



Helping Heal Haiti

Individuals from the United States are doing their part to provide clean drinking water in a country devastated by natural disaster.

By Mike Price

Ken Drowley felt a chill run down his spine once he saw the aftermath of the Haiti earthquake on the television evening news. His next reaction was how quick he could get on a plane to help.

“I know that water is more important than ever right now,” Drowley says.

The 44-year-old owner of 4D Builders Inc., a residential construction company from Alma, Michigan, has been repairing water well pumps in Haiti for more than five years.

Drowley’s church, Porter Free Methodist of Breckenridge, Michigan, has teamed with Cornerstone Church of Mt. Pleasant, Michigan, to raise funds to repair well pumps damaged or destroyed by the earthquake. It’s an ongoing water well pump repair project that began two years ago for the two churches.

On January 26, Drowley, along with Cornerstone Church pastor Chad Brown and missionary volunteer Floyd Ramey of Florida, flew into Cap Haitien to begin the work of repairing pumps in the water wells.

“I think we’ll find about 2500 wells that aren’t working in Port-au-Prince,” Brown told Mt. Pleasant’s *The Morning Sun* before the trip.

In a country where contaminated water is the leading cause of infant and child death, hand-pumped water wells can provide clean water. A well is typically used 24 hours a day, leading to breakdowns based on a lack of resources and know-how.

That’s where Drowley comes in.



Some 14 years ago Drowley went to Haiti as a volunteer to build churches with another church member, Keith Lockett. The two of them soon saw the dire need for clean drinking water, so they turned their attention to repairing well pumps.

A Haitian man named Snaider (pronounced SNY-dur), also known as

Some say when Haitians see a water well pump being fixed, they can be heard for blocks, jumping up and down and clapping and praising.

“The Pump Man,” taught Drowley about well pumps.

Snaider learned from third-generation well driller Curt King, CWD/PI, of Seattle, Washington, who began drilling water wells in Haiti 30 years ago. King is a member of the National Ground Water Association and a field director for Healing Hands International, a relief and development organization in Nashville, Tennessee. He is also a volunteer missionary with the Free Methodist Church.

Through the years Drowley has become efficient in repairing the most common problem he has seen in hand-pumped wells—holes forming in the drop pipe—and has increased the life of wells with repairs while at the same time decreasing the repair cost from \$700 to \$250.



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Snaider, also known as “The Pump Man,” taught Ken Drowley about hand-pumped water wells in Haiti.



Drilling a new well could run from \$2000 to \$10,000. The annual per capita income in Haiti is approximately \$1300, so the cost to drill a new well, let alone repair a well pump, is too much for most people.

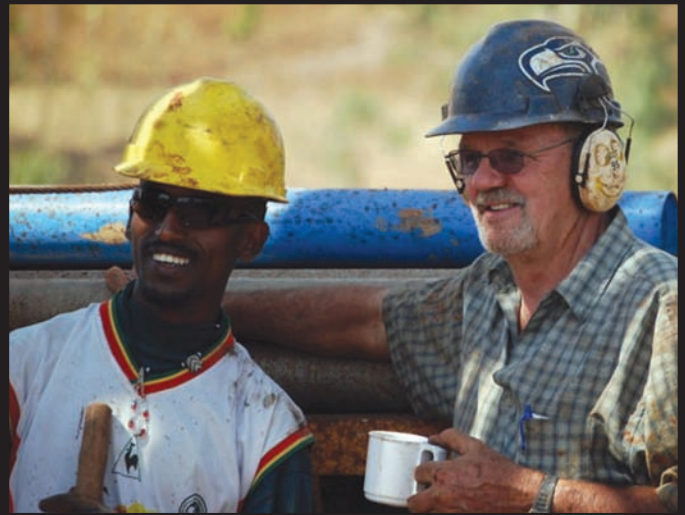
After the earthquake hit, Drowley phoned King, who has drilled approximately 1500 wells in Haiti, the majority of the ones Drowley has repaired, and found that repairing a well pump affected by the damage of an earthquake shouldn't be any different. Drowley believes he has enough equipment to repair 60 to 100 well pumps.

“I want to get in there, get the work done, and get out of there because if you stay longer than you need to be, you're consuming food and water that you don't need to be consuming,” says Drowley, estimating that he could be away from his business for as long as two months.

“They need all that they can get. As long as I can continue to work on well pumps and have money to work, I'll work. When the money runs out, I'm going to come home.”

Drowley's church also has a long relationship with the Ebenezer Glenn Or-

Solomon Tesfeye (left) and Curt King, CWD/PI, in southern Ethiopia. King estimates he has drilled 1500 wells in Haiti over the past 30 years.



phanage in Dessalines, Haiti, a city of about 50,000 people 90 miles northeast of Port-au-Prince.

Just two years ago Drowley, Brown, and a group of church members went on a missions' trip to Haiti to repair wells in the area surrounding the orphanage. They repaired 14 well pumps before running out of money.



When the magnitude 7.0 earthquake—the most powerful to hit Haiti in more than 200 years—occurred on January 12, King knew he had to act fast.

The 62-year-old well driller and his wife, Mary, of Seattle share a common belief in sharing what they have with others. So on January 26, King used donations he received from various sources to fly to Haiti to drill wells for the camps around Port-au-Prince. He is jointly working with two churches and Healing Hands International.

While in Haiti, King is hoping to duplicate the techniques he recently used in Ethiopia that allowed him to drill 30 wells at an average depth of 225 feet in 21 days. Over the last seven years King has drilled 325 wells in Ethiopia as part of a training program.

The average depth of a well in Haiti is 200 feet. King's method includes him using air rotary to drill a series of wells, parking the drill rig, training, and allow-

ing Snaider and his crew to do the rest of the work so they can take ownership of it.

Having Haitian communities pay for part of the well and take ownership of it is something King has worked to bring about with the help of Snaider, who he hired 20 years ago as his drill helper. Snaider now has his own pump repair business, thanks to King and the Free Methodist Mission, and assists water relief organizations when they come to Haiti.

“He's a really good guy, doing what he can, but very, very poor,” says King, who speaks country Creole to communicate with Snaider. “I'd call him more of a missionary than I am because if a pump breaks at a church and they don't have the money to fix it, he knows they won't pay him, but he'll go out and fix it anyway even if it means his family won't eat. He's an amazing guy.”



Drowley would be the first to admit that he never saw himself becoming a missionary.

But it only took one volunteer missionary experience in Haiti for him to change his mind.

“I've gone down there and met the people and know them real well,” Drowley says, “and so I think that's where my passion sparked from. I just want to help them in any way, shape, or form I can. They are great people. I've been all over the Haitian countryside and met all kinds of people. They basi-

cally have nothing, and yet they are some of the happiest people I've ever met."

Drowley has since taken his family—wife Marla, 15-year-old daughter Samantha, and 13-year-old son Max—to Haiti multiple times to volunteer at the Ebenezer Glenn Orphanage, which houses about 65 to 70 children. He and his wife hope to one day move permanently to Haiti to help at the orphanage full-time.

The Drowley family has come to love Haiti and its people. They've shared their experiences with church members through videos. They say when Haitians see a well pump being fixed, they can be heard for blocks, jumping up and down and clapping and praising.

"When we bring the videos back and show it at our church," Marla says, "tears will be streaming down people's faces because it just grabs a hold of their heart just to see these people and how excited they get over somebody pumping a hand pump and water coming out of it." *WWJ*



Ken Drowley

Engineering Firm Performs Hydrogeologic Consulting to Find Fresh Water in Haiti

It's no surprise that there is very little published geologic information on Haiti, which ranks as one of the world's poorest and least developed countries.

This fact has made it challenging for V3 Companies Ltd., a civil, science, and construction firm headquartered in Woodridge, Illinois, to locate fresh water in the poverty-stricken country. V3 serves clients with land development, natural resources, and infrastructure needs.

V3 has worked in Haiti over the last four years conducting hydrogeologic assessment, performing geologic management of drilling programs, as well as performing survey, stormwater assessment, civil design, and design build for a nearly 7½-mile roadway.

"We have been interested in working in Haiti for several years and are building a practice there," says Stuart Dykstra, a hydrogeologist and vice president of V3. "Our main emphasis to date has been our hydrogeologic consulting."

V3 was just west of Haiti's capital, Port-au-Prince, when the earthquake hit. Dykstra and his colleague and V3 hydrogeologist, James Adamson, have since returned to Haiti at the request of agencies and non-governmental organizations to assess water supply conditions in outlying areas of impact and implement water relief measures, such as well drilling and water system repair as the situation is presented to them.

Dykstra will be coordinating with Haiti's Ministry of Water, the United Nations Children's Fund (UNICEF), and the United States Agency for International Development (USAID), among other entities.

"Things were pretty rough in Port-au-Prince when we were there last Thursday (January 14) with all of the carnage you hear on the news," Dykstra said in January. "As of last week (January 12-15), the violence seemed to be more isolated and sporadic than you hear on the news. I don't have a good read on current conditions at the moment, but we will approach our work carefully and with partners with tens of years of experience in Haiti."



Stuart Dykstra, a hydrogeologist and vice president of V3 Companies Ltd.

NGWA Provides Timely Resources to Help Relief Agencies in Haiti

The National Ground Water Association's Web site furthers the mission of "advancing groundwater knowledge" by providing resources helpful to earthquake relief agencies, affected government jurisdictions, groundwater professionals involved in the relief effort, the news media, and the public.

In addition, the National Ground Water Research and Educational Foundation accepted proposals from various charitable groups for equipping small community or village water well systems in Haiti with replacement components or equipping entirely new wells. NGWREF is operated by NGWA as a 501(c)(3) public foundation focused on conducting educational, research, and other charitable activities related to a broader public understanding of groundwater.

Questions can be addressed to NGWA Public Awareness Director Cliff Treyens at ctreyens@ngwa.org or (800) 551-7379 or (614) 898-7791, ext. 554.