



Why the Snowpack Matters

Large portions of the West rely on [*snowpack as a natural reservoir*](#) to hold winter precipitation until it later runs off as stream flow in spring, summer, and fall. The annual snowpack normally [*provides about a third of the water for California's homes and farms*](#) as it melts into streams, reservoirs and aquifers. Snowpack runoff is critical to the water resources in the western United States and changes in the timing and amount of runoff can exacerbate problems with already limited water supplies in the region.

The largest losses in snowpack are occurring in the lower elevations of mountains in the Northwest and California, as [*higher temperatures cause more precipitation to fall as rain*](#) rather than snow. Moreover, snowpack is melting as much as 20 days earlier in many areas of the West.

After two record dry years and the worry of a third consecutive dry year, the state anticipates that it will only be able to deliver 5 percent of the water that agencies have requested. While many water agencies have multiple sources of water, including reservoirs, groundwater and other local resources, the reduced deliveries could result in water restrictions in certain communities.

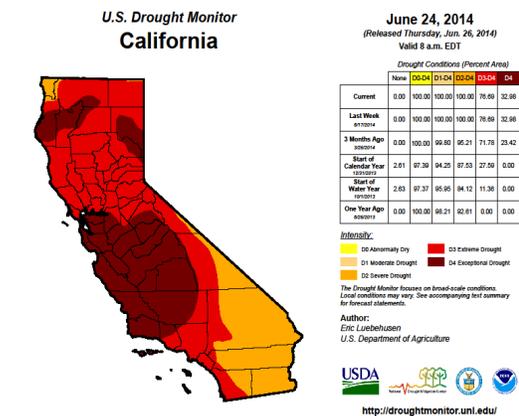
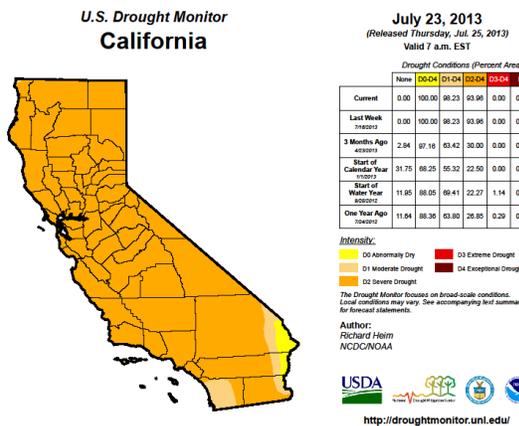
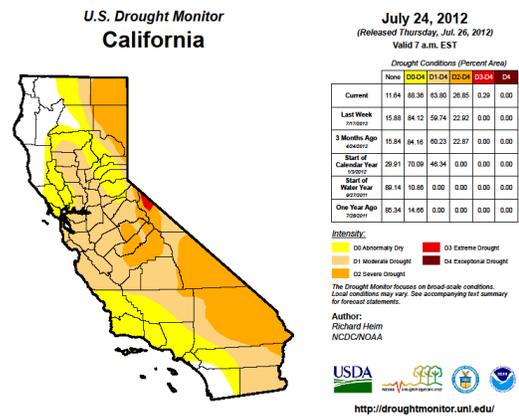
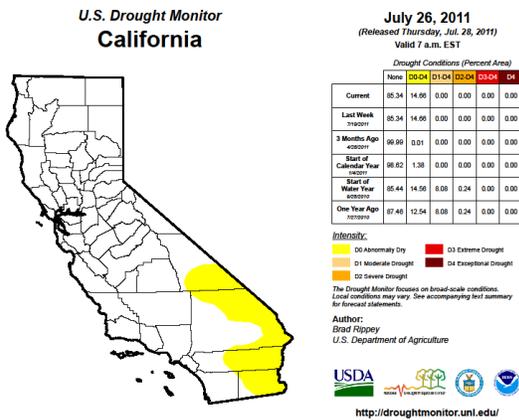


*Satellite images
1/13/2013 &
1/13/2014*

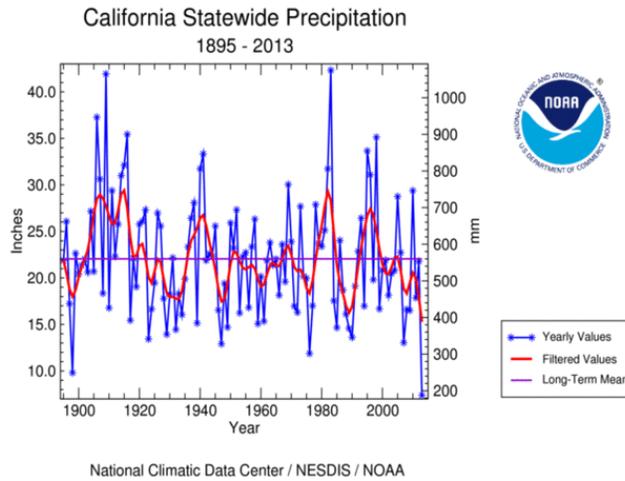
According to the U.S. Drought Monitor (USDM) (www.droughtmonitor.unl.edu) precipitation in California decreased dramatically between 2011 and 2014 which has resulted in less snowpack and therefore less water storage.

In July 2014, the USDM reported that “variable conditions in the north contrasted with ongoing drought elsewhere. In addition, the return of hot weather in California and the Southwest accelerated moisture losses and increased irrigation requirements.

Farther south, California and the Great Basin will most likely have to wait until the 2014-15 Water Year for drought relief. In northern and central California, Exceptional Drought (D4) reflected abysmal 2013-14 Water Year precipitation totals; from northern portions of the Coastal Range to Mt. Shasta, precipitation since October 1 totaled 30 to 50 percent of normal (deficits of 16 to 32 inches). The corresponding Standardized Precipitation Indices (SPI), which helps quantify precipitation in terms of drought and historical probability, are well into the Extreme (D3) to Exceptional (D4) categories. Similar precipitation rankings (D3 or D4 equivalent) are prominent for the past Water Year from San Francisco south to Santa Barbara and east to the Sierra Nevada, including most of the San Joaquin Valley.”



California & Drought



California's Mediterranean climate means that drought is not an unfamiliar sight in California:

- ❖ Since 1987, California has had 13 emergency proclamations (three statewide, two others included more than 19 counties) and three Executive Orders.
- ❖ 1977 was the driest statewide with just 21 percent of average rainfall, 47 of 58 counties declared local emergencies.

A Mediterranean climate is distinguished by warm, wet winters under prevailing westerly winds and calm, hot, dry summers. We typically experience a 'drought' each year from late spring to early fall. These 'drought' periods can last from 4-6 months during the summer without having any significant precipitation.



What can we do?

Water is a critical part of California's way of life. But our water supply is limited. We can help make the most of it by using water wisely every day.

Rethinking the way we use water – both indoors and outdoors – will help stretch our limited supplies and ensure water is there when we need it.

Because the majority of water used at home is used outdoors, even small steps to save water can yield big savings. Little things like fixing a broken sprinkler or making sure that you are running your sprinklers in the cool of the morning can save lots of water. You can conserve even more by shrinking the amount of lawn you have, installing a drip irrigation system or adding a weather-based "smart" controller.

Remember, every drop of water is important. The drought is on--turn your water off.



- Install a water-efficient clothes washer Save: 16 Gallons/Load
- Install a water-and energy-efficient dishwasher. Save: 3 to 8 Gallons/Load
- Run the dishwasher only when full to save water.
- Keep a pitcher of drinking water in the refrigerator instead of running the tap.
- Take five minute showers instead of 10 minute showers. Save: 12.5 gallons with a low flow showerhead, 25 gallons with a standard 5.0 gallon per minute showerhead.
- Turn water off when brushing teeth or shaving. Save: Approximately 10 Gallons/Day
- Water early in the morning when temperatures are cooler. Save: 25 gallons/each time you water.
- Put a layer of mulch around trees and plants to reduce evaporation and keep the soil cool. Organic mulch also improves the soil and prevents weeds. Save: 20-30 gallons/each time you water/1,000 sq.ft.

www.noaa.gov
www.droughtmonitor.unl.edu
www.water.ca.gov

www.water.ca.gov
www.saveourh2o.org
www.ca.gov/drought



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