

### Potable Water in La Criba, El Salvador

Just over a year ago the rural community of La Criba, El Salvador gained access to potable water. I have been fortunate enough to assist in the development of this clean water distribution system for the past 4 years with the Colorado State University Chapter of Engineers Without Borders (EWB-CSU).

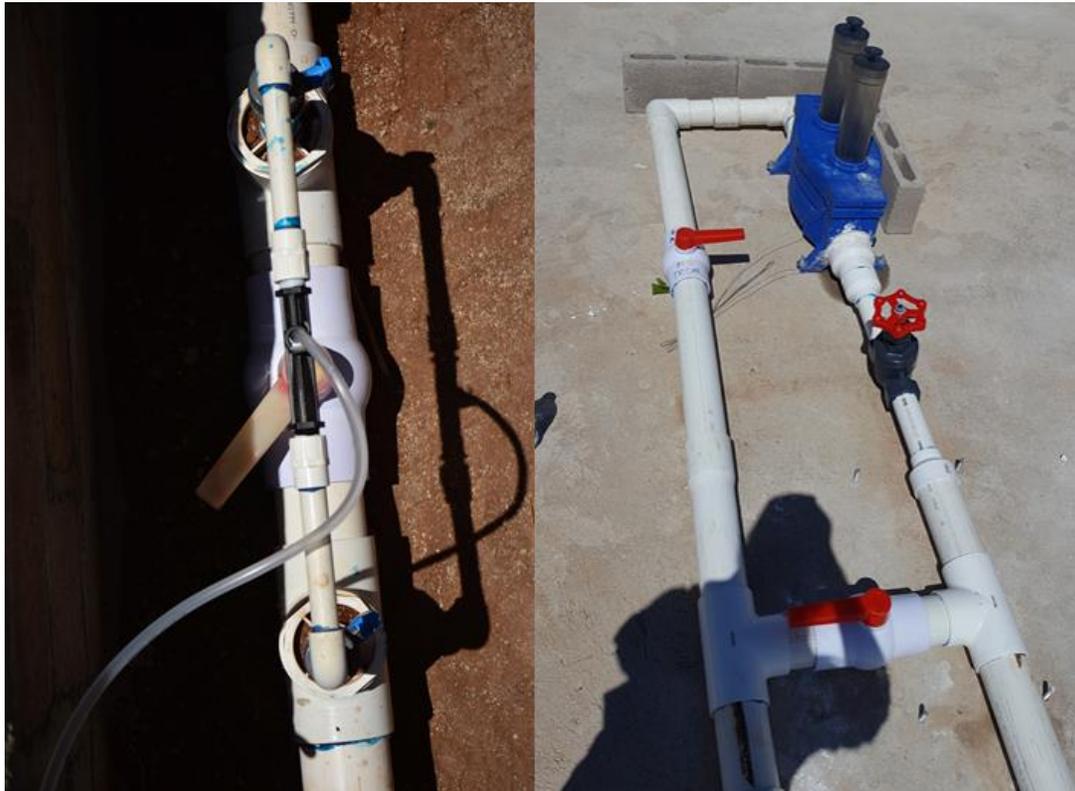
EWB-CSU began our partnership with the community of La Criba in 2008. Difficulties for La Criba first arose following an earthquake that damaged the springs supplying water to the community. Water output from the springs both decreased and became contaminated. As a result, community members needed to walk upwards of 1 km to gather water from a still contaminated source. Since initiating the project, we have worked with several project partners to design and install a water distribution system, a pump, and a 26,000-gallon storage tank. As of October 2016, nearly all of the 200-plus homes in La Criba have running water.



*Water Storage Tank*

This was my fourth trip to La Criba, and our goals were to improve the chlorination system and assess future projects. Due to problems with dosing from the initial chlorination system, the community has been manually adding chlorine. Thus, one of our tasks was to improve the chlorination system. We added two chlorine dosing systems—one for chlorine powder and another for chlorine tablets—so that the community can choose the mechanism for chlorination depending on which type of chlorine is more readily available at a given time. For the powder, we installed a venturi system, which uses pressure differences in the pipe to pull a

concentrated chlorine solution into the water. For the tablets, we installed a tablet dispenser, which adds chlorine when water passes over the tablets.



*Powder (Left) and Tablet (Right) Chlorine Dosing Systems*

To carry out the trip tasks, my role was to be one of the two translators and teach the new EWB-CSU project leaders about the community. This was my second time being a translator on one of these trips and it has been rewarding to see my Spanish skills grow during my involvement with EWB-CSU. In fact, when I started with the organization I did not know any Spanish. My first trip in 2015 inspired me to declare a Spanish minor and study abroad in Costa Rica. Now, I can lead meetings with the community leaders and translate technical documents.

The joy of these trips spans far beyond the technical aspects. With each trip, we learn more about the community and have become family. We tell jokes, share stories, exchange gifts, and play games together. One particular game we the community taught us during this trip is called Trompo. It consists of winding up a top with a string, throwing it, and performing sets of tricks while the top spins. The learning curve was hard but after over-analyzing the technique like a bunch of engineers, we finally got the game figured out.



*Maximino (One of the Community Leaders) Shows us How to Spin a Trompo*



*Late Night Trompo Practice Session*

Almost every night we played music together as well. On the previous trip, I wrote a song about a beautiful creek area called Pito Lito, which is a short walk from the community. All the kids asked me to play it again and it turned into a massive sing-along.



*Daily Mandolin Playing Outside of the Community Center*

Throughout all of my travel experiences, I have learned that it is not where you go and what you do, but the people you meet that make a place come alive. After sharing work, meals, music, and games, I feel a part of the La Criba family.



*A Goofy Photo with Kids in the Community*