

# Drought USA!

The Catastrophic Drought in California and How Israelis are Trying to Solve the Problem

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California has been plagued by a severe drought for several years now on a scale unseen in recent memory. The earth is crumbling, underground wells are drying up, rivers and lakes are emptying and the authorities have implemented water rationing measures (e.g. limiting showers). If the drought doesn't end soon, it could create an agricultural crisis of unprecedented national proportions and lead to a drastic increase in food prices, among other potential life-altering repercussions. Have the Israelis come up with a possible solution to forestall such a catastrophe? Read on....

SERIOUS DROUGHT  
HELP SAVE WATER



The *Yamim Noraim* have come and gone. Starting from the first day of *Selichos* through the end of *Simchas Torah*, we made several requests for rain. When the *Kohen Gadol* entered the Holy of Holies on *Yom Kippur*—the holiest person in the holiest location on the holiest day on the Jewish calendar—he offered a brief prayer on behalf of the entire nation. One of the few specific requests he made was for rain. On *Shemini Atzeres* we again devoted an entire section of our prayers to the supplication for rain to come at the right time.

We tend to take rain for granted. Only when it fails to rain do we realize how crucial it is. Now, an epic drought has hit the state of California, affecting the daily lives not only of people on the West Coast but those in the



It is hard to recognize that this was once the site of California's large Shasta Lake.



California farmers warn Americans of what awaits them if the farmers lose the water left for them.

Northeast as well. We tend to associate the word “drought” with Third World countries or the distant past. Now, however, the entire United States is threatened by the effects of this severe drought.

## Drought in Our Times

The giant sequoias are a renowned family of redwood trees, the tallest and possibly most beautiful trees in the world. They are also counted among the oldest living things on the planet. There is only one other species capable of challenging the sequoia’s advanced age, and it does not begin to compare to the beauty and majesty of the sequoia.

Some sequoias are so large and imposing that they have been named after legendary American generals, including General Sherman, General Grant and others. They can achieve a height of 300 feet, making them as tall as a 30-story building! Some are estimated to be 3,000 years old or more.

These trees were granted special powers to survive the various hazards that destroy millions of trees around the world annually. Be it plant diseases, wildfires, insects or powerful storms, sequoias have survived them all. Thanks to their thick bark, deep roots and towering branches, the sequoia has thrived for thousands of years unfazed. Until now.

For the first time in their history, a natural disaster threatens the continued existence of the massive sequoia forests.

Wooden giants that they are, sequoias must drink copious amounts of water daily to live. It is estimated that a single sequoia sucks between 500 and 800 gallons of water from deep beneath the earth *daily!* That is one of the reasons why the only place sequoias are found naturally is in Northern California. Now, with California hit by a historic drought, there is serious concern that the sequoias’ supply of water will soon run out, leaving them to die off one by one.

Concerned researchers are studying the trees and observing them. They are clearly shedding their leaves much faster than



Before: Part of California's reservoir at Lake Oroville in 2011.



After: The same area of Lake Oroville in August 2014.

normal. After five years of drought, scientists are wondering whether the ancient trees may finally be brought down by an invisible enemy: water shortage.

Just talk of such a possibility underscores the scope of the extraordinary catastrophe affecting America’s most populous state. If there is discussion about trees that have survived all sorts of difficulties for millennium succumbing to the drought, then we must be talking about a drought such as the region has not seen in at least 3,000 years!

This much is certain: California is facing its worst drought in recorded history.

## America’s Agricultural Headquarters

When California Governor Jerry Brown declared a water emergency last April, it was not the first time. In fact, California is not the only state where water emergencies are a common concern. Even in the wetter New York we hear discussion about shortages from time to time. This is particularly true in upstate New York where many cities are not served by reservoirs and rely on underground sources for their supply.

This time, though, California is bordering on panic. The last three years have been the driest on record, but it appears that 2015 will break all previous records for water shortfalls. Experts believe that even with the heavier than usual rainfall anticipated during the coming winter, based on the stronger than usual El Nino weather system (this a system of warm weather that strikes

the Pacific once every few years and greatly affects the entire region), there will still not be enough rain to satiate the parched state.

Brown’s declaration means that all California residents must implement drastic limitations on their water usage. Each municipality in California must reduce its water consumption by a mandated percentage. In particular, the farmers who make up the state’s massive agricultural industry must develop a plan on how to cut back on their water.

California boasts the ninth largest economy in the *world!* The state is especially proud of its extraordinary role in technology. Its famous Silicon Valley in Southern San Francisco is the world’s oldest and largest technology region, attracting inventors and students from across the globe. As much as 58% of California’s economy is concentrated in the service industry, which includes technology, finance, real estate and more.

Only 1.5% of California’s economy is based on agriculture. Nevertheless, the state is so large and its climate so favorable for certain types of produce that this small percentage still makes California’s agricultural industry the largest of all 50 states!

Check out the following statistics: 97% of America’s plums grow in California, as do 97% of the kiwis, 99% of the walnuts, 95% of the celery, 95% of the garlic, 89% of the cauliflower, 71% of the spinach, 69% of carrots, not to mention other fruits and vegetables.