



California's Water Crisis Is Just the Beginning for Water Woes in the U.S.

By [Susan J. Marks](#), [AlterNet](#). Posted November 13, 2009.

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Legislators silenced some of the outcry over water in California last week with the passage of a sweeping water-reform bill.

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Many Californians blame their water problems on drought, the Endangered Species Act (the "farmers vs. fish" debate) and inadequate infrastructure.

Others point to mismanagement, overallocated water rights and a lack of conservation. The reasons, though, behind the state's water crisis, and that which threatens the rest of the country and many places around the globe, go well beyond that.

Fresh water, once considered Earth's infinite, simply is not inexhaustible. Demand has soared, and supplies dwindled. Factor in climate change and drought, and the result is shortage and conflict over what's left.

The contentious battles plaguing California over the past year -- marches, protests, dried-up fields, demands for massive aid, and more -- will spread across the country. Sooner rather than later our once-abundant water taps could run dry, and the water battles to come will make the health care debate seem like a tea party.

Why such doom and gloom? Water is the new oil, only there is no alternative. Every living being on this planet needs water to survive. Each of us has a vested interest in this elixir of life.

Complicating the equation, no one wants to relinquish his or her share. California approved a controversial water reform, but stay tuned. Californians still thirst for diminishing supplies, as do other areas of the country.

Beyond drought, fish and canals, overpopulation exacerbates our water troubles. The U.S. population is up more than 70 percent in the last 50 years. With that boom comes huge demands for water, and not only to drink. It takes water to produce and deliver our energy, grow our food, manufacture our goods, mine our minerals, and even to deliver the water we drink.

Populations, too, have moved to where the water is not. Arid cities like Albuquerque, N.M.; Phoenix; Tucson, Ariz.; Dallas; Denver and Las Vegas have limited water supplies.

In a paper written in February 2008, researchers at the Scripps Institution of Oceanography at the University of California predict a 50 percent chance that by 2017 Lake Mead, the primary water supply for Las Vegas, will hit "dead pool" status. That's when the lake's water level drops below the intakes for Hoover Dam, energy production ceases and no more water is released downstream. ("When Will Lake Mead Go Dry?" [\[PDF\]](#) by Tim Barnett, a research marine physicist, and David Pierce, a climate scientist.)

"It's not a question of if it's going to happen; it's when," says Pat Mulroy, general manager of the Southern Nevada Water Authority in the new book, *Aqua Shock: The Water Crisis in America* (Bloomberg Press).

Our nation's water woes don't end with shortages, either. Pollution fouls much of our water and waterways -- naturally occurring pollutants such as arsenic, uranium, radon, radium and selenium, as well as man-made ones. The latter include industrial and human wastes, mining and agriculture runoffs and storm water runoff. The *New York Times* and the *Associated Press* have reported on the fertilizers, pharmaceuticals and other scary substances in our water.

How we develop our cities, towns and communities compounds the water crisis.

Look outside, especially in urban areas, at the acres of concrete, parking lots, buildings and sidewalks. All pave out and over Earth's natural ability to replenish and, to some extent, clean up its water. Sewers and downspouts connected to sewers cause water to run off and away instead of soaking into the ground.

We overuse water, too. The United States consumes a mind-boggling 410 billion gallons every single day. Individually, Americans use 80 to 100 gallons per person daily for in-home personal use, according to the latest estimates from the U.S. Geological Survey.

Of course, as with everything else to do with water, the numbers are controversial and vary depending on who is counting, how and where they're doing so, and so on.

Laws -- old and new -- or their absence, add to the water fray. California's lawmakers tried to address some of what they considered legal shortcomings in their state, but plenty more legal issues clog the system there and elsewhere. Local, state, regional and national water laws tend to be antiquated and outdated, convoluted, confusing and open to broad interpretation.

Adding to the legal morass, more than 20 federal agencies have some hand in water issues, according to Mike Hightower, water expert, environmental engineer, and Distinguished Member of the technical staff of Sandia National Laboratories, part of the U.S. National Nuclear Security Administration.

With about 250 transboundary rivers globally, [water is a national security issue](#), too.

Old and antiquated water infrastructure creates still more problems. Today's water-treatment plants weren't built to handle 21st century pollutants, and often don't. The end result is more than H₂O in drinking water.

And many of the 700,000 miles of water-delivery pipes that crisscross beneath our cities, towns and fields are worn out, crumbling or clogged with years of buildup. Some peg the price tag to fix this mess at up to more than a trillion dollars. (Read that as a major job generator of the 21st century!)

How divisive is the issue of water?

Who in Las Vegas or Phoenix, or anywhere else for that matter, is willing to give up their backyard swimming pool or abandon a lifestyle centered around golf on verdant courses in the middle of deserts? Which farmers who grow water-intensive crops are willing to rethink what they grow in arid climates? How many people will sit back quietly as water prices soar, as costs of developments, housing, goods and services skyrocket to accommodate water priced on its value? These are all questions that must eventually be addressed and answered.

As the resource becomes scarcer, it could be time to rethink how the nation uses its water, says Colorado State University Professor Steve Mumme, an expert on the Colorado and Rio Grande rivers.

"We must think more carefully about how we need to use this resource -- not how we want to use this resource," Mumme says in *Aqua Shock*. It's as much about lifestyle as it is economics, he adds. The question is whether we can afford to sustain the lifestyle.

All this doom and gloom, though, does have some bright spots.

Solutions start with recognizing the problems, like in California, Congress is also trying to take its own steps as it discusses water law reforms. Many communities, organizations and individuals -- public and private -- across the country are working to do something, too.

Still many others resist. It's no one single problem, and there's no single silver bullet either. It's time to wake up to the realities of our planet's water supply in crisis. We're out of alternatives.