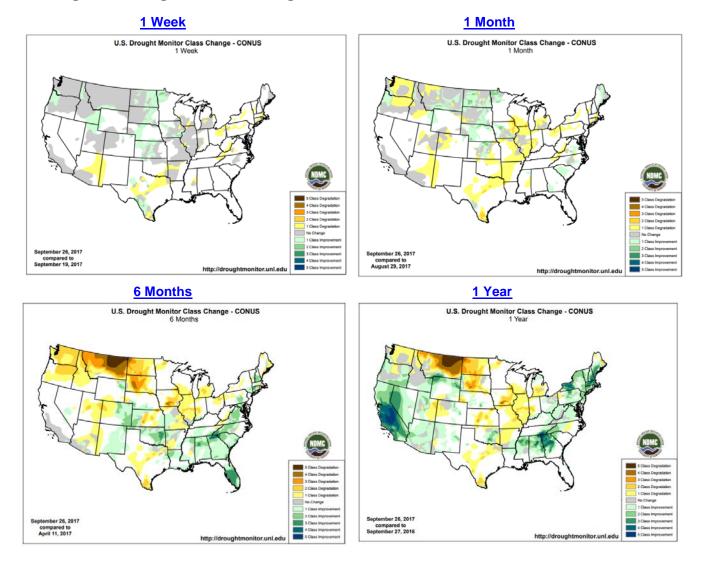




### Current National Drought Summary, September 26, 2017

Author: Brad Rippey, U.S. Department of Agriculture

"Relatively quiet weather prevailed for much of the drought-monitoring period. Record-setting warmth accompanied the tranquil weather across the Midwest and Northeast. However, very cool weather and locally significant precipitation affected the Northwest, including the Cascades and northern Rockies, boosting topsoil moisture and further aiding wildfire containment efforts. Starting on September 23, heavy rain erupted along an axis stretching from the southern High Plains into the upper Great Lakes region. The rain put a significant dent in rainfall deficits for areas still experiencing dryness or drought."

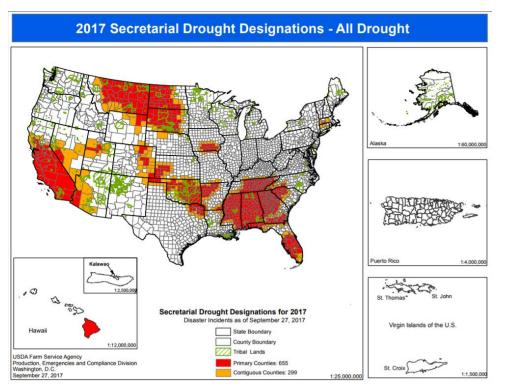


### **Changes in Drought Monitor Categories over Time**

Changes in drought conditions over the last 12 months

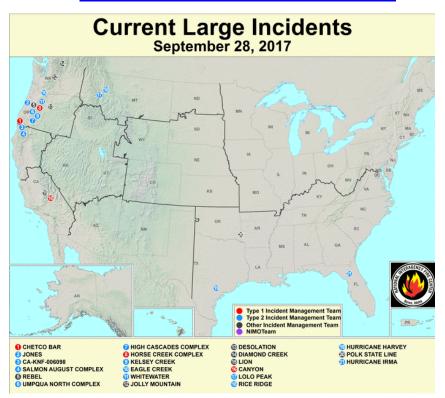
### **Highlighted Drought Resources**

- 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 2017 Secretarial Drought Designations

### Wildfires: USDA Forest Service Active Fire Mapping

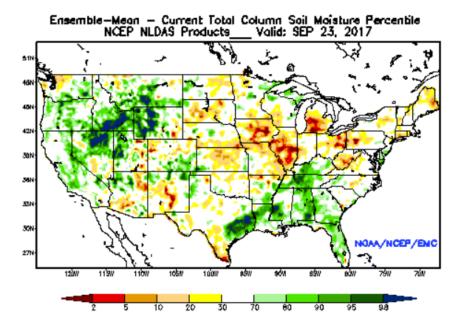


# Highlighted Wildfire Resources

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

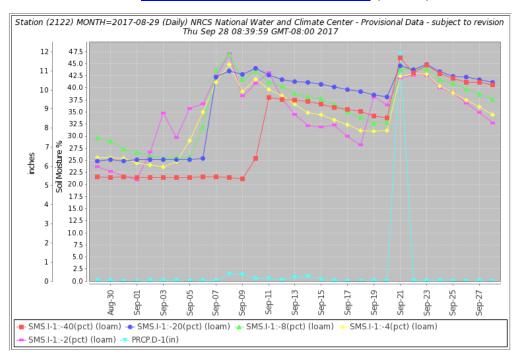
# **Other Climatic and Water Supply Indicators**

### Soil Moisture



<u>Modeled soil moisture</u> <u>percentiles</u> as of September 23, 2017.

### Soil Moisture Data: NRCS Soil Climate Analysis Network (SCAN)



The chart shows precipitation and soil moisture for the last 30 days at the <u>Fortuna SCAN Site 2122</u> in southern Puerto Rico. Hurricane Maria precipitation totals at the site were nearly 12 inches on September 21. All soil moisture sensors jumped to between 42 and 46 percent soil moisture on that day, and have been slowly declining since then.

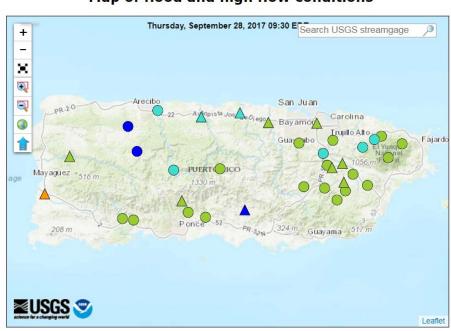
### Water and Climate Update

### Soil Moisture Data Portals

**CRN Soil Moisture** Texas A&M University North American Soil Moisture Database University of Washington Experimental Modeled Soil Moisture

### Streamflow

Source: USGS



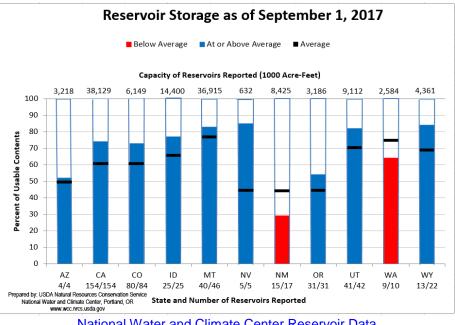
### Map of flood and high flow conditions

Flood and high flow conditions interactive map

### **Reservoir Storage**

Western States Reservoir Storage

Source: NRCS National Water and Climate Center

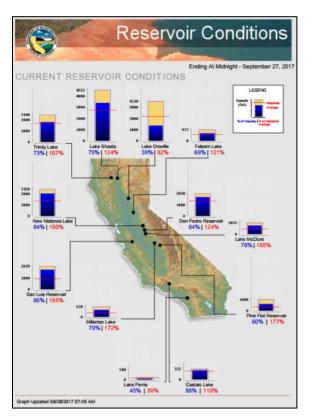


### U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions

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



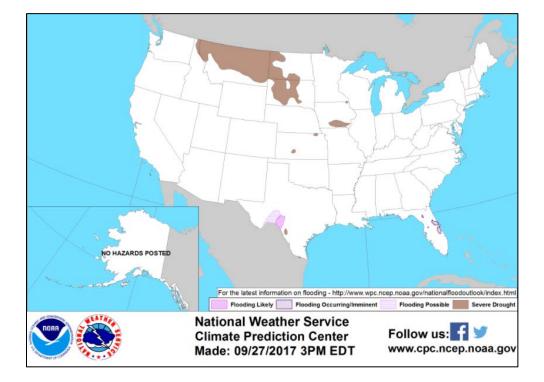
California Current Reservoir Conditions

# Short- and Long-Range Outlooks

### Agricultural Weather Highlights

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

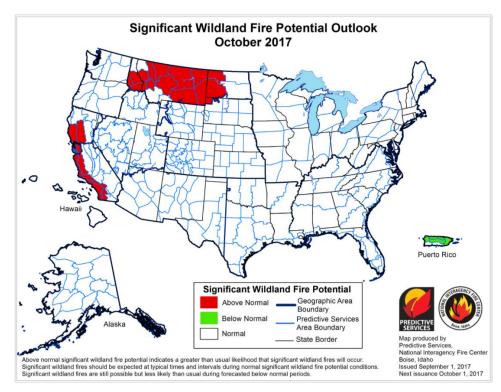
National Outlook, Thursday, September 28, 2017: "A cold front will continue to push east of the Midwest and Northeast, bringing to an end a late-season heat wave. Meanwhile, significant precipitation will fall across southern sections of the Rockies and Plains, with additional rainfall totaling 1 to 2 inches or more from Colorado and New Mexico into western and southern Texas. Some flooding can be expected in parts of the middle and lower Rio Grande Valley. During the weekend, dry weather will arrive in the south-central U.S., while late-season warmth should return (or continue) across most parts of the country. Exceptions will include the northern Plains and the Northwest, where cool, showery weather will develop over the weekend. Little or no rain will fall during the next 5 days in the Midwest and East (except across Florida's peninsula), as well as California and the Great Basin. The NWS 6- to 10-day outlook for October 3 – 7 calls for the likelihood of above-normal temperatures nationwide, except for cooler-than-normal conditions in California, the Great Basin, and the Northwest. Meanwhile, below-normal rainfall from the mid-South into the Northeast should contrast with wetter-than-normal weather in southern sections of Texas and Florida and from the Pacific Northwest into the upper Great Lakes region."



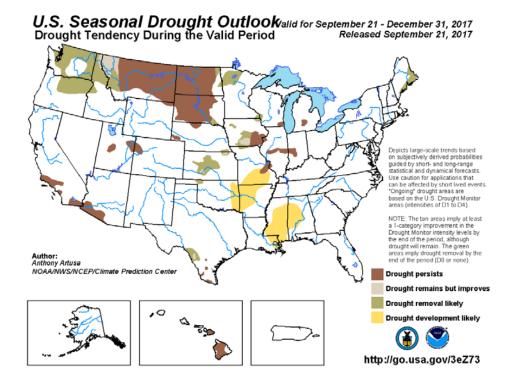
### Weather Hazard Outlook September 30 - October 4, 2017 Source: Climate Prediction Center

### Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center

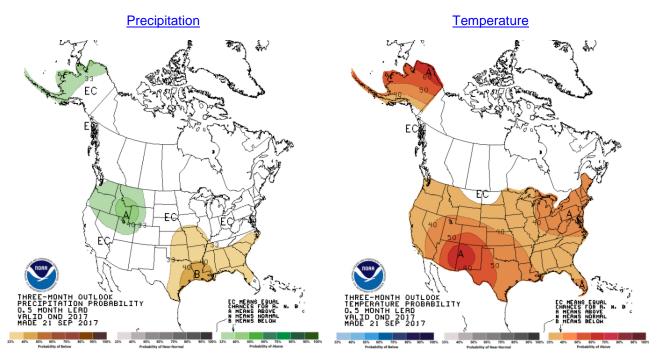


Seasonal Drought Outlook: September 21 - December 31, 2017 Source: National Weather Service



### **Climate Prediction Center 3-Month Outlook**

Source: National Weather Service



Oct-Nov-Dec (OND) 2017 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>.