Honduras Program Updates
By Elisa Arriaga Castillo

As we approach the completion of El Carrizalito project, it is easy to forget that at one point we were not sure how and even if we could complete it. When EWB-USA NEU first visited El Carrizalito in 2010, it was clear that the community needed a partner to help design a water distribution system but we were not sure we had the expertise to do so. Until that moment, we had only worked with gravity-fed systems. Their project would require us to install a pump to bring water up to the village. The biggest challenge, however, proved to be finding a source of energy to power the system. Over a course of two years, we worked on an alternatives analysis to find a feasible solution: connecting the new system to the existing electrical grid located near the source.

Soon we would find out that it was not only design challenges we would face. In the spring Semester of 2013, as we prepared to implement the first phase, permission for students to travel was revoked due to a warning issued by the US Department of State. This trip was delayed until December 2013 when a group of five EWB-USA NEU alumni traveled to the village. During this time, one of our biggest concerns was whether students would stop attending the design meetings if they knew there was a chance they would never travel. Nevertheless, students kept working on reports and design and staying up late in the design studio. In May 2014, through a petition to the University, we sent a group of four alumni and one current student member to implement the second phase. In December 2014, we received the good news we had been waiting for: a group of five students was allowed to travel to complete the final phase of implementation.

It is impossible to talk about this project without emphasizing the effort of the people of El Carrizalito and our in-country guides, Ronis and Dionisio. The community involvement was vital to the success of this project. They dug trenches and collected sand and gravel before the team arrived, they gathered around to transport materials, they learned about cutting and maintaining pipes, and were actively involved in the design of their system. Their eagerness to help and commitment to this project was overwhelming and we could have never asked for a better partner.

We have worked in the Yoro District in Honduras for about 10 years now and we are truly proud of the successes we have accomplished, the relationships we have formed and the challenges we have overcome. As our fifth project comes to an end, we look forward to partnering with a new community and to stay in contact with the ones we have already worked with.
2014 has been an undeniably busy year for the Uganda project of EWB-USA NEU. After breaking ground on the village wide, water distribution system in July 2013, our group undertook an ambitious, aggressive, and (depending on who you ask) crazy construction schedule in an attempt to complete the Bbanda Distribution System (BDS) in August 2014. To accomplish this, EWB-USA NEU travelled to Bbanda four times – accumulating approximately 110,000 miles flown – making substantial progress on our project.

Over the past year, the BDS evolved from a trench cutting through town center with a pipe protruding from the ground to a nearly complete water distribution system. The system transformed from the theoretical ideas on paper to a concrete, tangible system that people of Bbanda call their own.

This transition was by no means easy. The community dug the trenches that extend to the outskirts of the community and helped install several truckloads of hefty pipe. The pipe network took several trips to Uganda to complete. We drilled a borehole with enough potable water – as determined by the Ugandan government – to supply the system for the near future. Based on the difficulty in the past, this was a great accomplishment for us! In addition to these crucial, but hidden, components, EWB-USA NEU constructed a water storage tank, generator storage house, and several community tap stands; now the system looks like, as well as is, a water distribution system. All of this work represents an almost complete water system. Unfortunately we were unable to install the pump and generator on the most recent trip.

While we are proud of the tangible accomplishments, the impalpable role of the community in the project must not be understated. People dedicated time and energy out of their lives to dig the trench on the faith that we will complete the project (which isn’t always the case in Uganda). Consequently, community members have shown an increased interest in the BDS, attending multiple community wide meetings to discuss the logistics of construction and decided that every person would dig six feet of trench. This sense of ownership is the key to the longevity of the BDS.

The generator and pump remain to be installed, and we will continue with design work and fundraising until we can travel to Bbanda and commission the Bbanda Distribution System.
Trip to Panama

By Brandon Hornak - Honduras Program Director

Honduras Program Director Brandon Hornak and Uganda Program Director Alex Piers had the opportunity to travel to Panama in early October as representatives of Engineers Without Borders Northeastern University.

Brandon and Alex spent five days in Panama attending the joint 2014 American Society of Civil Engineers (ASCE) and Engineers Without Borders (EWB) International Conference in Panama City. The conference was held in Panama to commemorate the 100th anniversary of the historic civil engineering feat of the Panama Canal.

The conference was also used as a platform to bridge the gap between two influential civil engineering groups on an international stage in order to raise awareness of the purpose and cause of EWB and how the civil engineering community can contribute to furthering mutual goals within the profession.

Brandon and Alex attended seminars revolving around giga-projects, including the Panama Canal and the Big Dig, as well as seminars presented by Engineers Without Borders. They attended met representatives and spread the word about Engineers Without Borders.

After the conference, Brandon and Alex traveled to Las Delicias, a community in rural Panama, to explore the option of working with the community as a third program for the Northeastern University chapter, adding on to the current Honduras and Uganda programs.

The community first connected with the chapter after a Northeastern University “Alternative Spring Break” trip spent time there in late August, led by EWB-USA NEU Faculty Advisor Dan Saulnier and Professor Tom Sheahan, helping a local NGO in building more efficient stoves in homes, sand filtration systems at two homes, and a water storage tank at the community school.

While they were in Las Delicias, Brandon and Alex observed that the community water distribution system was in severe disrepair. With the help of a local NGO that works with the community, Sustainable Harvest International, and a Peace Corps volunteer that has lived in the community for a year and a half, the two students got to know the village in more depth.

The program has been discussed with the community Water Board and the chapter has decided to pursue the program. Applications were submitted to EWB-USA for program approval in February, and the chapter recently found out about EWB-USA decision to approve our program in Las Delicias. EWB-USA NEU is excited about the expansion of the group, and looks forward to this new phase.
Member Spotlight: Kim Perrone

By Charlie Audi - Uganda Design Lead

An engineer must be eager and determined to learn. Acquiring the technical knowledge to produce a safe, efficient, and sustainable design requires patience, attention to detail, and most importantly, a love for the work. We are students that struggle through design concepts and constructibility issues on a daily basis. At the same time, we enjoy the work and understand that our personal development as engineers translates to the development of a community in need.

Kim Perrone is an engineer. As a sophomore civil engineer, she is already a key member of the Uganda Design Committee and attends every meeting. Typically with young members, design work requires numerous iterations to be completed; this is expected considering young members are learning to design for the first time and have little knowledge of the project. When I assign Kim work, however, she returns a quality product on time. The extra effort she puts in between meetings is apparent as she exceeds the expectations for a young design member. To date, Kim has drafted as-built drawings in AutoCAD, written report sections, and given a presentation on the Bbanda Distribution System’s (BDS) structures to new members. She not only rapidly grasps technical knowledge of the project, but also affectively communicates this to her peers.

As more complex design work becomes available, Kim is a person I will continue ask for help due to her past reliability and future outlook – her future within EWB-NEU is bright. Her aspirations to take a leadership position and travel to Uganda are a good indication that our group will maintain its success and become stronger. Kim’s personal development as an engineer continues to strengthen our group. More importantly, Kim’s personal development as an engineer will help Bbanda gain access to clean drinking water.

2014 EWB-USA National Conference

By Kelly O’Connell - President

EWB-USA NEU sent six student members to the EWB-USA National Conference this past October, which was held in Reston, Virginia. This biannual event is a fantastic opportunity for all of EWB-USA’s chapters to learn, share, and network among students and professionals involved in the international development industry. The breakout sessions were divided into several topics of interest including impact analysis, technical applications, community development, and international leadership and careers. Our student members gained valuable knowledge that will be shared with the rest of the chapter during the spring semester’s general body meeting.

The chapter also accepted the 2014 Premier Student Chapter Award from EWB-USA, which recognizes our “strong organizational structure, outreach and collaboration with local chapters and varied fundraising approach.” This commendation recognizes the need for a robust internal chapter structure to support successful programs in developing countries.
Engineers Without Borders - USA Northeastern University Chapter

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