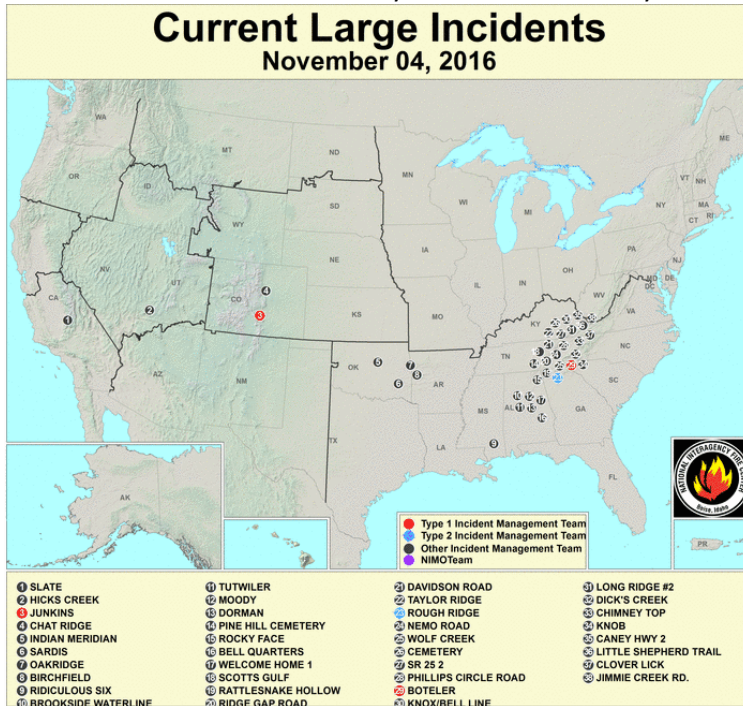


Drought News—Multitude of wildfires engulfing Southeast November 4, 2016

Remember to set your clocks back an hour Saturday night.

Many large wildfires were burning from eastern Kentucky through northern Alabama. [Yesterday](#) there were not even half as many fires as shown today.



State of emergency in eastern Kentucky

Kentucky Gov. Matt Bevin declared a state of emergency due to 38 wildfires burning largely in the eastern part of the state. The fires blackened 3,800 acres in Harlan, Breathitt, Clay, Bell, Knox and other counties, according to the Kentucky Division of Forestry.

Fire restrictions in

- 20 of Louisiana's parishes
- More than one-quarter of Texas' 254 counties
- 76 of Mississippi's 82 counties
- Spencer County, Indiana
- Areas with heavy wildfire activity

30 Pennsylvania counties in drought watch, 4 in drought warning

The Pennsylvania Department of Environmental Protection declared a drought warning for four counties and boosted the number of counties in a drought watch to 30.

Emergency level drought status for 18 additional Alabama counties

The Alabama Office of Water Resources added 18 additional counties to those in emergency level drought. The 18 counties were Autauga, Bibb, Bullock, Elmore, Fayette, Greene, Hale, Lamar, Lee, Lowndes, Macon, Marion, Montgomery, Perry, Pickens, Russell, Sumter and Tuscaloosa.

Extreme drought emergency in Birmingham, Alabama

The Birmingham Water Works declared a stage 4 drought emergency as drought, heat and no rain in the 10-day forecast put the water storage in Lake Purdy in jeopardy through the end of 2016.

Salt water creeping up Delaware River in Pennsylvania

Salty water from the Delaware Bay has crept up the Delaware River to river mile 85, between Chester, Pa. and the Philadelphia International Airport as of Oct. 20, placing the salt front 13 miles further upstream than normal.

Alabama soybeans shattering

Soybean growers statewide have reported that soybean pods were shattering. Soybean pod shattering occurs as a result of hot and windy conditions and low humidity combining to dry the pod walls until they become brittle and break.

Northeast Christmas tree farms largely OK

Christmas tree growers in the Northeast say that drought has not significantly affected their trees. Some of the newly planted trees died, but overall, large trees with well-established roots came through the summer alright.

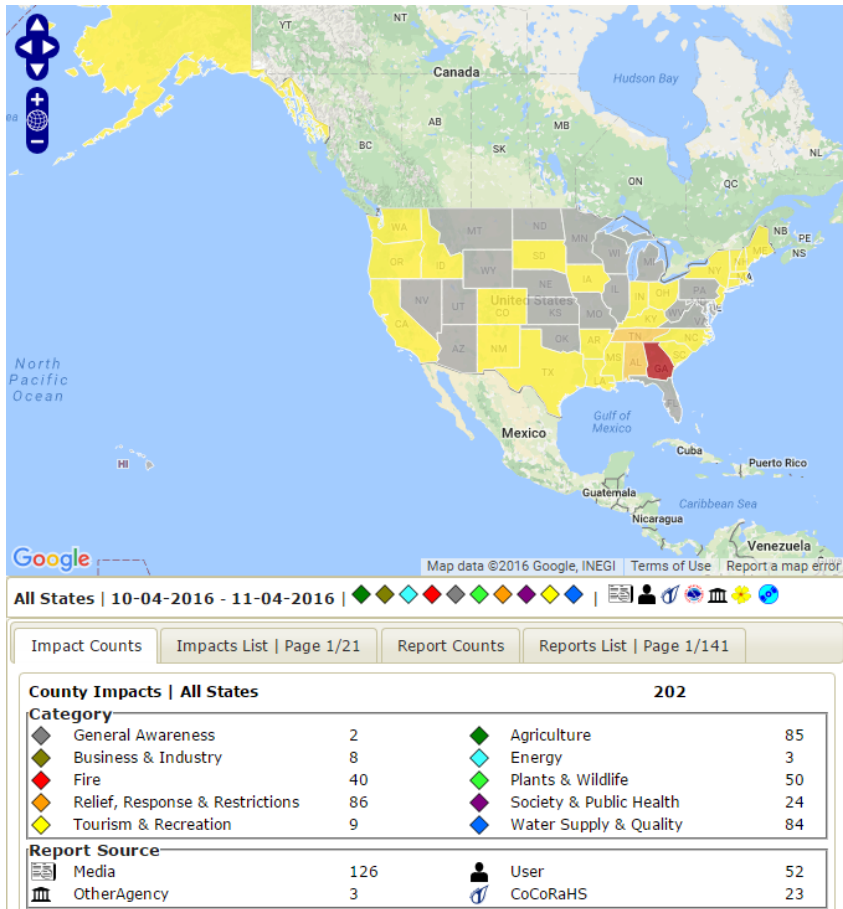
Wheat planting delayed in Georgia, peanut harvest difficult

Drought delayed the planting of winter wheat in Georgia, where the topsoil moisture conditions were 73 percent below normal, according to the USDA National Agricultural Statistical Service. The ground was so dry that farmers cannot use a plow to turn the peanuts, stated a farmer who cultivates land in Lee, Terrell, Sumter and Webster counties. He reported having to irrigate at least twice as much as usual, driving his electricity bill to \$5,000 monthly with his irrigation pivots running nonstop.

Fish, mussels perishing in Southeast drought

Sixty-four Barrens Topminnows were salvaged from a depleted Middle Tennessee stream to be housed at the Tennessee Aquarium Conservation Institute near downtown Chattanooga. In the Cherokee National Forest, native Southern Appalachian Brook Trout were moving to deeper pools as the forests' streams become shallower, slower and warmer. Drought also triggered a mass die-off of mussels in the Clinch River system of northeastern Tennessee and southwest Virginia because water levels have become very shallow in comparison with wetter months.

The [Drought Impact Reporter](#) has 227 impacts for the last 30 days.



Agriculture

[Christmas tree growers: Drought not seriously hurting crop](#)

The Washington Post

Nov 2, **New England**. Christmas tree growers in the Northeast say that drought has not significantly affected their trees. Some of the newly planted trees died, but overall, large trees with well-established roots came through the summer alright.

[Lack of rainfall impacts farmers in south Georgia](#)

Albany Herald (Ga.)

Oct 29, **Southwestern Georgia**. Drought delayed the planting of winter wheat in Georgia, where the topsoil moisture conditions were 73 percent below normal, according to the USDA National Agricultural Statistical Service.

The ground was so dry that farmers cannot use a plow to turn the peanuts, stated a farmer who cultivates land in Lee, Terrell, Sumter and Webster counties. He reported having to irrigate at least twice as much as usual, driving his electricity bill to \$5,000 monthly with his irrigation pivots running nonstop.

[Late rain help salvage grain yields after dry, hot summer](#)

Madison.com (Wis.)

Nov 1, **Ohio**. Corn yields in northern Ohio averaged about 130 to 140 bushels per acre, said Ohio State University professor Peter Thomison. Northern Ohio dealt with drought during much

of June and July, while the southern half of the state enjoyed normal rainfall and better grain yields.

Silage production in Putnam and Henry counties averaged between 22 and 26 tons per acre, considerably lower than the 30 to 32 tons per acre achieved in better years.

A soybean grower in Union County got late summer rainfall which helped his yield. The soybeans averaged just over 50 bushels per acre, but was hoping for 60 bushels per acre.

[Northern Front Range experiencing moderate drought](#)

Denver 7 (Colo.)

Oct 31, **Colorado**. A wheat grower in Roggen in northeastern Colo. was concerned about his wheat having enough moisture to germinate and grow. A lawn care expert also advised homeowners to water grass and trees.

[Soybeans Shattering in Fields Throughout Alabama](#)

Growing Alabama

Nov 4, **Alabama**. Soybean growers statewide have reported that soybean pods were shattering. Soybean pod shattering occurs as a result of hot and windy conditions and low humidity combining to dry the pod walls until they become brittle and break.

Business & Industry

[Drought edges in on outdoor businesses](#)

BlueRidgeNow (Hendersonville, N.C.)

Nov 3, **Hendersonville, North Carolina**. Outfitters in western North Carolina have seen slightly fewer customers and have taken fewer people on guided and rafting trips. Fishing was extremely difficult with water levels being so low, said a store manager in Asheville.

Fire

[Another parish orders burn bad as state's fire danger increases](#)

KTBS-TV ABC 3 Shreveport (La.)

Nov 3, **Louisiana**. At least 20 parishes in Louisiana have adopted burn bans in response to the dry conditions and elevated fire risk. Some of the counties where open burning was prohibited were Allen, Avoyelles, Beauregard, Caldwell, Concordia, Franklin, Grant, Jefferson Davis, LaSalle, Madison, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Richland, Sabine, Winn, Union and West Carroll.

The wildland firefighting crews belonging to the Agriculture and Forestry Department were prepared to assist with blazes, if needed.

[Burn Ban in Effect for Spencer County](#)

TriStateHomepage.com (Henderson, Ky.)

Nov 2, **Spencer County, Indiana**. Spencer County commissioners instituted a countywide burn ban due to drought conditions.

[Burn bans remain, summer weather to pass](#)

The Clarion-Ledger (Jackson, Miss.)

Nov 3, **Mississippi**. Seventy-six of Mississippi's 82 counties had bans on outdoor burning, due to the drought and upcoming cold front that will bring strong winds.

[Drought and wildfires plague a region typically known for its 'rainforest-like' climate](#)

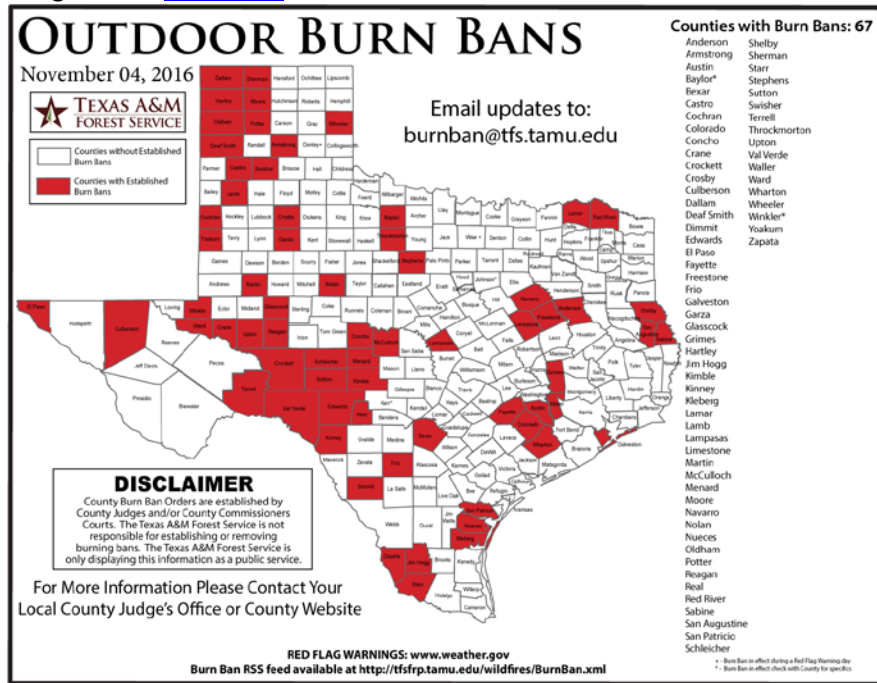
The Washington Post

Nov 2, **Southeastern U.S.** Numerous wildfires were roaring in the Southeast, charring a section of the country that is typically greener and lusher than it is at present. Much of this part of the U.S. saw poor rainfall and warmer than normal temperatures through the summer and into the fall, which have set the stage for the fire danger and sizeable fires that continue to burn.

[East Texas Burn Bans](#)

KNUE 101.5 (Tyler, Texas)

Nov 1, **East Texas.** A few counties in eastern Texas —Navarro, Limestone, Freestone, Anderson, Grimes, Shelby and Sabine—have implemented fire restrictions. Texas A&M offers a statewide image of the [burn bans](#) in effect.



[Florida Forest Service Alerts Public to Heightened Wildfire Danger](#)

Southeast Ag Net

Nov 1, **Florida panhandle.** Florida Commissioner of Agriculture Adam H. Putnam and the Florida Forest Service warned the public to exercise caution with all outdoor fires, due to the increased fire danger and fire incidence in many parts of the state.

[Kentucky wildfires prompt emergency declaration](#)

The Courier-Journal (Louisville, Ky.)

Nov 3, **Kentucky.** Kentucky Gov. Matt Bevin declared a state of emergency due to 38 wildfires burning largely in the eastern part of the state. The fires blackened 3,800 acres in Harlan, Breathitt, Clay, Bell, Knox and other counties, according to the Kentucky Division of Forestry. The biggest blaze was near Pine Mountain, where difficult terrain made firefighting challenging.

[No bonfires, no leaf burning until further notice in Clarksville](#)

The Leaf-Chronicle (Clarksville, Tenn.)

Oct 31, **Tennessee**. Clarksville, and a number of other cities including Brentwood, Spring Hill, Smyrna, LaVergne, Mount Juliet and all of Rutherford County, have prohibited outdoor burning, due to the hot, dry weather.

General Awareness

[Birmingham inching towards drought record](#)

Alabama Public Radio (Tuscaloosa, Ala.)

Nov 2, **Birmingham, Alabama**. Birmingham was closing in on the record of 52 days without rainfall and was at 44 days as of Nov. 2.

[Despite Record Flooding, Acadiana is Now Under a Drought](#)

KATC.com (Lafayette, La.)

Nov 2, **Acadiana, southern Louisiana**. Although Acadiana experienced record rainfall in August and flooded extensively, the area has also entered drought just a few months later.

[Drought worsening in Alabama, killing plants, drying creeks](#)

Moulton Advertiser (Ala.)

Nov 3, **Alabama**. Alabama was enduring a drought that was not so bad when compared to other long-term droughts of six months or more, but when compared to shorter-term droughts lasting around two months, "this is a once in a 50- to 100-year event," said John Christy, state climatologist.

[Monitor: Drought ends in nearly one-fourth of California](#)

Associated Press

Nov 3, **California**. Northern California received heavy rains in October, leading to one-quarter of the state escaping drought. Water officials, however, point out that three-fourths of the state remained in the five-year drought.

[Study blames low 2015 Western snowpack on high temperatures](#)

KXRM-TV Fox 21 News (Colorado Springs, Colo.)

Oct 31, **West Coast**. The low snowpack levels in 2015 were the result of warm temperatures, not drought, with greenhouse gases playing a large role, according to research from Oregon State University.

[Perspectives on the causes of exceptionally low 2015 snowpack in the western United States](#)

Just so you know.... (not necessarily drought-related)

[Climate Change? Scientists Beware "The Blob," Low Sierra Snowpack](#)

Fountain Valley Patch (Calif.)

Oct 31. The menacing Blob has returned to the Northern Pacific, which may have contributed to warm winter temperatures and snow drought seen last winter.

[New owners of the longest World Series drought? Indians](#)

Chicago Tribune

Nov 3. Congrats to the Chicago Cubs for ending their 108-year drought! As for the Indians, hang in there—maybe next year...

Plants & Wildlife

[Drought brings on pine beetle infestation](#)

WALB-TV NBC 10 Albany (Ga.)

Nov. 2, **Southwestern Georgia.** Ips engraver beetles were drawn to drought-stressed pine trees in southwestern Georgia, said Georgia Forestry Commission Rangers, who were monitoring pine trees daily. The beetles attack and kill drought-stressed and weakened pine trees.

[Drought means a stunningly clear Gulf, happy fishermen, and bad news for oyster lovers](#)

Huntsville Times (Ala.)

Nov 1, **Mobile Bay, Alabama.** Low flows in Alabama's rivers have allowed salty water to push further northward into the Mobile-Tensaw Delta, permitting saltwater creatures, like blue crabs, mullet and shrimp to appear in areas where they are not normally seen. Shrimp, too, were moving further upstream to nearly 20 miles north of the U.S. 98 Causeway, whereas they are typically found below the Causeway at this time of year.

Fishermen have even been able to catch red snapper under the coal docks of McDuffie Island in the past week. Red snapper is an open ocean fish that would not normally be found so far north in Mobile Bay, underscoring the extremely high salinity.

Oysters were expected to suffer greatly, due to the high salinity, because oyster drills thrive in the salty water. During the 2007 drought, most of the oysters at Cedar Point, the state's primary commercial reef, were killed by oyster drills and had not recovered yet in 2016.

Water clarity and color along Alabama's coast improves with less fresh water flowing downstream, a change that coastal fishermen, beach goers and scuba divers enjoy.

[Drought prompts Tennessee Aquarium to launch rescue of endangered Barrens Topminnows](#)

WTVC NewsChannel9 (Chattanooga, Tenn.)

Nov 3, **Tennessee.** Sixty-four Barrens Topminnows were salvaged from a Middle Tennessee stream to be housed at the Tennessee Aquarium Conservation Institute near downtown Chattanooga.

In the Cherokee National Forest, native Southern Appalachian Brook Trout were moving to deeper pools as the forests' streams become shallower, slower and warmer.

Drought also triggered a mass die-off of mussels in the Clinch River system of northeastern Tennessee and southwest Virginia because water levels have become very shallow in comparison with wetter months.

Relief, Response, & Restrictions

[DRBC: Lower Delaware Drought Warning Becoming Likely](#)

PA Environment Digest (Harrisburg, Pa.)

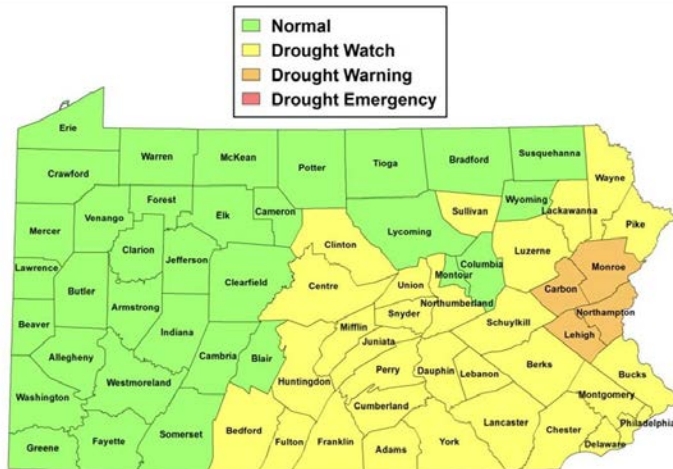
Oct 31, **Pennsylvania.** As storage levels in two reservoirs in the Schuylkill and Lehigh river valleys of Pennsylvania fall, the Delaware River Basin Commission may soon announce a lower basin drought warning.

[Drought warning declared in four counties 30 more under drought watch](#)

WPMT Fox43.com (York, Pa.)

Nov 3, **Pennsylvania.** The Pennsylvania Department of Environmental Protection declared a drought warning for four counties and boosted the number of counties in a drought watch to 30.

The [Pennsylvania DEP shows counties' current drought declaration](#) status.



[Emergency level drought declared in 18 more Alabama counties](#)

AL.com (Birmingham)

Nov 1, **Alabama**. The Alabama Office of Water Resources added 18 additional counties to those in emergency level drought. The 18 counties were Autauga, Bibb, Bullock, Elmore, Fayette, Greene, Hale, Lamar, Lee, Lowndes, Macon, Marion, Montgomery, Perry, Pickens, Russell, Sumter and Tuscaloosa.

[Alabama Drought Declaration](#) from the state Office of Water Resources

[Heightened Drought Response Coming Soon, Gov. Deal Says](#)

WABE 90.1 FM (Atlanta)

Nov 3, **Georgia**. Georgia's Gov. Nathan Deal said that level 2 drought restrictions will take effect very soon.

[In California, a \\$350 million social experiment over lawns](#)

San Francisco Chronicle (Calif.)

Oct 30, **California**. California water agencies were looking back on the lawn removal rebate programs and wondering if it was truly worth the expense. Gov. Jerry Brown's goal was the removal of 50 million square feet of lawn, and the state offered some funds toward the goal, but local water districts paid the lion's share of the rebates.

Society & Public Health

[Drought Impact on Mississippi](#)

WTVA (Tupelo, Miss.)

Oct 31, **Mississippi**. Many Mississippi homes exhibited foundation and wall cracks as drought shifts the state's soils. Homeowners were urged to wait for rain to see if the cracks close once moisture returns.

Water Supply & Quality

[As water sources dry up, Ga. city warns of impending ban](#)

WXIA-TV/ 11Alive (Atlanta, Ga.)

Nov 2, **Villa Rica, Georgia**. Villa Rica residents were asked to end all outdoor watering as Lake Fashion, the city's reservoir, was three feet below normal. The community of nearly 14,000 people may have 30 to 40 days' worth of water remaining.

[Birmingham Water Works declares Stage 4 Extreme Drought Emergency](#)

WBMA ABC3340 (Birmingham, Ala.)

Nov 4, **Birmingham, Alabama.** The Birmingham Water Works declared a stage 4 drought emergency as drought, heat and no rain in the 10-day forecast put the water storage in Lake Purdy in jeopardy through the end of 2016. Surcharges for profligate water use will be set at 400 percent starting Dec. 4.

[Californians using more water again](#)

The Press-Enterprise (Riverside, Calif.)

Nov 2, **California.** Californians' water conservation efforts in September yielded a 18.3 percent reduction in water use, compared to September 2013. During September 2015, conservation amounted to 26.2 percent, but mandatory restrictions guided water use as the public was directed by Gov. Jerry Brown to curb water use by at least 25 percent. Given that water use had increased by 8 percent, the State Water Resources Control Board was considering bringing back mandated water restrictions.

[Carolina drought grows worse. Residents asked to conserve water and energy.](#)

The Herald (Rock Hill, S.C.)

Nov 1, **North and South Carolina.** Worsening drought conditions led the Catawba-Wateree Drought Management Advisory Group to move to Stage 1 of the low inflow protocol. Catawba River Basin residents were asked to conserve water and electricity. Stage 1 is the second level of five in the low inflow protocol.

[Charlotte escalates to Drought Stage 1](#)

WBTV-TV Channel 3 (Charlotte, N.C.)

Nov 1, **Charlotte, North Carolina.** Charlotte Water asked residents to voluntarily conserve water because the Catawba Wateree Drought Management Advisory Group changed the river basin's drought stage to one rather than zero. The cities of Concord, Kannapolis and Harrisburg have also been urged to conserve water.

[Drought causing salty water to creep farther up Delaware River](#)

NJ.com

Oct 28, **Pennsylvania.** Salty water from the Delaware Bay has crept up the Delaware River to river mile 85, between Chester, Pa. and the Philadelphia International Airport as of Oct. 20, placing the salt front 13 miles further upstream than normal, according to the Delaware River Basin Commission.

[Severe drought: City preparing to tap onto French Broad](#)

BlueRidgeNow (Hendersonville, N.C.)

Nov 3, **Hendersonville, North Carolina.** Hendersonville officials hope to avoid mandatory water restrictions by drawing water via a temporary pump from the French Broad River. The governor must declare a state of emergency for the city to be able to use an emergency water line to the French Broad River, and the declaration was expected soon.

[Study: Next US president must act fast on Colorado River](#)

Associated Press

Oct 31, **Colorado River Basin**. The next U.S. president will have to oversee efforts to keep water flowing from the Colorado River in the Southwest by addressing contingency plans and extending water-use agreements.

[Water districts dealing with drought, demand](#)

Knoxville News Sentinel (Tenn.)

Nov 1, **Eastern Tennessee**. Many water districts in eastern Tennessee were asking customers to reduce water use as drought persisted. Water demand has been higher than usual because the lack of rain and higher than normal temperatures prompted farmers and homeowners to irrigate more than usual.

International

[Biggest Instant-Coffee Exporter Shuns New Sales as Drought Bites](#)

Bloomberg

Nov 1, **Brazil**. Worsening drought has led Brazil's robusta coffee bean growers to hold off signing new export contracts because there is a shortage of robusta beans.

[Cashew Prices Are About to Go Nuts](#)

Bloomberg

Oct 31, **Vietnam**. Vietnam's worst drought in a century has cut production of many of the country's agricultural exports like rice, black pepper, coffee and seafood. The 2016 cashew harvest was down 11 percent, while domestic prices rose as much as one-third to an all-time high.

[South African dams could take up to five years to recover from drought](#)

Reuters

Nov 1, **South Africa**. Water rationing may be a possibility as authorities say that South Africa's dams could need up to five years even with normal rainfall to recover from the severe drought.

[South Africa Drought 'Recovery' Forecast Even as Dam Levels Drop](#)

Bloomberg

Nov 2, **South Africa**. South African weather forecasters are expecting an "extended period of recovery" to the region's drought. Extreme wet conditions were highly favored for the summer months of November through February.