

World Water Day 2015



March 22 is World Water Day. World Water Day was instituted in 1993 by the United Nations General Assembly to recognize the worldwide problem of water sanitation and promote the development of sustainable practices where water usage is concerned. It's easier to get a cell signal than it is clean water and not just in the western world. In

India for example, almost 2/3rds of the population doesn't have access to proper sanitation or clean water. That equates to 806 million people. The number of cellphones in India is estimated at about 971 million. Worldwide, 1 in 5 deaths is directly related to unsafe drinking water. That's about 2300 people per day and it's estimated that approximately 1400 of those are children.

It probably isn't surprising to hear that some of the places in most desperate need of clean water are India, Chad, Bangladesh and Afghanistan but we have water problems in the US too. Many places are forced to boil water after a natural disaster, such as an earthquake or hurricane but there are some states where water quality is suspect all of the time. In late 2013, 7,000 gallons of a toxic chemical was leaked into the Elk River in West Virginia. More than 300,000 people were without water for almost two weeks and there have been several inquiries since then as some still find the quality of their water questionable. Just a few months ago 6 people were indicted on charges related to negligence and also trying to cover this crime up and West Virginia residents are still trying to get a definitive answer as to whether their water is safe or not.

Water quality is not the only water issue we are grappling with in the US. Lack of water is also a problem. California has been in a severe drought for the better part of four years. An OpEd article appeared in the Los Angeles Times with the headline, "California has about one year of water left. Will you ration now?" That may be a slight exaggeration but there is no denying the fact that California's reservoirs and ground water supplies are at critical levels. In fact the entire southwestern region of the United States has been going through prolonged drought periods.

Sure boiling water and rationing may be inconvenient but imagine that the nearest source of water wasn't in the tap in the next room but 4 miles away. Imagine every day you get up early and the first thing you do is get up and walk 4 miles to a stream and then walk home 4 miles carrying 40 pounds of water. It is estimated that nearly a billion people, mostly women, in the developing world make this trek daily. This arduous quest for water everyday makes little more than subsistence possible.



It's true that the current state of affairs regarding water needs to change but the news isn't all bad. There are some amazing projects happening that are finding new and innovative ways to clean, conserve, and provide water. Peru's Atacama Desert is one of the driest places on earth. It averages just .5 inches of rainfall per year. About 600,000 people who dwell in this region rely on cisterns for their water which must be filled by hand or with pumps. Another 700,000 have no access to clean water at all. Though this

region receives little rainfall, it averages about 90% humidity in the summer. Yes, people with curly hair are cringing but scientists at Peru's University of Engineering and Technology decided to put that clammy air to work. They devised a billboard that uses condensers like the ones in your home AC unit to turn humid air into usable water. The atmospheric water is collected and accessed by a simple faucet. Each billboard can produce up to 96 liters of water per day and costs around \$1200 to install.

Deshawn Henry, a sophomore at the University of Buffalo, constructed a "water lens". This glass lens is placed over a container of water and held up by a wooden frame. Sunlight, magnified through the lens can heat a liter of water to between 130-150 degrees in about an hour, killing 99.9% of bacteria and pathogens. Materials to create the lens and build the platform cost next to nothing and are easy to construct and maintain, making it ideal for developing countries.



Wello had designed a so called "water wheel" It is a durable, rubberized round container that can be opened, filled with water, sealed again, then rolled with a long handle to make covering long distances with larger amounts of water easier. It is said to be able to carry about 5 times more water than carrying it using traditional methods.



We will be celebrating World Water

Day all week at Kryschendo! Check back for easy ways to conserve water, we'll highlight some organizations trying to solve the world's water problem, and talk about some new innovations in water sanitation and conservation. If you have any news to share with us, we'd love to hear it! Please post it on our [Facebook page!](#)