

Case Study Waterboys

Xylem partners with Hometown H₂O to install water well for retired Oregon couple

SPECIAL PROJECT BRINGS WATER TO COUPLE WHO TRAVELS 40 MILES FOR DRINKING WATER



For 34 years, Steve and Lana Gleason made due without a traditional residential water system. The couple, who live in the rural logging community of Jewell, Oregon, pumped water for washing from a nearby river and made 40-mile round trips from their home to haul drinking water from a spring.

Now retired, the Gleasons are both 69 and facing mounting health concerns. Steve Gleason suffers from chronic obstructive pulmonary disease (COPD) and heart issues, which make the arduous treks to the river and spring even more dangerous. Add to that the risks that COVID-19 bring to the elderly and immunocompromised, the potential outcomes of not having direct access to running water are bleak.

By December 2019, silt from the river flow built up in the Gleasons' existing river pump, causing it to fail and forcing the couple to use nonpotable water collected from a rain barrel. Although Steve purchased a new pump, he couldn't get it to work. After two months without running water to their home, the Gleasons heeded a neighbor's recommendation to apply for assistance through the Water Well Trust (WWT), a nonprofit arm of the Water Systems Council established to provide wells for Americans who do not have a safe drinking water supply. Working with Xylem and Hometown H_2O , a domestic water program of The Chris Long Foundation dedicated to bringing access to clean and sustainable water to the more than 2 million Americans without it, WWT identified the Gleasons as a family in need.

CUSTOMER:

Steve and Lana Gleason - beneficiaries of Hometown $\rm H_2O$

CHALLENGE:

Provide clean, safe running water to the Gleasons, who had been pumping water from a nearby river to do laundry and take showers and making 40-mile round trips to a spring to fill gallon jugs of water for cooking and drinking

XYLEM SOLUTION:

Design, install and provide materials for a standard residential water well system

EQUIPMENT USED:

Goulds Water Technology 4" Submersible Pump, Motor and Jet Pump, HydroPro Tank, 2,500-gallon poly tank and a reverse osmosis (RO) system with 2-gallon reserve tank

RESULTS:

Volunteers from Xylem Watermark; Hometown H₂O; Mitchell, Lewis & Staver of Wilsonville, Oregon; McMullen Water Systems and McMullen Drilling of Portland, Oregon; and Hillsboro Pump Service Pipe & Supply provided the Gleasons with a new water well system via donated products and discounted drilling services, enabling the couple to have a reliable, clean water supply.



Hometown H_2O was launched in late 2019 as a result of a partnership between The Chris Long Foundation's Waterboys initiative, Xylem Inc. and the Water Well Trust. The new well, which provides potable water directly to the Gleasons' home, marks Hometown H_2O 's second well donation project in partnership with Xylem.

"The fact that senior Americans with underlying health conditions must get usable water from two different locations on a regular basis - especially during a global pandemic - should not exist; however, issues like these are far more prevalent than people realize,"

said Chris Long, two-time Super Bowl champion and founder and chairman of the Chris Long Foundation.

Xylem donated Goulds Water Technology brand equipment and local Xylem distributor partner Mitchell Lewis & Staver coordinated its discounted installation through pump installer McMullen Water Systems and water well driller McMullen Drilling of Portland, Oregon.

The simple goal of providing access to clean water for the Gleasons ultimately proved anything but easy.

"It was a long and emotional process as we uncovered many obstacles that nearly brought this project to a halt," said David Brown, Mitchell Lewis & Staver CEO.

When the project got underway in late June, the first two wells McMullen Drilling attempted produced just 2 GPM of saltwater. A third attempt resulted in 120 feet of dry sandstone. The crew then drilled a fourth hole at the lowest point on the Gleasons' property, but after boring down 100 feet, 200 feet, then 300 feet, drillers determined that site, too, was a nonproducer.

After the fourth failed drilling, McMullen returned to the drawing board to figure out another solution.

"They told us they would do whatever it takes, but if there's no water, there's no water, so we were concerned it wasn't going to happen," said Lana Gleason. "We were very relieved when we found out things were moving forward."

Ultimately, the decision was made to move back to the original drilling site where the crew drilled a fifth saltwater-producing well. The site picked up 2GPM of saltwater with a total dissolved solids (TDS) level of 3,400 – typically a good-producing well will have at least 10GPM and a TDS below 600. The team added a reverse osmosis filtration system, two separate holding tanks (one for the well to pump into and one for treated water) and a booster system to move clean water up to the Gleasons' home.

Once the well was drilled, team members installed a Goulds Water Technology 7GS05R 4" submersible pump with a 1/2 HP 2-wire motor. Sizing a "reduced stage" pump helped minimize the amount of lift from the well, thus offering protections against over-pumping. Additionally, the volunteer team trenched 300 feet of pipe and electrical, installed a Goulds Water Technology Jet Pump, HydroPro Tank, 2,500-gallon poly tank and a reverse osmosis (RO) system with 2-gallon reserve tank for under-the-sink operation.



"These teams of professionals pushed the limits of creativity and ingenuity to provide a solution where the Gleason family can now enjoy clean water."

Additionally, Mitchell Lewis & Staver made a \$10,000 donation to the Waterboys program through Xylem Watermark, which is matching donations 1:1 during the pandemic for a total of \$20,000. Waterboys will use the funds for its domestic initiatives to bring clean water to communities in need.

"This type of opportunity to collaborate with these premier organizations and make a real difference in people's lives doesn't come along every day," Brown said. "These teams of professionals pushed the limits of creativity and ingenuity to provide a solution where the Gleason family can now enjoy clean water."

While the pandemic restricted Xylem employees from traveling to Oregon to volunteer, Watermark, Xylem's corporate social responsibility program, provides initiatives for Xylem partners to carry out its mission of volunteering. Taking social distancing precautions amid COVID-19 concerns, Mitchell Lewis & Staver employees purchased materials and built the well house for the new water well, helping ensure its longevity for the Gleasons' access to water.

"One thing no one should have to worry about, especially during such uncertain times, is having access to clean, safe water," said Susan O'Grady, director, Americas Building Services & Agriculture, Xylem. "But, in fact, there is a very real water crisis in the U.S., which is being further compounded by the COVID-19 pandemic. Now, more than ever, our unique position in the water sector in coordination with our national and global partners, gives us the great honor and responsibility to address these water challenges swiftly."

Following the installation of the water well and home improvement projects, Steve Gleason expressed the couple's gratitude.

"We've lived 34 years on this road and we've pumped out of the river the entire 34 years so this is going to be quite the treat," he said. "Everyone has done a wonderful job. We knew it was going to be hard; we didn't know it was going to be this hard, but they persisted."

For more information about the partnership between Xylem Inc. and The Chris Long Foundation's Waterboys initiative, please visit Goulds.com/Waterboys.



Xylem Inc. 2881 East Bayard Street Ext., Suite A Seneca Falls, NY 13148 Phone: (866) 325-4210 Fax: (888) 322-5877 www.xylem.com/goulds

Goulds is a registered trademark of Goulds Pumps, Inc. and is used under license. © 2020 Xylem Inc. October 2020