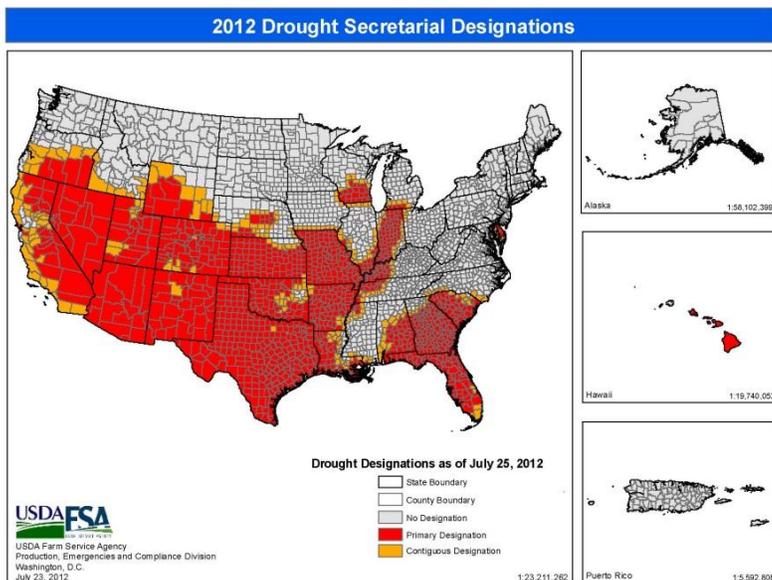
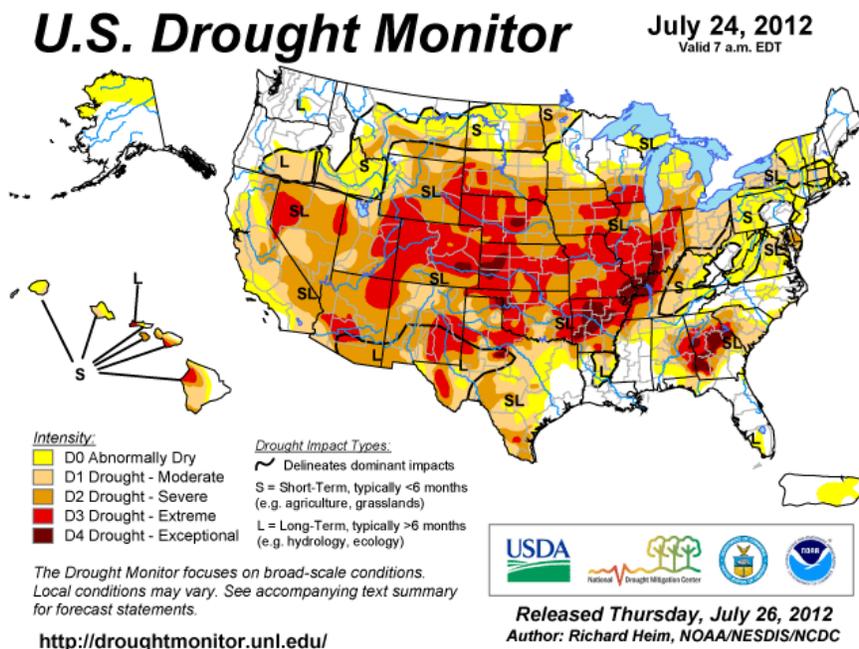


DROUGHT IN THE WEST

Ways for States to Actively Engage in Response to a Regional Disaster
July 2012

Nearly all of the 19 WGA member states are currently affected by dryness or drought to some extent (Figure 1). In fact, over 75% of the contiguous United States is suffering from some degree of abnormally dry or drought conditions, with half of that being categorized as *severe*, *extreme*, or *exceptional drought*. The largest swath of extreme drought is centered over the Rocky Mountains and the Great Plains.

Drought is an expensive phenomenon: both the Southern Plains drought of 2011 and the widespread drought of 2002 [cost more than \\$12 billion](#) in today's dollars.



Figures 1-2

Figure 1 (top right), the US Drought Monitor shows some lack of precipitation in all of the western states, ranging from "abnormally dry" conditions to "exceptional drought." Figure 2 (bottom left), under a new expedited drought declaration rule, more than 1300 US counties have been recognized by the USDA as being in drought.

Drought and the Economy

Food Prices: Food prices are projected to [rise by 3 to 4% in the next year](#), which is slightly above the average 2.8% annual inflation. Beef prices could increase as much as 5%.

Agriculture: Hay prices have as much as tripled in drought-stricken regions, adding pressure for ranchers across the West to [sell cattle months before they would normally go to market](#).

Tourism: In addition to impacts to areas ravaged by drought-intensified wildfire, low stream levels due to drought can impact the recreation sector in western states. [Rafting tours have been less popular this year in Colorado](#), and Montana has enacted [fishing closures](#) on some rivers and lakes.

Economic Confidence: A [poll of Midwestern bankers in July](#) suggested that drought is leading to weak confidence in rural economies. Agriculturally-based industries can suffer, too, as Bloomberg News suggested in a report showing a [6.3% drop in John Deere's stock](#) over 11 days.

Drought and Natural Resources

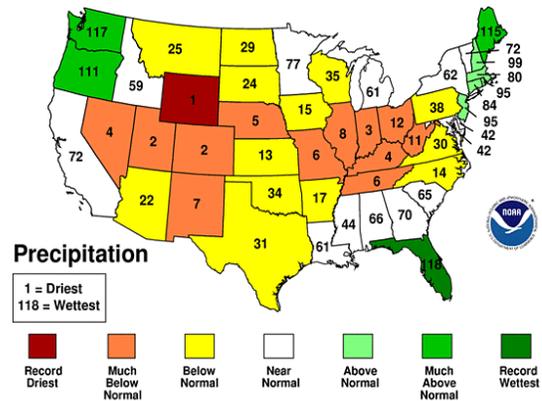
Fire Risk: Wildfires were remarkably devastating in the West this season; although the national acreage subject to fire is [in line with the 10-year average](#), several wildfires this year occurred in populated areas with valuable property. Insurance estimates for the Waldo Canyon fire stand at [\\$352.6 million](#), more than 1.5 times the second-most expensive wildfire in Colorado history. Wildfire conditions were exacerbated by lack of precipitation (Figure 3), high temperatures (Figure 4), and low soil moisture.

Water Supply: Western reservoirs are in fair shape due to 2011's wet conditions, but in some regions reservoir storage has dropped considerably. For instance, in Arizona, [storage in the Verde and Salt river basin systems are at 59% of capacity](#), or 20% less than last year. The Southern Nevada Water Authority said the western slope of the Rocky Mountains would need at least [seven years of normal snowfall to bring southern Nevada out of its 12-year drought](#).

Wildlife: Droughts adversely impact aquatic species: low water levels can [increase water temperature and decrease oxygen levels](#), stressing fish and their food sources instream. Drought-exacerbated wildfires threaten terrestrial species: habitat for the sage-grouse, a chicken-like bird which lives in open sage land, has been subject to widespread fires in [Oregon](#) and [Nevada](#).

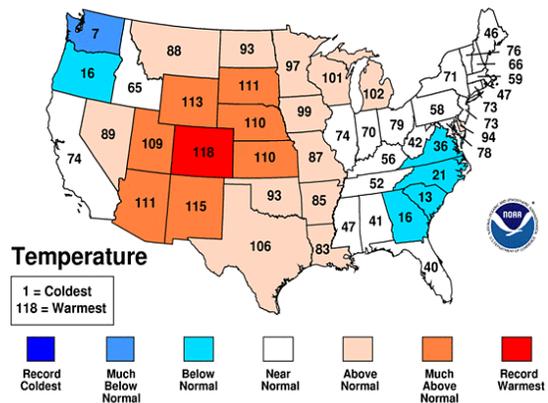
June 2012 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



June 2012 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA

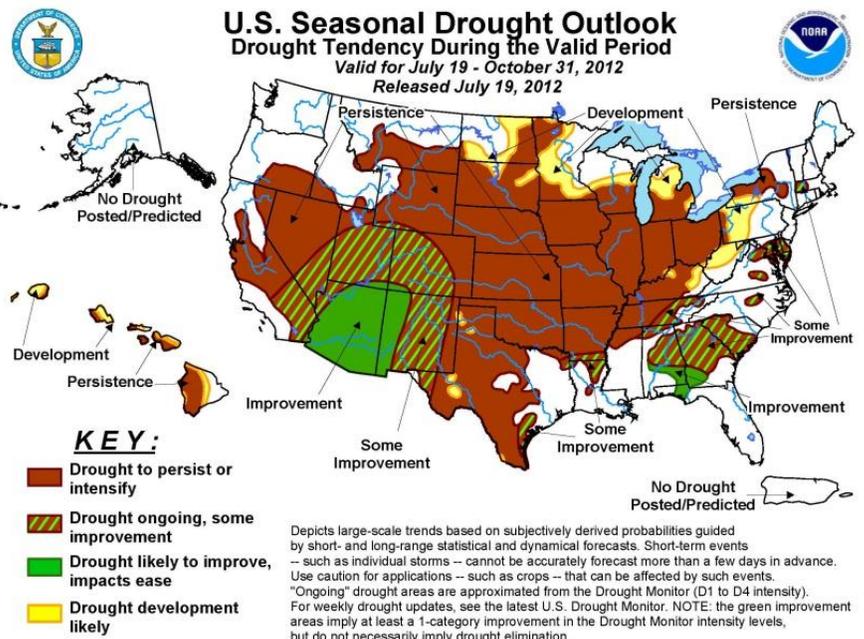


Drought Forecast for July-September 2012

Much of the West will likely experience persistent or intensified drought throughout the summer of 2012. Normal or higher-than-average monsoon rainfall in the Southwest should result in drought improvement for some parts of the region.

Figures 3-5

From top to bottom: Figure 3, Precipitation records for the month of June dating back 118 years. Figure 4, Temperature records for the month of June dating back 118 years. Figures obtained from NOAA's [State of the Climate for June 2012](#). Figure 5 (bottom), [The US Seasonal Drought Outlook](#) for July 19-October 31.



Taking Action on Drought

Governor Leadership

Governors from across the United States are taking action to respond to drought.

- **Drought Disaster Designations:** Governors of 13 WGA states have worked with USDA to designate drought disaster areas in portions of their state. Drought designations raise awareness and allow states to tap into federal funds for drought response.
- **Visits to Affected Communities:** Governors are touring drought-stricken areas to assess impacts and ensure relief is delivered. For example, [Kansas Governor Sam Brownback is leading a multi-week tour](#) of drought-impacted areas across Kansas.
- **Drought Planning and Task Forces:** All Western states have programs or plans to deal with drought. In many states, Governors have established task forces to mobilize state agencies and partners to address drought impacts. For example, see [Governor Martinez's New Mexico drought task force](#).

Federal Programs

Federal agencies are mobilizing to assist communities directly affected by drought.

- **Agriculture:** Assistance to farmers and ranchers has been expedited under [the USDA's new drought designation rule](#). USDA programs, including crop insurance and assistance for livestock losses, are available at usda.gov/drought.
- **Water Supply:** Under the Reclamation States Emergency Drought Relief Act, the [US Bureau of Reclamation](#) can establish temporary contracts to make project water available for drought response and can support conservation, planning and construction activities for drought relief. The [USDA Rural Development program](#) also provides emergency grants for communities suffering impacts to water quality and supply.
- **Natural Resources:** The USDA offers [programs to protect or enhance natural resources](#) and watersheds, including the [Environmental Quality Incentives Program](#) (EQIP) and the [Emergency Watershed Protection](#) (EWP) program.

[A catalog of federal drought response programs](#) is available at drought.gov.

Drought Severity Index by Division
Weekly Value for Period Ending JUL 28, 2012
Long Term Palmer

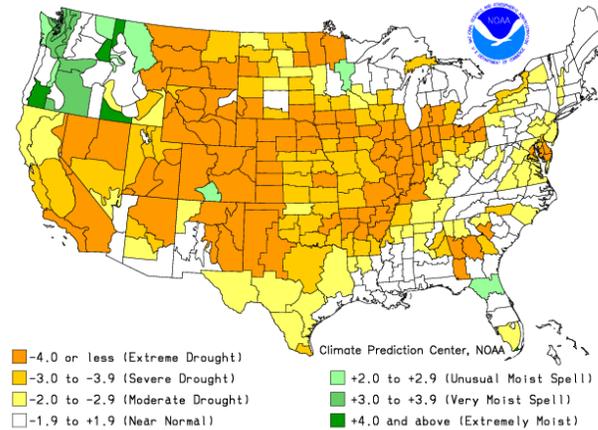


Figure 6

The Palmer Drought Severity Index uses multiple factors to assess long-term drought conditions, including precipitation, temperature, and soil moisture.

Drought Monitoring and Forecasting

The National Integrated Drought Information System (NIDIS) offers up-to-date maps and data on drought conditions on the drought.gov website.

Additionally, state climatologists lead monitoring groups across the West, including efforts in Colorado, New Mexico and Texas. These groups provide local, state, and regional information to the U.S. Drought Monitor.

National Drought Policies

- **NIDIS:** Western Governors were instrumental in passage of NIDIS in 2006, which is currently being considered for reauthorization. WGA can advance Governors' priorities for information or forecasting needs through the reauthorization of NIDIS.
- **Comprehensive Drought Policy:** The Western Governors' Association has [long supported drought preparedness and regional and federal coordination](#) in the delivery of drought response programs. Advance coordination and preparedness can reduce the significant costs of ad hoc drought relief funding.

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