

Water and Climate Update

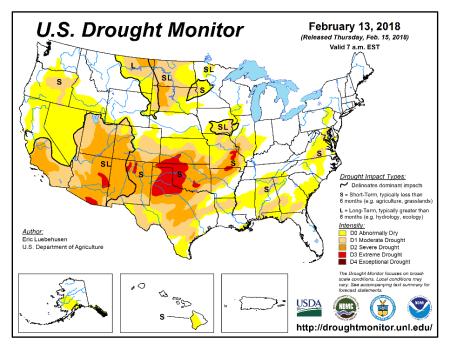
February 15, 2018

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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Temperature7	More Info
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Over a third of the U.S. in moderate to extreme drought



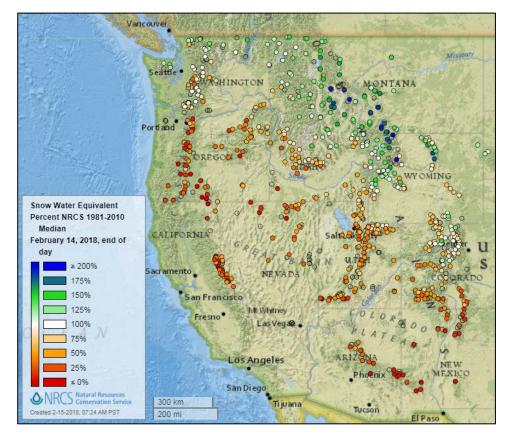
For the contiguous 48 states, the current U.S. Drought Monitor shows over 36% of the area in moderate to extreme drought. Drought now affects over 77 million people. Much of the drought in the East, Southeast, and Southcentral U.S. was reduced or eliminated by heavy rainfall during the past week. In contrast, drought conditions have worsened or expanded in the West, Southwest, and southern Plains. There was no change in Alaska over the past week, while rainfall in Hawaii helped to improve conditions there.

Related:

Driest winter in 40 years worsens Missouri **drought** – AP Drought conditions worsen across NW Oklahoma – Enid News (OK) Trending dry weather prompts wildfire warnings across Texas, Oklahoma – Southwest Farm Press Drought hitting Ruidoso's ski season hard - Santa Fe New Mexican (NM) Drought tightens its grip – Payson Roundup (AZ) February has been bone dry. Has drought returned to California? – The Sacramento Bee (CA) Dry, hot California winter closes ski resorts, stalls wildflower blooms and revives drought fears - Daily Republic (CA)

Snow

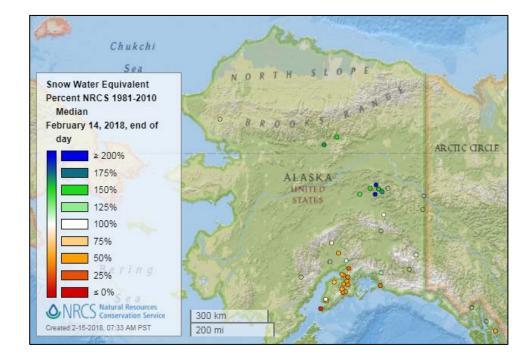
Current Snow Water Equivalent, NRCS SNOTEL Network



Snow water equivalent percent of median map

See also:

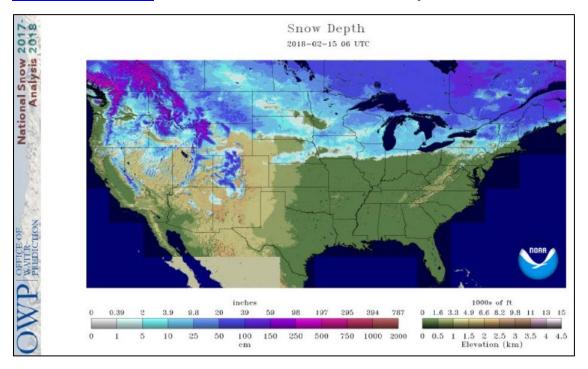
<u>Snow water</u> equivalent values (inches) map



Alaska snow water equivalent percent of median map

See also: Alaska snow water equivalent values (inches)

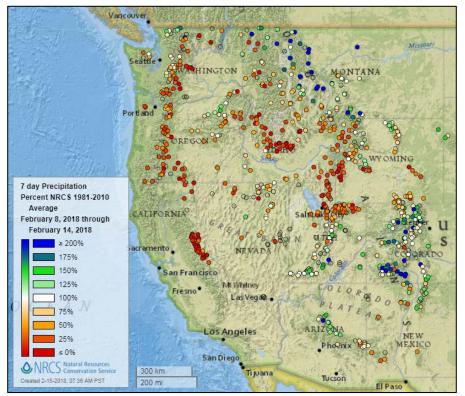
<u>map</u>



Current Snow Depth, National Weather Service Snow Analysis

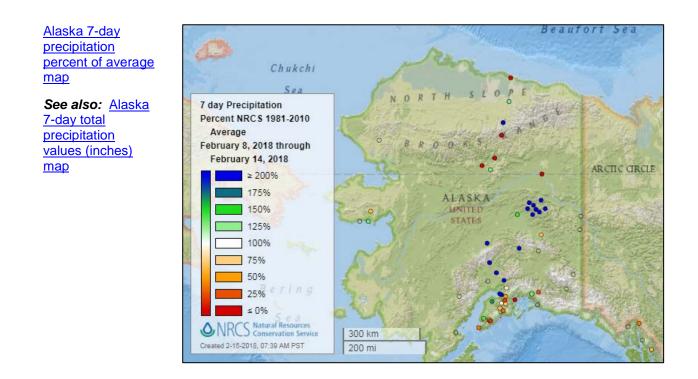
Precipitation

Last 7 Days, NRCS SNOTEL Network



<u>7-day precipitation</u> percent of average map

See also: <u>7-day total precipitation</u> values (inches) map

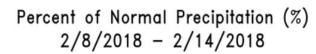


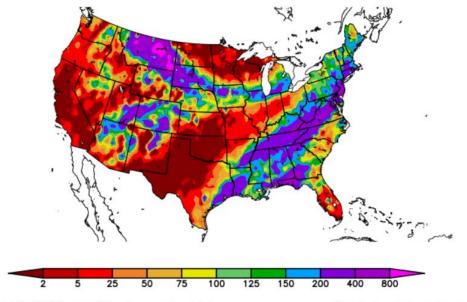
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day precipitation percent of normal map for the continental U.S.

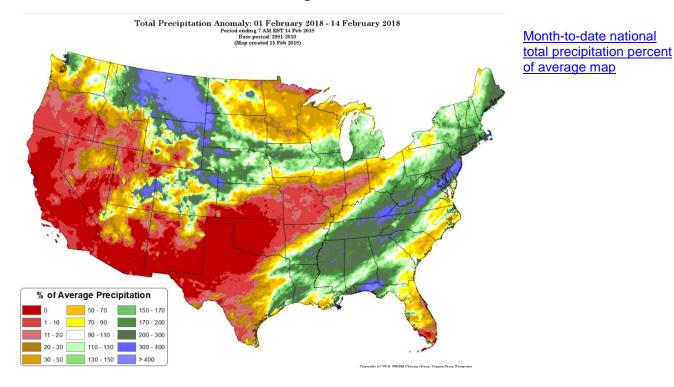
See also: 7-day total precipitation values (inches) map





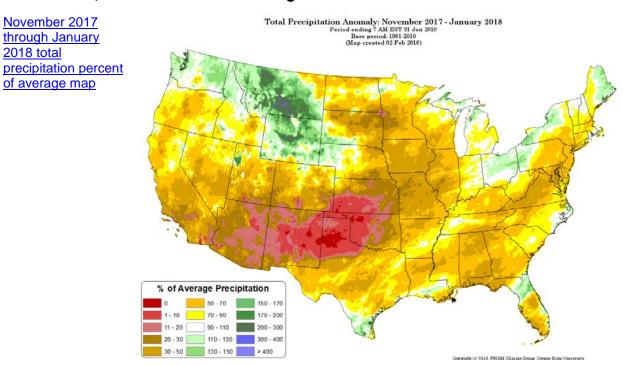
Generated 2/15/2018 at HPRCC using provisional data.

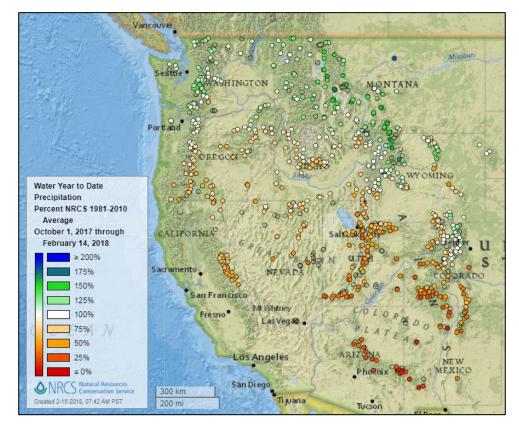
NOAA Regional Climate Centers



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

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

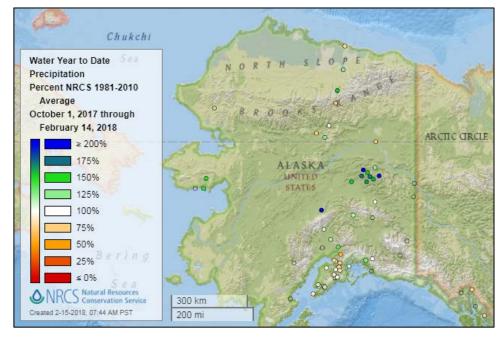




Water Year-to-Date, NRCS SNOTEL Network

2018 water yearto-date precipitation percent of average map

See also: 2018 water year-to-date precipitation values (inches)



Alaska 2018 water year-to-date precipitation percent of average map

See also: <u>Alaska</u> 2018 water year-todate precipitation values (inches) map

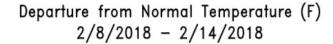
Temperature

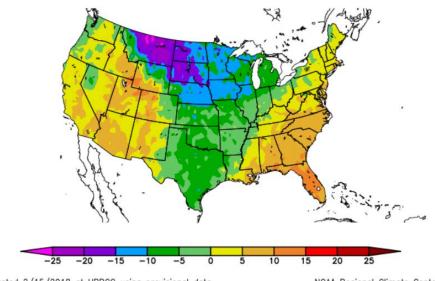
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

See also: 7-day temperature (° F) map





Generated 2/15/2018 at HPRCC using provisional data.

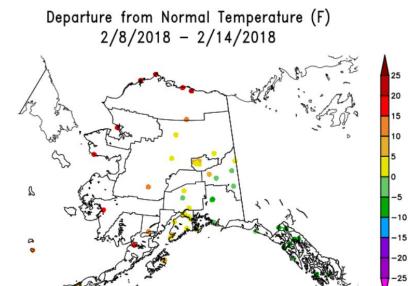
NOAA Regional Climate Centers

Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

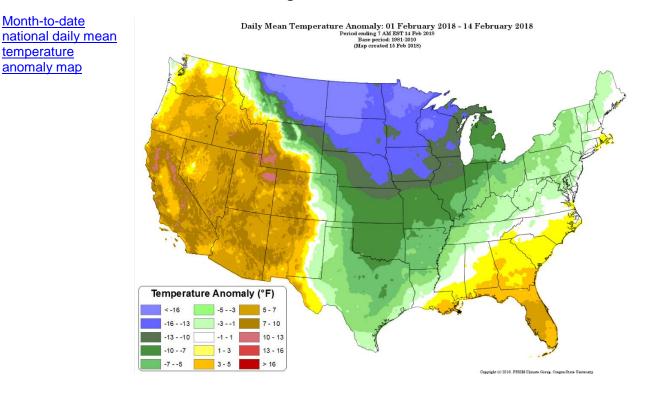
<u>7-day temperature</u> anomaly map for Alaska.

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



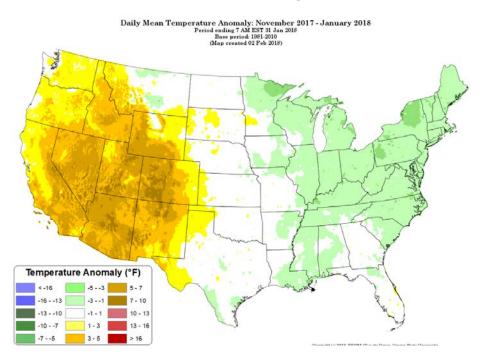
Generated 2/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers



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

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

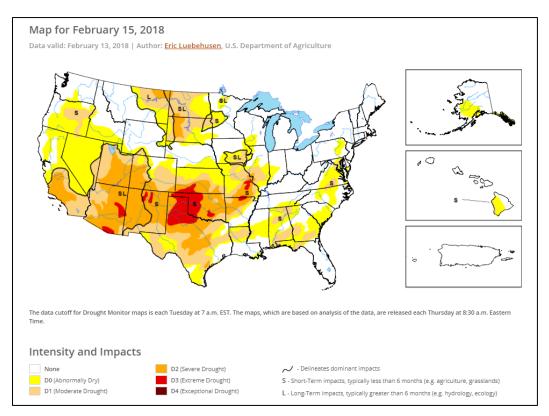


November 2017 through January 2018 daily mean temperature anomaly map

Drought

U.S. Drought Monitor Select map below.

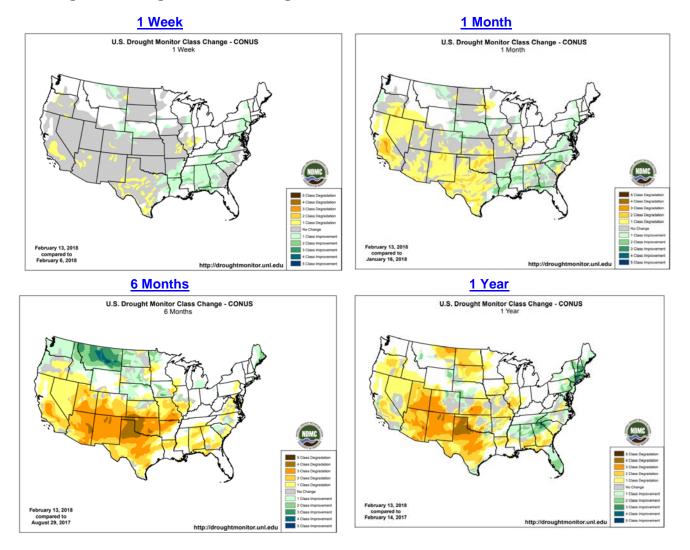
U.S. Drought Portal Comprehensive drought resource.



Current National Drought Summary, February 15, 2018

Author: Eric Luebehusen, U.S. Department of Agriculture

"During the 7-day period (ending Tuesday morning), heavy to excessive rainfall eased or eliminated dryness and drought across much of the eastern, southeastern, and southcentral U.S. Conversely, drought intensified and expanded from the central Corn Belt southwestward across the southern Plains into the Southwest, including much of southern California. Other modest changes to the nation's drought depiction over the past 7 days included reductions to drought intensity in Montana as a result of recent snowy, cold weather, while dryness and drought expanded in Oregon due in large part to subpar snowpacks."

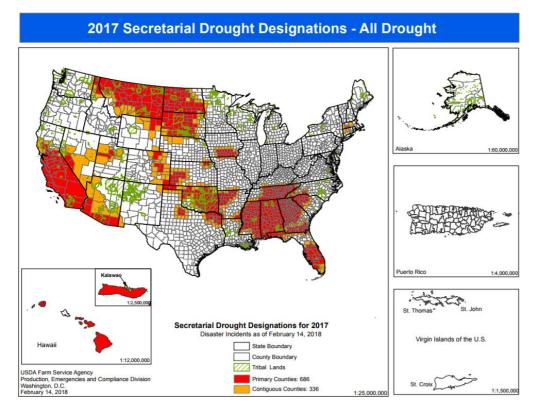


Changes in Drought Monitor Categories over Time

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

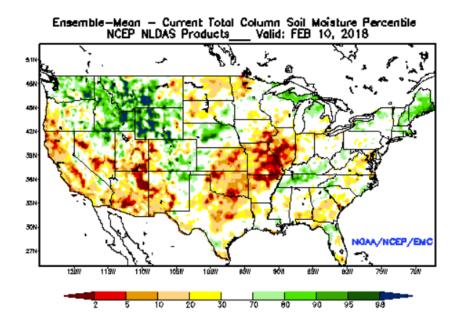


USDA 2017 Secretarial Drought Designations

Other Climatic and Water Supply Indicators

Soil Moisture

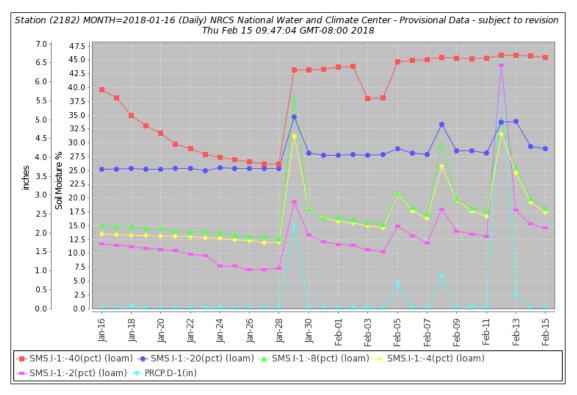
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of February 10, 2018.

Soil Moisture Data

Source: NRCS Soil Climate Analysis Network (SCAN)



The chart shows precipitation and soil moisture for the last 30 days at the <u>River Roads Farms SCAN site</u> 2182 in Alabama. The past 30 days show several precipitation events causing the soil moisture to increase at all sensor depths. The rainfall on January 29 caused all sensors to show large increases, and the larger 6.7-inch rainfall on February 12 showed similar or higher soil moisture levels at the all sensors.

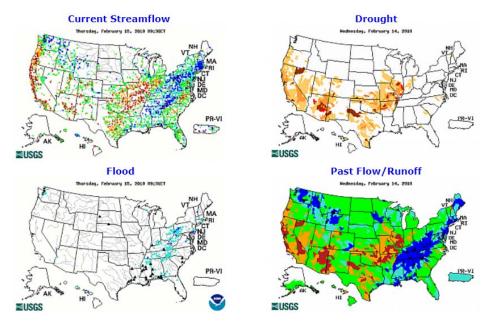
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Soil Moisture Data Portals

- 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

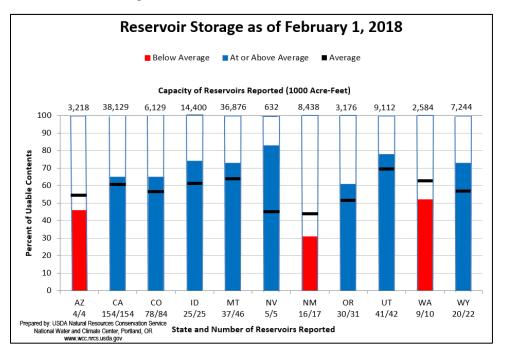


WaterWatch: Streamflow, drought, flood, and runoff conditions

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center





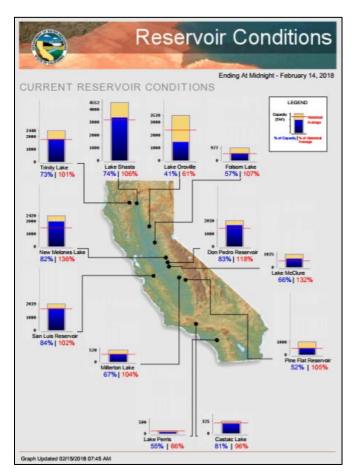
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U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions

- 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



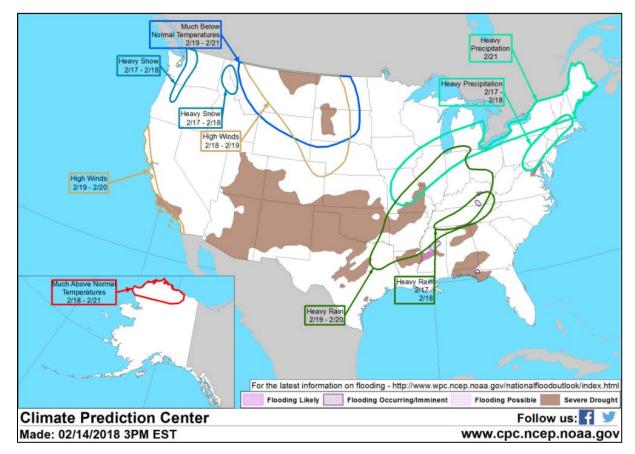
Current California Reservoir Conditions

Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

National Outlook, Thursday, February 15: "A newly established weather pattern should lead to increasingly colder conditions across the West and spring-like warmth in the South and East. With a sharp temperature gradient in place, an active weather pattern will unfold across several regions. For example, 5-day precipitation totals could reach 1 to 3 inches from the mid-South into the northern Mid-Atlantic States. Although much of the precipitation will fall as rain, some weekend snow may occur in the Northeast. Farther west, significant, late-week snow can be expected across the northern High Plains and the Northwest. Snow may spread into the upper Midwest by early next week. Elsewhere, mostly dry weather will prevail during the next 5 days in central and southern California and portions of the central and southern Plains. The NWS 6- to 10-day outlook for February 20 – 24 calls for the likelihood of belownormal temperatures across the western and north-central U.S., while warmer-than-normal weather will prevail across the South, East, and lower Midwest. Meanwhile, near- to above-normal precipitation across most of the country should contrast with drier-than-normal conditions in much of Florida; the southern Rockies; the southern Great Basin; and central and southern California."

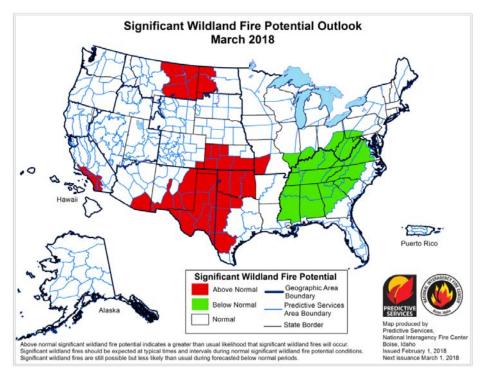


Weather Hazard Outlook February 17 - 21, 2018

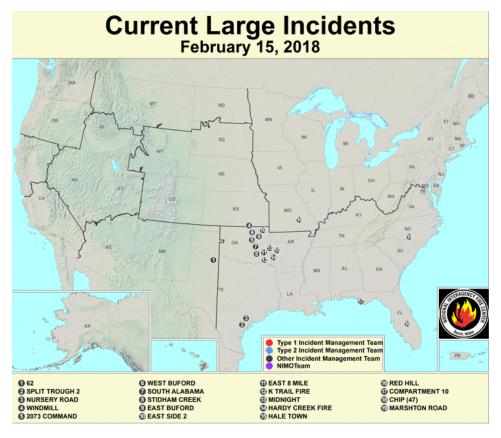
Source: Climate Prediction Center

Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center

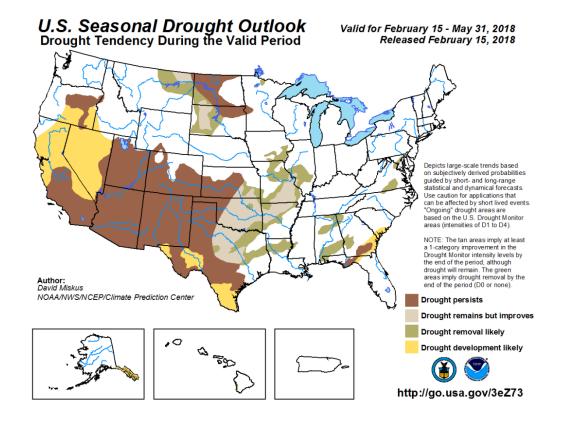


Wildfires: USDA Forest Service Active Fire Mapping



Highlighted Wildfire Resources

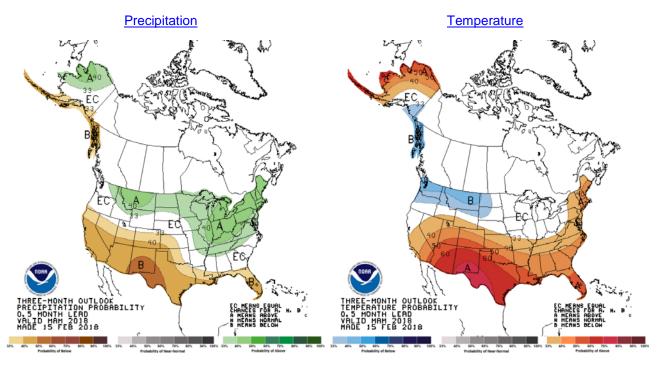
- <u>National Interagency</u> <u>Fire Center</u>
- InciWeb Incident
 Information System
- Significant Wildland <u>Fire Potential</u> <u>Outlook</u>



Seasonal Drought Outlook: January 18 – April 30, 2018 Source: National Weather Service

Climate Prediction Center 3-Month Outlook

Source: National Weather Service



Mar-Apr-May (MAM) 2018 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>.