### **United States Department of Agriculture**

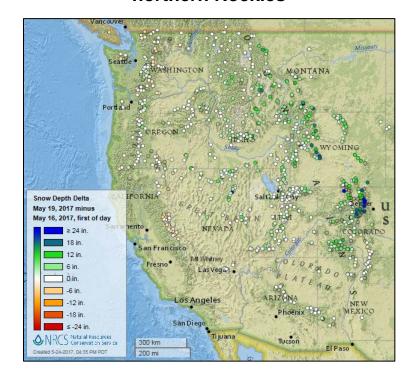
### **Water and Climate Update**

May 25, 2017

The Natural Resources Conservation Service produces this weekly report using data and products from the <u>National 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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## Late-season storm leaves up to 42 inches of snow in central and northern Rockies



A late-season storm left fresh, deep snow across the West last week. While snow started at pass levels in the Cascades, the heaviest amounts were reported in Utah, Montana, Wyoming, and Colorado. NRCS Snow Telemetry (SNOTEL) sites reported up to 30 inches of new snow depth at stations in the central Rockies near Denver. Up to 42 inches were reported by news outlets at other locations in Colorado.

#### **Related Information:**

Snowstorm brings up to 42 inches of snow to Colorado mountains

Spring snowstorm continues to snarl Wyoming roads

May snowstorm snaps trees, cuts power

**May Snowstorm Causes Problems in Western Montana** 

**Cheyenne Recovering From Record Spring Snowstorm** 

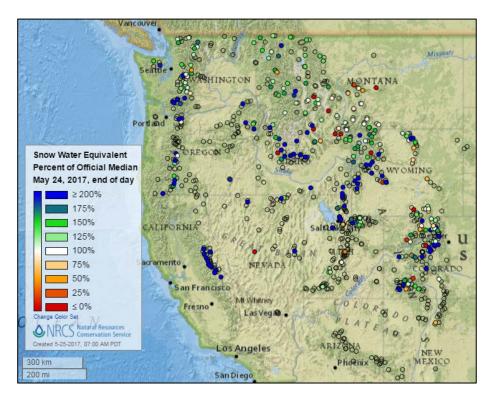
Storm rejects springtime, dumps snow in Pacific Northwest

**Snow Storm Threatens Stream Flooding** 

May snow storm blankets Northern Utah, damages trees and knocks out power

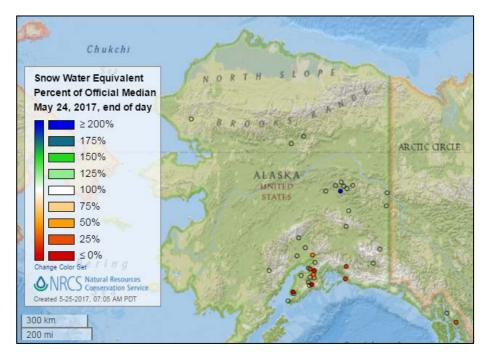
### **Snow**

### **Current Snow Water Equivalent, NRCS SNOTEL Network**



Snow water equivalent percent of median map

# See also: Snow water equivalent values (inches) map



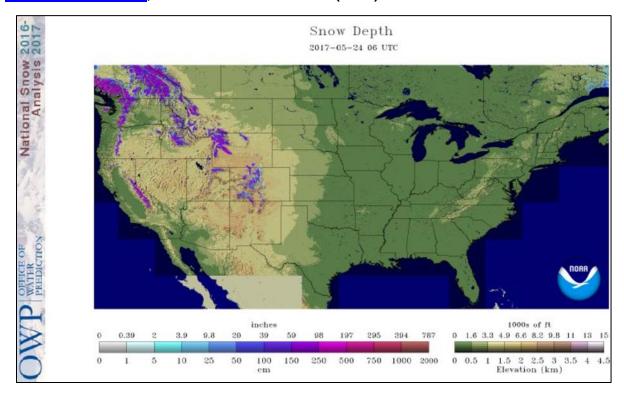
Alaska snow water equivalent percent of median map

#### See also:

Alaska snow water equivalent values (inches) map

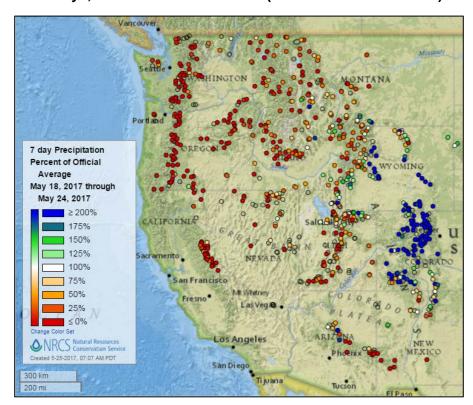
### **Water and Climate Update**

### **Current Snow Depth**, National Weather Service (NWS) Networks



### **Precipitation**

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



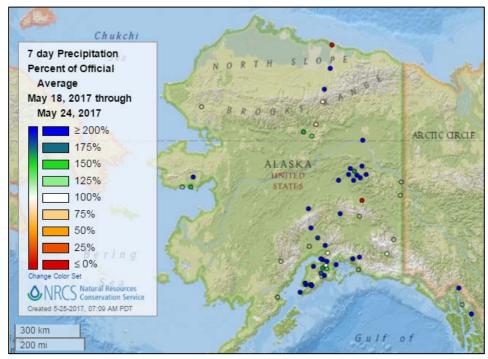
7-day precipitation percent of average map

#### 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

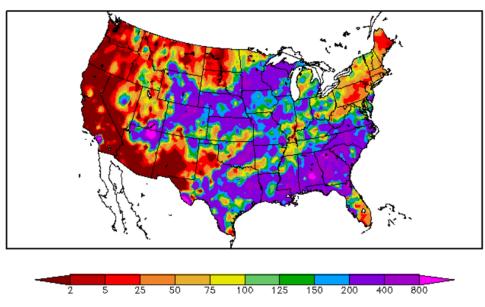
7-day precipitation percent of normal map for the

continental U.S.

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

Percent of Normal Precipitation (%) 5/18/2017 - 5/24/2017

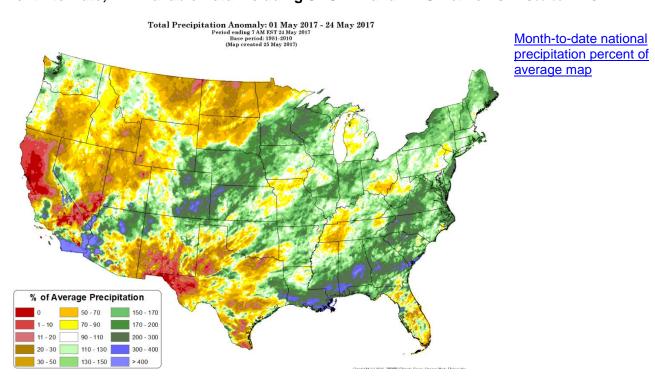
Source: Regional Climate Centers



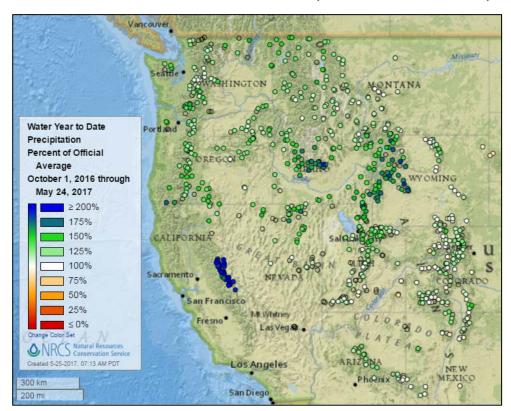
Generated 5/25/2017 at HPRCC using provisional data.

Regional Climate Center:

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

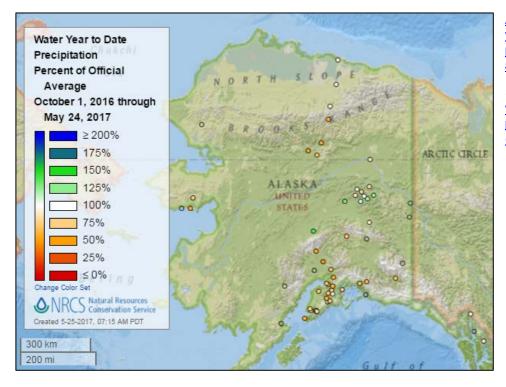


### Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



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

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



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

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

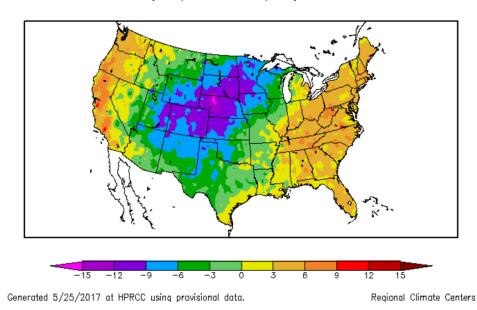
### **Temperature**

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

7-day temperature anomaly map for the continental U.S.

See also: 7-day temperature (° F) map Departure from Normal Temperature (F) 5/18/2017 - 5/24/2017

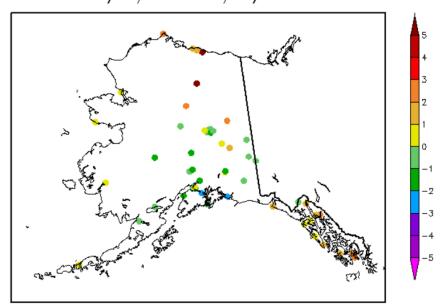
Source: Regional Climate Centers



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

7-day temperature anomaly map for Alaska.

See also: 7-day temperature (° F) map Departure from Normal Temperature (F) 5/18/2017 - 5/24/2017



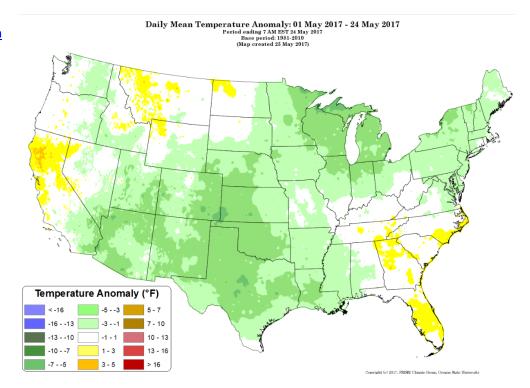
Generated 5/25/2017 at HPRCC using provisional data.

Regional Climate Centers

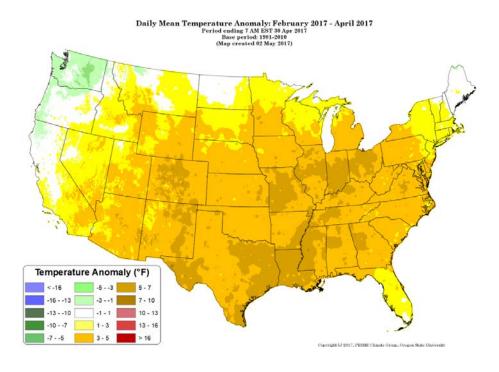
Source: Regional Climate Centers

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

Month-to-date national daily mean temperature anomaly map



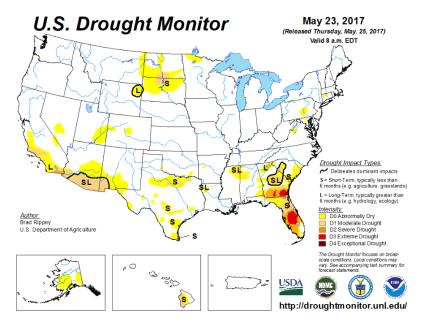
### Last 3 Months, All Available Data Including SNOTEL and NWS Networks Source: PRISM



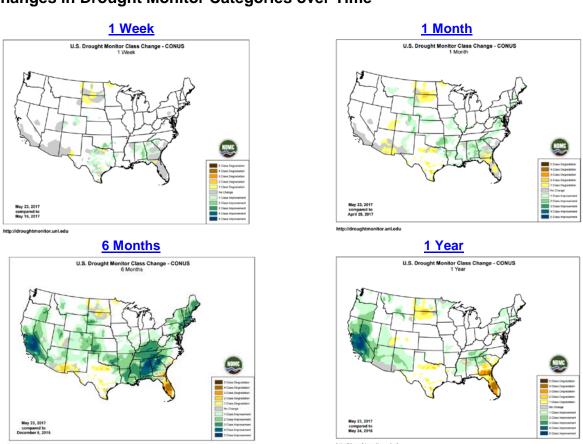
February through April
2017 daily mean
temperature anomaly map

### Drought





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



Changes in drought conditions over the last 12 months

### Current National **Drought Summary**, May 23, 2017

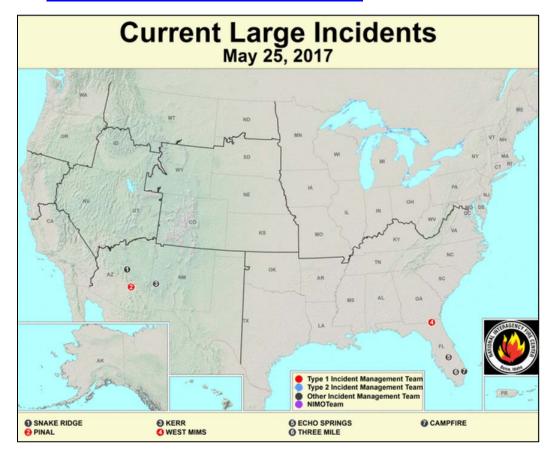
Author: Brad Rippey, U.S. Department of Agriculture

"Soaking precipitation occurred from central portions of the Rockies and Plains into the upper Midwest, mainly from May 16-18, and in parts of the Southeast starting on May 20. Drought-affected areas of the Southeast, including portions of Alabama and Georgia, experienced substantial relief, with rain still falling when the drought-monitoring period ended on May 23. The drought-easing effects of any rain that fell after 8 am EDT on Tuesday, May 23, will be reflected on next week's map. Farther west, late-season snow (locally 1 to 3 feet) blanketed the northern and central Rockies, while streaks of heavy rain largely arrested drought development in the south-central U.S. Areas that remained stubbornly dry included parts of the north-central U.S. and Florida's peninsula, although significant rainfall developed in the latter region after the monitoring period ended on May 23."

#### **Highlighted Drought Resources**

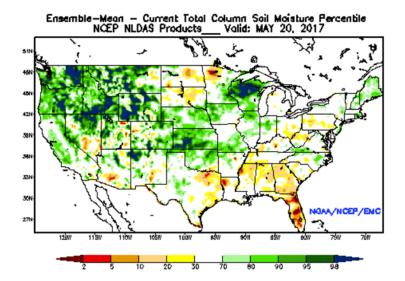
- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

Wildfires: USDA Forest Service Active Fire Mapping



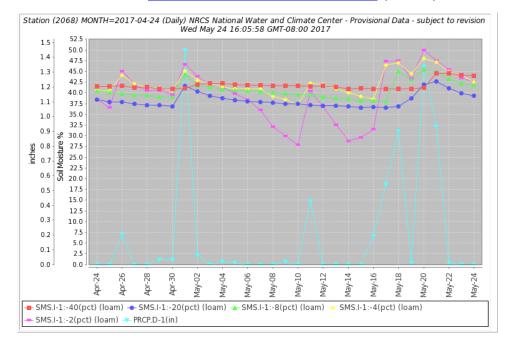
### Other Climatic and Water Supply Indicators

#### **Soil Moisture**



Modeled soil moisture percentiles as of May 20, 2017.

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



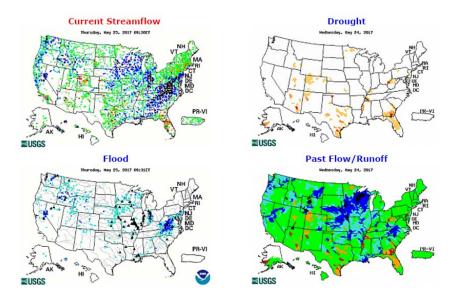
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past 30 days at the <a href="Shagbark Hills SCAN site 2068">Shagbark Hills SCAN site 2068</a> in Iowa. The site recorded several precipitation events that increased soil moisture at all sensor depths.

#### **Soil Moisture Data Portals**

**CRN Soil Moisture** 

<u>Texas A&M University North American Soil Moisture Database</u> <u>University of Washington Experimental Modeled Soil Moisture</u>

Streamflow Source: USGS



Current streamflow maps Click image to enlarge and display legends

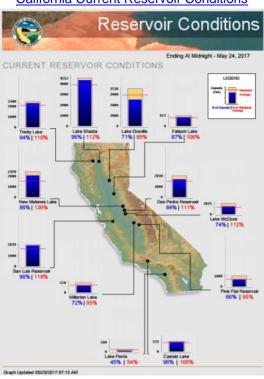
### **Reservoir Storage**

National Water and Climate Center Reservoir Data

#### 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

### California Current Reservoir Conditions



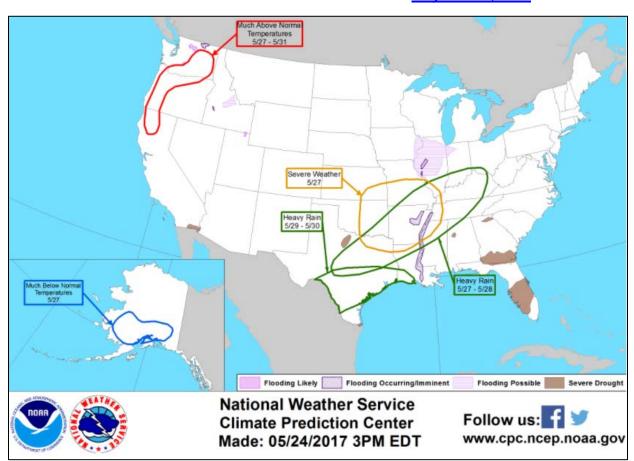
### **Short- and Long-Range Outlooks**

### **Agricultural Weather Highlights**

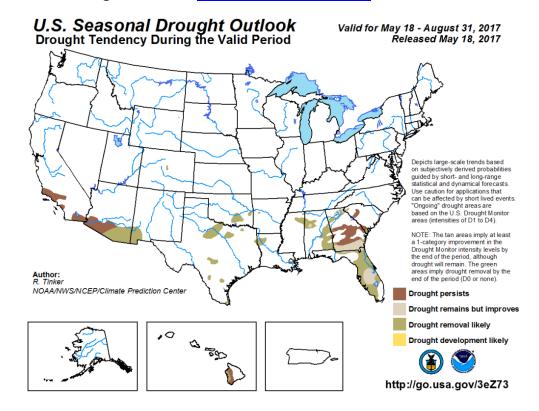
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, May 25, 2017: "For today, heavy rain will spread into the Northeast, while scattered showers will affect northern and central portions of the Rockies and High Plains. During the Memorial Day weekend, showers will develop across the nation's mid-section and quickly return to the South, East, and lower Midwest. Five-day rainfall totals could reach an inch or more across central sections of the Rockies and Plains, and 1 to 4 inches from southern and eastern Texas into the Northeast. Some of the heaviest rain, accompanied by locally severe thunderstorms, can be expected on Saturday in the Ohio Valley and the mid-South. In contrast, dry weather will prevail into next week in California and the Southwest. Meanwhile, a new surge of warmth will overspread the West during the weekend and early next week. The NWS 6- to 10-day outlook for May 30 – June 3 calls for the likelihood of below-normal temperatures from the central and southern Plains to the western slopes of the Appalachians, while warmer-than normal weather should prevail along the Atlantic Seaboard and across the northern High Plains and much of the West. Odds will be tilted toward near- to above-normal rainfall across most of the country, but drier-than-normal conditions can be expected from the Pacific Northwest into the upper Midwest."

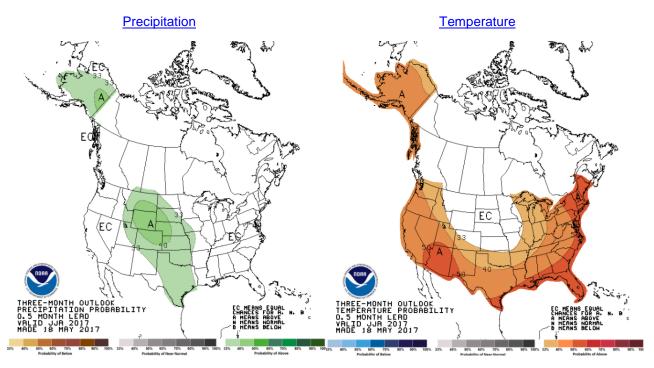
#### NWS Climate Prediction Center Weather Hazard Outlook: May 27 - 31, 2017



### NWS Seasonal Drought Outlook: May 18 - August 31, 2017



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



June-July-August (JJA) 2017 precipitation and temperature outlook summaries

### **Water and Climate Update**

### **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  $\underline{\text{contact us}}$ .