

## BETTER LIVING WATER NEWSLETTER

BLW was officially established in 2021, our mission; to provide safe drinking water to people around the world. We will use any design that will deliver an affordable, sustainable solution to drinking water problems wherever we find them. “The King will answer and say to them, ‘Truly I say to you, to the extent that you did it to one of these brothers of Mine, even the least of them, you did it to Me’” Matt 25:40

In 2008 my wife and I financed a well for a school and clinic in Honduras so they would have safe water to drink. Since then, that well has since become contaminated. Honduras gets 90% of their water from surface water ponds, rivers, or streams. That water is contaminated.

From 2021 until the end of 2023, we have provided safe bacteria free water for that school, clinic, and a mountain village in Honduras. We also provided a filter to a missionary in Haiti and a system to a village in Ethiopia. Now, rather than having to buy bottled water, they receive safe drinking water free. Our systems have provided more than 200,000 gallons of safe drinking water. With only simple maintenance to keep them going.



The Mountain village in Honduras.

2024 is shaping up to be very different, James 1:2 “Consider it nothing but joy, my brothers and sisters, whenever you fall into various trials.” We are experiencing trials now. We have placed systems in Liberia, Zambia, and Ghana. We have not received reports from Liberia or Zambia. But our Ghana location has reported a challenge.



In Ghana pastor Martin (blue shirt) and his assistant are standing next to what remains of their water source until the rains come to fill it again. A new well was drilled for them to a depth of approximately 390 feet. Expecting the water to be very good I thought there would be no problem with it. Having been a residential contractor it has always been our practice to have

the water tested in any well we drilled, so naturally we requested a water test. We were shocked when we got the results back from the lab. The water was labeled as being unfit for human consumption.

They now have a good well with a nice setup. Plenty of water for all. Unfortunately, the water is high in minerals, suspended solids and Total Dissolved Solids (TDS). The major concern lies with the TDS, that is 12 x's higher than the maximum allowed by the W.H.O. I met with Dr. Nfamara a research scientist from the University of MN, that happens to be from Gambia, Africa hoping to find a remedy for this problem. He wants to conduct a research project that will address not only this well but cover multiple wells across Africa. In our conversation he indicated that less than 5% of the wells are tested, begging the question 'what is the water quality across the rest of Africa?'

TDS is detrimental to the body causing kidney stones, heart disease, diabetes, gastrointestinal problems, diarrhea, and dehydration. For the young it affects their ability to properly develop both mentally and physically. For the elderly the effect on the kidneys, heart, and gastrointestinal system progresses much faster and is harder for health care professionals to detect.



This is their new holding tank for the well water.

Our current system removes bacteria along with many minerals and heavy metals, but the pours are not small enough to stop TDS from getting through. Our system is better for areas like Central America, Indonesia, Papa New Guinea, Haiti, etc. where wells are shallow, or their source is surface water. Areas where the water supply is deep may require different filter systems. Currently we are researching an affordable, sustainable filter systems that will reduce suspended solids and TDS to an acceptable level. We found a German engineer that has designed a system that could meet our needs.

Moving forward I have assembled a core group of professionals willing to help design and test filtration systems to meet the need. We hope to establish a pattern with the water tested so that standard filters can be quickly deployed to the needed areas.

This team consists of the Research Scientist from the U of M, a Water Technology instructor from St. Cloud Technology College, and a Senior Water Engineer that designs pharmaceutical and municipal water purification systems around the world. The team hopes a pattern will emerge so we can standardize systems to fit the different needs.

We are working to raise money to fund this research. God has a plan for people to have safe water to drink. I'm honored to have been put on this journey and I look forward to what He'll do next. If you can help financially, it would be wonderful. If you know someone with a heart for water and has the means, please let them know and encourage them to get involved. BUT the most important thing you can do is pray so PLEASE pray so we can see God do mighty things.