

And They Said it Couldn't be Done: Jonestown WSC Supplies Water to Trails End

By Tonyia Sullivan, Texas Rural Water Association

The day Jim Roberts, Trails End Homeowners' Association (HOA) president, watched one of his neighbors' house burn down while three fire trucks stood by, waiting to be refilled with water, he knew the time had come for his community to call Jonestown Water Supply Corporation (WSC) to install a water system.

"The need had built up, but two things solidified it: that house burning down and a water plant being built in our neighborhood that would service another community," Roberts said.

Trails End residents hauled water into their community, used water from Lake Travis or had wells. Many had to drink bottled water and wells were drying up or becoming contaminated. Five wells were confirmed contaminated with coliforms and two were confirmed contaminated with solvents and possibly heavy metals.

"Ironically, a couple of days after we finished this project, the Trails End HOA vice president's well ran dry." Dave Stewart, Jonestown WSC board secretary and treasurer, said.

Before Trails End HOA contracted Jonestown WSC, they had been trying for four years to figure out how to build an affordable water system. The Lower Colorado River Authority (LCRA) designed a water system for Trails End that was estimated to cost \$865,000, which the Trails End residents, whose homes' values started at \$40,000, could not afford. Eventually, the Trails End HOA turned to the Jonestown WSC for help researching alternatives within their financial reach. William Carter, president of the board of directors, responded to this request by directing staff to investigate solutions for the construction of the water system.

"The LCRA plan ran lines down every street in Trails End, including those that did not have contributors yet," Stewart said. "When we limited the plan to only streets with contributors, it shaved \$400,000 off the cost of the system."

Next, John Tichi, Jonestown WSC general manager, suggested doing the project in house instead of letting the project out for bid and buying the wholesale water from an outside purveyor. Not

only would this lower the cost of the project, it would give Jonestown WSC more control over the system.

"No other company is going to treat water the way we treat it or treat our customers the way we treat them," Tichi, who was in charge of the job and labor throughout the project, said.

Stewart added, "We just completed our first in house 7,000 foot line replacement, and we had enough staff and employees to do it in house. We could not have done this two and a half years ago.

The project ran 16,000 feet of pipe, including 1,400 feet of 12 inch high density polyethylene pipe, which was installed under Lake Travis. Doing the project in house and running the line under the lake lowered the cost of the project another \$245,000 to \$220,000, a price Trails End could agree to.

"Jonestown WSC deserves a lot of credit for doing this themselves. Otherwise, it would have cost twice as much," Roberts said.

In order to finance the line construction, Trails End residents who wanted to be connected to the Jonestown WSC's system paid \$3,500 each. Once the water line was installed, each property owner also paid a \$2,300 equity buy-in fee required by Jonestown WSC's tariff for all new taps to the water system. Jonestown WSC required that 65 homeowners sign on initially, and agreed to serve up to 80 homes eventually. Out of the 117 homes in Trails End, 67 homes are now served by the line, and there are five fire hydrants in the neighborhood. The WSC designed and completed the project in 10 months.

"Residents had their personal finances tied up in this for four years before we got into it," Stewart said.

"From day one an elderly resident put up \$14,000 to cover his house and his three rentals here," Roberts said.

Since the community now has water, Trails End home values are increasing, Roberts noted. He added that one home was on the market for a long period of

time, but sold immediately once the water system was installed.

“This is an example of a poor neighborhood that pulled themselves up by the bootstraps to do something big. Very few poor neighborhoods pull themselves up and put in a system after the neighborhood is already there,” Roberts said.

Q&A with Jonestown WSC

Q: To what do you attribute the success of this project? Is there anything you would make sure you did the same way again on other projects?

Dave Stewart (DS): This situation was unusual because the people were living in a developed neighborhood with no water pipes. Also, there were residents with expensive houses and other residents who were living on a fixed income, so we were working with people with diverse needs and resources.

Because we had not done this before it was a learning experience for everyone. Office staff members Karissa Kornegay, Susan Barnett, John Tichi and I worked to research and develop the project as well as manage it throughout the construction stage. Everyone had an equal say in biweekly roundtable meetings where, with everyone's input, we attacked the project's problems. I also consulted on a regular basis with other board members.

John Tichi (JT): One of the biggest factors contributing to the success of the project was the team attitude of everyone involved and guidance and support from William Carter, our board president. Carter, an independent contractor, provided me with conceptual planning methods that assisted with the logistical planning of everything from materials and equipment to personnel.

Given the situation, I feel we were successful in ensuring the safety of our employees and the people in the community and constructing the system without compromising installation standards with minimal impact to the residents.

Q: What was the biggest challenge in this project?

DS: Getting the easement across the lake bottom, negotiating the contract with the Trails End HOA and getting the permits were time consuming. The

permits caused us to begin construction 45 days later than we wanted to.

JT: The 1,400 feet of 12 inch HDPE line we put into the lake is the longest line in Lake Travis. It took extensive planning to prepare the line for installation, but installation of the underwater line took only four hours.

Q: Is there anything you wish you would have done differently on this project?

JT: In my opinion, the project went very well. Given the situation, I feel there is room for administrative improvement on my part.

Q: How do you identify and fix leaks? What are the chances of something like that happening to the pipe?

JT: Leaks are very unlikely, but if the line does leak, we meter the water, so we would judge the water loss by water sold vs. water metered through the line. We also schedule yearly inspections of the underwater line. If we have to fix the line, we could bring it to the surface. Some repair can be made subsurface as well.

Q: How many more connections will you now have, compared to those you had before serving this community, and how will growth affect your system?

DS: The 8 percent increase in connections will not impact our system capacity immediately, but as other developers build in the WSC area, we will have to do a plant expansion eventually. Trails End did not put us over capacity. We did not cut back on quality to save money.