

Hope flows: Vt. nonprofit pours 'Pure Water for the World'

By Kevin O'Connor STAFF WRITER - Published: March 18, 2012

kevin.oconnor@rutlandherald.com

Rutland resident Carolyn Crowley Meub didn't fret when her hometown turned on its faucets two weeks ago to find, due to a water main break, the usually clean stream down to a dirty trickle. She was flying off to the Caribbean - specifically, to Haiti, where the situation is even worse.

Meub is one of several prominent Vermonters who've recently witnessed the problems of the earthquake-ravaged island - and the solutions of the Green Mountains-based nonprofit Pure Water for the World, which is aiming to pour hope across hemispheres to mark United Nations World Water Day on Thursday.

For most Americans, clean water is a tap away. But 1 billion people worldwide drink from contaminated springs and streams, the United Nations reports, while 3.5 million people die each year from related diseases.

State Rep. Margaret Cheney, D-Norwich, joined her husband, U.S. Rep. Peter Welch, D-Vt., in a February tour of the Haitian capital of Port-au-Prince, where, between a congressional delegation's visits with the country's president and actor Sean Penn's relief organization, she saw the water challenge firsthand.

"It's the poorest, most chaotic scene in the world," Cheney says of crowded slums equipped with little more than rain barrels. "The water can be the unknown bearer of terrible diseases. Catch them and you can't work, you can't go to school, you can't really function."

Organizations like the U.S. Agency for International Development are working to help densely populated areas of the globe that report 75 percent of the problem. But that leaves more than 250 million people without potable water in remote rural settings. Enter Vermont's Pure Water, which is installing simple, inexpensive household filters in developing countries in the Caribbean and Central America.

Dr. Noelle Thabault, a Burlington native, graduated from the University of Vermont College of Medicine before practicing in Rutland. After a magnitude 7.0 earthquake decimated Haiti in 2010, she flew to Port-au-Prince as a Pure Water volunteer and now serves as its deputy regional director.

"I recognized the role that lack of clean water plays in illness," Thabault recalls of her knowledge before arriving, "but I had no understanding of the scope of the problem."

Two years in the trenches, Thabault recently hosted Cheney and Marcelle Leahy, wife of U.S. Sen. Patrick Leahy, D-Vt. The doctor told them that more than 40 percent of Haitians live without clean water, leading to diseases that are the country's second leading cause of death and fill more than half of all hospital beds with patients suffering from bacteria or parasites.

"Clean water is so necessary," says Marcelle Leahy, herself a nurse. "But Haiti unfortunately was lacking a lot of the necessities of everyday life even prior to the earthquake."

Most U.S. municipalities filter water at central reservoirs and then distribute it through pipes. But that doesn't work in Caribbean and Central American villages with more poverty than plumbing. Cheney and Leahy visited a Pure Water plant that manufactures the kind of "slow sand" household filters used in New England for its first 150 years.

Pure Water taps the sand system because it costs as little as \$150 to produce, install and monitor; requires no moving parts or electricity; and can be built with locally available materials. Each unit, shaped of concrete or plastic and sized like an office water cooler, is filled with several layers of sand and gravel. Pour in water, and the mixture traps microorganisms that, in turn, decompose other organic material.

Water that passes through the filter is clear in color, taste and smell. More importantly, it's rid of up to 90 percent of toxins, 97 percent of fecal coliform bacteria and 100 percent of worms and parasites.

"It's such a clever, simple concept, and it works," Leahy says. "You're employing people, they're earning a living and improving their health."

Cheney, for her part, was equally impressed by Pure Water posters written in Creole that explain the importance of proper hand-washing, hygiene and waste disposal.

"They're providing really simple tools and educational efforts - the common-sense Vermont way - to help make this sustainable," Cheney says. "They have a great banner that says, 'Clean water is medicine.' We take it so for granted, but that's the basic key to recovery."

Pure Water bubbled up two decades ago after Brattleboro dentist Peter Abell traveled to El Salvador and saw people drinking dirty water that caused diarrhea, cholera and dysentery. Abell's local Rotary club went on to raise money to provide clean water in El Salvador and later Honduras, then incorporated its volunteer efforts into the Pure Water nonprofit, which Meub has headed from Rutland for the past 10 years.

Pure Water so far has spent at least \$5 million on projects to provide safe drinking water - a comparatively small sum compared with the \$20 billion a year the United Nations estimates it would cost to provide clean water to everyone on the planet. But as Meub notes, helping one family, one school, one community at a time, "many drops of water eventually fill a bucket."

Americans, for their part, annually spend billions on store-bought bottled water. Consider what Rutlanders were willing to pay after the city's recent main break. As Meub was packing for her trip, husband William Meub fielded calls from fellow residents wondering how many hours they'd lack water. He recalled his own travels to Haiti after the earthquake.

"They let me take a shower with a yogurt container full of water," the lawyer says. "It's a whole different experience than anyone here has any familiarity with."

That's why Pure Water is streaming its message (the latest: Gov. Peter Shumlin will promote World Water Day this week with a proclamation) through Facebook, Twitter and the website purewaterfortheworld.org.

Says Carolyn Meub: "Safe drinking water should be a basic human right."

And Thabault: "All other interventions - the rebuilding of roads and schools and hospitals and communities - will not result in a long-term sustainable improvement if people don't have clean water. People need to support organizations that are bringing clean water, hygiene education and sanitation to homes and schools. That's how they can help."