Water… Or, the Lack Thereof

The Los Angeles fires that have started out 2025 have capture the attention of just about everyone. As of this writing, over 12,000 structures have burnt and 25 people are confirmed to have been killed. The disaster is apparently far from over though, with fresh winds coming to fan the flames again.

One of the rumors that has come out of these fires is that firefighters are being forced to work with one hand tied behind their back, as they are trying to fight the fire in the midst of water shortages. Our firefighters' whole battle plan is based on using large amounts of water to cool the fire, make the fuel too wet to burn, and keep oxygen from getting to that fuel. But without water, those same experts could be left to fighting the fire with much more rudimentary methods, like using picks and shovels.

The fires they are battling are so extensive that water alone isn't enough to fight them. I'm not in California, so I have little trustworthy information to go on; but based on what I know of fighting forest fires, the firefighters are probably trying to use containment, more than putting out fires in individual homes and other buildings.

Containment means putting barriers in the way of fires, that the flames cannot jump over. Generally speaking, this requires a wide enough area of non-flammable material, such as asphalt, water or bare ground, that the winds can't blow sparks across it. In the forest fires we used to deal with, bulldozers would clear swaths of vegetation 50 feet wide to contain fires. Considering that they've had 100 mile-per-hour winds, that would have to be a pretty wide. A two-lane street wouldn't be enough. It would probably take a divided highway, after the firefighters burnt off the vegetation in the median, with a controlled burn.

But this is California we're talking about; the land where trees and smelt (small fish) are more important than people and their homes. You can be sure that if some fire chief started a controlled burn to clear those medians and create a fire break, the local news media would be calling for his or her head.

While it is easy to get political about this, that may not be the answer. Yes, I'd say that California's politicians have mismanaged water; but even if they hadn't, I don't think the situation would have been any better. The city's infrastructure; specifically, the water mains that feed fire hydrants, can't handle the volume of water needed to fight that many fires at once. On top of that, trying to keep the water tanks those water mains receive their water from would be impossible. It's just too big a problem for the infrastructure to handle, no matter how good the firefighters are.

So, where does this leave the people of California? Put another way, where would this leave any of us, if our cities were faced with the same sorts of fires, in the same sort of wind conditions, without rain?

To understand this, we need to consider that the fire hydrants receive water from the same place that residents, businesses, and industry get it from, the municipal water system. So, if the hydrants don't have enough water or water pressure, then neither does anyone else. Granted, many of those people have been ordered to evacuate; but if they didn't follow those orders or they lived outside the evacuation zone, they're at home with little to no water available to them.

This is the type of risk we all face, every day of our lives. Don't get the idea that just because you don't live in California, the same thing couldn't happen where you live. While California has more than their fair share of wildfires; any wildfire is so intense that typical water infrastructure

isn’t enough to fight the fire.

What this boils down to is one more reason why we can’t trust our cities to provide even the most basic needs. No matter how good things are during normal times, it is no indication of how they will be during the hard times. As we’ve seen in LA, something as commonplace as a fire can overwhelm the city’s water infrastructure, no matter how much money was invested in it.

Of course, we all know that water is one of our top survival priorities and that we must be prepared to provide water for ourselves and our families, either out of our stockpile or harvesting it from nature and purifying that which we harvest. My concern is that I don’t think most prepping families are as prepared to harvest and purify water as they think they are.

The biggest problem here is volume. The “gallon of water per person, per day” standard that exists in the prepping community is fine, if all you want to do is drink your 8 eight-ounce glasses of water per day and cook your food. But you’ll have to forget about washing the dishes, personal hygiene, keeping your home clean and washing your clothes. That might work for a few days; but if you ignore those things for more than that, you’re highly likely to fall victim to disease.

The other volume issue that I see is just how much water do you think you can harvest from nature anyway? If all you’re talking about is that gallon of water per person, per day, you can probably do it. But what about harvesting five gallons of water per person, per day, or even ten? Those are much more realistic figures, even if we leave out gardening. If you’re growing your own food, that number goes up by quite a bit.

The answer that most preppers have to their water needs is “No problem, I’ve got rainwater capture.” That’s good; but is it enough. That depends largely upon the part of the country you

live in. Rainwater capture isn't doing those people in southern California any good right now, even if they have it. There's no rainwater to capture.

Most preppers use 55-gallon "blue" drums for their rain barrels, connecting anywhere from two to four of them together. So, assuming a best-case scenario, where they have four barrels together and those four barrels are full. Just how long is that water going to last? For a family of four, using five gallons of water per person, per day, that's a whole five-and-a-half-days' worth of water; that's it. Unless it rains during those days they are using that water, filling their barrels back up, they're going to be out of water.

There are places in the country where that's not an issue; where they receive rain that often. But by no means does that apply to the whole country. There are large parts of the country where it can go three or four months without rain. All the rain that those people get comes in just a few months. Where could they possibly store enough water to get through the rest of the year, assuming they get enough rainfall in the few months it does rain.

This is why we can't expect to get by on just one means of water harvesting. Yes, go ahead and build that rainwater capture system. Let it be your primary water harvesting system, if you want. But don't expect it to be everything you need, providing all your water, all the time.

The question then becomes, what should you use as a secondary means of harvesting water? Answering that question depends a lot on what you have available to you. If there's a canal running behind your home, then that's an obvious water source. But I'm not that fortunate. Not only isn't there a canal behind my home; but there aren't any canals in our town whatsoever.

Be sure to do a full inventory of all potential water sources

around your home, especially those which will continue to run, even when the infrastructure breaks down. The local swimming pool is a water source; but it’s only going to last as long as it takes your neighbors to find it and haul that water home.

This leaves us with only one true guaranteed water source that we can depend on… water wells. I realize that putting in a well is an expensive proposition; but if you want to have a source of water that you can depend on all year long, that’s the way to go. Just make sure that they put the well in deep enough that it goes past the salty, brackish surface water, as well as going a good ten or fifteen feet into the sandy layer where they find the good water. There’s always a possibility of that subterranean water level dropping, as is happening with some of our aquifers. If it does drop, you’re still going to need water.

I doubt there are many people in Los Angeles that have a water well in their backyard. But I can tell you this – the few that do are in better shape than anyone else. Not only do they have abundant water, when everyone else is out; but they also have water to wet down their home and property, protecting it from any stray sparks that come their way.