# WATER ENGINEERS FOR THE AMERICAS & AFRICA

# TRIP REPORT

by Alex Litofsky



### **Trip Summary**

This was a short trip to verify progress on the Quebrada Pastor school aqueduct project, assist with filling any information gaps or necessary coordination, listen to feedback from the community, and confirm ongoing construction plans. As the Returned Peace Corps Volunteer who served in Quebrada Pastor from 2014-2016, and who coordinated the Michigan Tech senior design class assessment trip that produced the assessment and design report that was used to guide the WEFTA project, I was already directly acquainted with the community leaders and the aqueduct system.

The primary outcomes of the trip were:

- Verify construction progress
- Review and confirm construction plans with José
- Confirm spring sources and toma construction plans
- Confirm current and potential users of the school aqueduct system
- Confirm the current leaders of the school aqueduct water committee and construction team
- Facilitate the coordination of the Representative's support for the project with WEFTA's
- Report feedback from the community about the distribution system
- Report feedback from community members about construction labor
- Maintain relationships in the community
- Take photos and video

# **Trip Narrative**

After communicating with WEFTA for several months about visiting Quebrada Pastor to assist with coordinating and verifying the school aqueduct project, I finally made plans to travel. I had been so excited to make this trip so I could help see through a project I had never been able to make much progress on as a volunteer because it had been so politically complicated at the time.

I arranged the trip to coincide with an Engineers Without Borders (EWB) implementation trip to Cerro Muleto, a community in Comarca Ngöbe-Buglé. Travel on behalf of EWB depended on CDC clearance to travel to Panama.

I flew into Tocumen International Airport the evening of Tuesday, April 12, 2022. Incountry partners on the EWB project, Lisi and Ricardo, picked me up in their car from the airport and took me to their house to spend the night. They had cooked arroz con pollo, a classic Panamanian dish, which we enjoyed on their lovely back patio, which brought back memories of every Panamanian celebratory meal. We chatted for a few hours about all kinds of things before heading to bed.

Ricardo made me patacones for breakfast Wednesday morning, much to my delight. Then Lisi took me to the Albrook airport to catch my flight to the Bocas airport on Isla Colón. What an upgrade to be flying across the country in only an hour, a trip I had only ever done as a 12-hour bus ride or 9-hour car ride.

I had contacted my friend Nayelis before I left, hoping to meet up with her while I was in country. When she asked what day I would be arriving, I told her, "miércoles el diecitrés," much to her amusement. Clearly my Spanish was a little rusty. Luckily it only took a couple days to get most of it back. She was working as a nanny on Isla Colón, so I was able to meet her in the central park in Bocas Town right after I got off the plane. That half mile walk was very sweaty, just as I remembered it. We chatted for an hour while she waited for the little girl she takes care of to be done with school.

Then I caught a boat to Almirante. Willy, head of household of my host family in Quebrada Pastor, met me right as I got off the boat. We went to get lunch at his favorite fonda and then picked up some groceries at my favorite vegetable stand (including a couple ripe pineapples) and at his favorite mini-super.

We took a taxi to Quebrada Pastor – also an upgrade compared to the busito – and spent the afternoon hanging out with the family at Willy's dad's house. Heidy has grown up so much – she was only 2 years old when they were hosting me, and now is almost 10. Anaica is now a young woman of 19. And Wilmer is much more talkative than he was when I last visited right before the pandemic. Willy's dad, Undu, is still doing okay. I retold the story of the stray cat that was harassing me as a volunteer, much to everyone's delight. And they killed a chicken for me so we could have pollo de patio for dinner, with all the fresh vegetables we had picked up in town. Willy gave me his take on the aqueduct project, but he advised me to ask Ángel most of my questions, since he was involved daily in the project. After dinner, Willy drew a map of all the houses now located in the center of the community that are currently served by the



school aqueduct or are potential users, much like the mapping we did when I was a new volunteer. And, like always, we stayed up much too late and used up all my flashlight batteries. I slept at Willy's new house along the highway, which he has been building in conjunction with his chocolate factory – still a work in progress.

On Thursday, I had breakfast with Willy's family down at Undu's house. I expressed some anxiety about going up to the tank site for the work day, so Willy sent Heidy to accompany me. I was relieved to remember the path and was delighted to spot a sloth along the way.

When I arrived at the tank site, I first greeted Rafael, who was cutting some rebar. Then I climbed up the wooden ladder and poked my head over the side of the 8-feet-high tank walls to find Ángel chipping away at the excess mortar to get the tank cleaned up for the plaster layer.

Angel was my community guide while I was a volunteer and is my best friend in the community. We spent a lot of time together walking around the community talking and dreaming and planning and building. We were so happy to see each other. I climbed down into the tank and started chipping away at the mortar alongside him, just delighted to be working together again.

I also got to finally meet José, who was preparing the rebar for the next layer of concrete blocks. It started raining as we were working, and concrete dust and chipped pieces were flying everywhere and sticking to everything, including in my hair. Every time I scratched my head, it felt like I was picking out little bugs: gross. Justin, Ángel's son, who was just a baby when I completed my service, was running around the tank site with Heidy picking oranges, which they offered to me. I asked Heidy to take some action photos and videos with my phone. I asked about José's plans for finishing up the tank, and I asked about the community's engagement on the project. José also explained his plans for maintaining service at the school while doing toma construction.

Then we walked along the rest of the system, stopping at the first pipe bridge, where we pulled out the assessment and design report to review the plans for making repairs, replacing the rusty column on the upstream side. We also reviewed the plans in the report for anchoring the pipeline where it goes up the hill from the big stream crossing.

We finished our walk up to the existing toma and discussed plans for replacing it. We discussed both removing the existing toma and trying to capture the escaping water in a separate new toma without doing the heavy work of taking down the existing one. I made note of several questions for Tim.

We closed out the work day so José could head home to spend the Viernes Santo with his family in Valle Risco the next day. Ángel guided me – along with Heidy and Justin – across the fincas to his house, on a path I don't think I had ever taken before. He is still my community guide, after all! When we arrived at his house, where there is always good cell service, we called Tim to discuss the findings from the day (such as clarifying the spring source situation) and to ask questions about the best approach for dealing with the existing toma. We concluded that it would be best to take down the existing one to remove all that excess weight from on top of the spring.



We also discussed the plans of the Representative of the Corregimiento de Valle de Agua Arriba to support the school aqueduct project with \$15,000, and Ángel's hope to build an additional new toma higher up the mountainside that could also supply the system. Tim suggested that the new toma could be part of this Phase 1 scope for the WEFTA project, and WEFTA would write a letter of support to recommend the Representative fund the Phase 2 work that would address the distribution side of the system. We clarified what the scope of the current project was so Ángel knew we weren't planning to replace all the existing supply line pipe.

Ángel also asked whether it was possible for the most committed community members, the 5 people who show up every day to make sure that José has the labor he needs to keep the project going, could receive some compensation for their time. Community projects are always a challenge, because contribution is never equal, and some people take on more responsibility than others. Ángel explained that he would continue to work every day regardless but wanted this request to be considered. At the very least, Tim agreed that Ángel should be compensated for the material and labor cost of supplying the wood forms for the tank roof.

Ángel also mentioned that MEDUCA built a new school in Jobito Rojo, the small community uphill from Renacimiento, to the north of Quebrada Pastor, but did not provide any water. He asked to learn the process by which to apply for a new project to build a system in that community.

As we were talking, Neno, Ángel's oldest grandkid, harvested some mangos and served me a savory mango snack, while Blanca, Ángel's wife, fried up some spam and served it to me over rice.

We talked for a while and then it was time to head back before dark. On the way back to Undu's house, I stopped to say hi to Undu's brother David for a while, where we talked about the new two-story secondary school currently under construction next to his house (which will add 14-16 toilets!), about the current and potential users on the school aqueduct system, and about the health clinic that MINSA has proposed building in Quebrada Pastor. Then I continued down the hill to have dinner with Willy's family.

On Friday, Viernes Santo, there was no work – the first rest since the project started 24 days ago. I had breakfast with Willy's family, then climbed up the hill to Ángel's house. We continued up to his aunt Ema's house. Ema is my abuelita, the woman who taught me how to make mochilas and who was always delighted when I showed up to spend the day with her and her family. We visited her son Alberto along the way. Ángel told the story about the French World Bank worker who visited recently. Ema has been having a harder time walking, which has been challenging for her (and tough for me to see), but she was delighted when I arrived, as was Ogwa, her husband, and the rest of her family. I immediately changed into my nagua, which Ema had given me as a going-away present at the end of my service. I handed out some reading glasses, which were distributed among those who needed them – a gift that has always been appreciated. The family killed a chicken for me so we could have pollo de patio. We talked about where Cleveland is located, due north of Panama, and I joked that the most direct path would be to swim there, which everyone found amusing.



Ángel and I returned to his house and spent a few minutes chatting with Nayelis and Blanca. Then I rushed down the hill to meet Willy in time to go to dinner at a cute café overlooking the coast and talk about his chocolate business, Heidy Artisanal Chocolates, which he has been building since before I was a volunteer. On the way home, the bus got stuck behind a Viernes Santo procession in Almirante, so we ended up walking alongside the Catholics down the street. We made it back to the house just before a big rain hit.

On Saturday morning, I had breakfast with Willy's family before heading to Mario's to check out the Lopez aqueduct. On the way I stopped to say hi to Lucas, then Neli and Alberto, and ask about their idea for a fair connection fee to include their homes on the school system.

I found José in the Renacimiento caseta and together we walked to Mario's. Amalia and Ángel had been waiting for us. Together we walked to the toma and saw the provisional toma that the family had built just downstream of the previous toma (which they had constructed with the help of Eric, the previous volunteer) that had run dry. We discussed the plans for José to help with construction of a new, more permanent toma at the site, to capture all the water, securing a backup source for the school while construction on the school aqueduct was in progress. We returned to Mario's house, where Ángel explained the plans to Mario in guari-guari, which I found entertaining to listen to. They decided that the community could pay for the materials as long as WEFTA could cover José's time to oversee the project.

Then Ángel, Amalia, José, and I walked back to the center of the community to visit Melitza, the water committee president who had taken over when Roberto renounced the position. We shared the WEFTA letter of support with her and established contact information. I handed over the printed Spanish-translated copy of the aqueduct assessment and design report. We discussed the scopes of Phase 1 and Phase 2 of the aqueduct project. Then we spent some time discussing the community service group that Ángel, Amalia, and Melitza had started, which picks up trash along the highway and does other environmental and community service activities. I agreed I could help the group with a t-shirt design and find funds to buy the t-shirts for the group. I also suggested a public-private partnership with Willy's chocolate business, which will require some more follow up.

I returned to Willy's house to get packed up and have lunch at Undu's. Then Willy and I caught the bus to Almirante, and he made sure I got safely on the bus to David. Four hours later, I walked into the restaurant of Hotel Alcala to find my EWB teammates and members of the Rotary Club of David snacking on some patacones, and it was time of the second phase of my trip.



### **Photos**

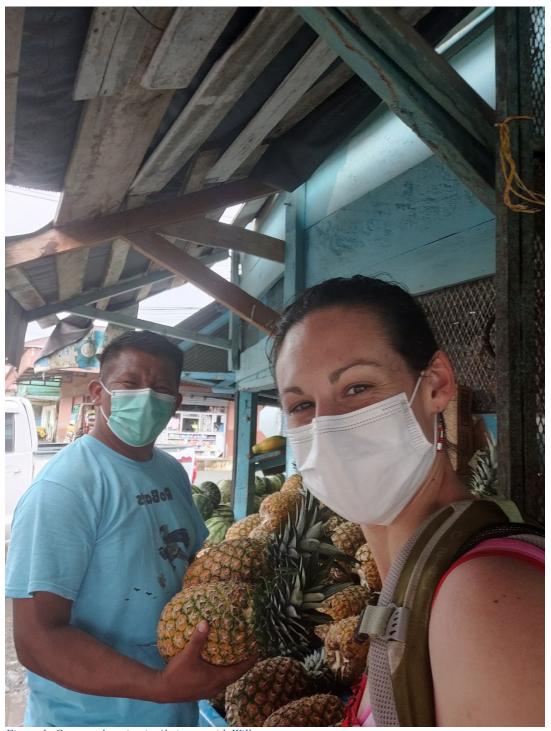


Figure 1: Grocery shopping in Almirante with Willy



Figure 2: Willy making dinner



Figure 3: The new secondary school



Figure 4: Rafael at the tank site with materials



Figure 5: Angel (left) and Jose (right) at the tank



Figure 6: Angel and Alex



Figure 7: Angel cleaning around the first pipe bridge



Figure 8: Rafael, Jose, and Angel discussing the toma rehabilitation



Figure 9: Heidy, Jose, Rafael, and Justin at the existing toma



Figure 10: Heidy, Justin, and Angel returning to Angel's house



Figure 11: Alex wearing her nagua, visiting Ogwa and Ema



Figure 12: Amalia, Jose, and Angel walking to the Lopez aqueduct toma behind Mario's house



Figure 13: Amalia, Angel, and Jose at the toma near Mario's house



Figure 14: Alex with Melitza, Angel, and Jose at Melitza's house



Figure 15: Angel, Amalia, and Jose walking through downtown Quebrada Pastor