

Distributions

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Uganda Committee Update

This is an incredibly busy and exciting time for the Uganda Committee – just come to 140 Dodge Hall on any Monday night and you will see what I mean!

The Uganda Committee has been working hard to put reports together and finish up design for travel this summer. We've also got some awesome new talent that's getting ready to take over the Uganda project.

We're getting ready to begin construction of a village-wide water distribution system in Bbanda, Uganda. EWB-NEU has been working in Bbanda for almost five years now, and this system represents several years of assessment, planning, and design. The team has worked with local engineering firms and professors in Northeastern's Civil Engineering Department to complete the design, and with the community and local Ugandan government to coordinate construction. This summer, we are going to dig trenches, lay pipe, build a reinforced concrete tank, and build a generator house.



Liz Cherchia speaking with Mathias, the chairman of the Water Board at a Water Board meeting, 2012 | Photo: K. O'Connell

We're hoping to do an extended trip (six weeks instead of the usual two) and take ten students in two cycles. This way, we can be present for as much of the beginning of construction as possible, and more students will gain invaluable on-the-ground experience. Laying pipe and construction will go on throughout the fall, and next year, we'll return to Bbanda to finish by re-drilling a borehole, dropping the pump, and turning on the water!

by Liz Cherchia, *Uganda Design Lead*



Kevin Rathbun and Lindsey Broderick inspecting the tank at the Anglican school, 2012 | Photo: L. Cherchia

"The team has worked with local engineering firms and professors in Northeastern's Civil Engineering Department to complete the design, and with the community and local Ugandan government to coordinate construction"



The team draining the Bbanda Umea tank so it can be cleaned, 2012 | Photo: L. Cherchia

Honduras Committee Update

Endings Lead to New Opportunities

By Julieta Moradei

When looking around the classroom in the basement of Northeastern's Snell Library, you could see the different emotions and memories rushing through everyone's mind. The many alumni, students, mentors and leaders of the EWB-NEU Honduras team came together that night to support one another during the revelation of the abrupt cancellation of the culmination of our Honduras Projects.

The news was not easy to absorb: The Department of State had issued a Travel Warning to inform U.S. citizens about the security situation in Honduras. Currently, San Pedro Sula is considered to be the world's most violent city, and in January 2012, the Peace Corps withdrew its volunteers from the country to conduct an administrative review of the security situation. When EWB-NEU first started planning the water distribution system in Honduras in March 2005, we were aware of the risks, but decided that the needs of the communities outweighed them. Since then, the chapter has successfully completed projects in El Tecuan, Los Planes, El Chaguite, and Los Oreros and begun its fourth and fifth projects in El Carrizalito and Los Oreros. However, economic, political, and cultural changes have slowly led Honduras to become a more dangerous country in which we must stop our work for now.

For the past eight years, many passionate individuals have put countless hours and energy into making all these projects a reality. The team has shown incredible dedication to helping hundreds of villagers gain access to a better lifestyle.

Students have received the opportunity of a lifetime to experience active learning and educating others.

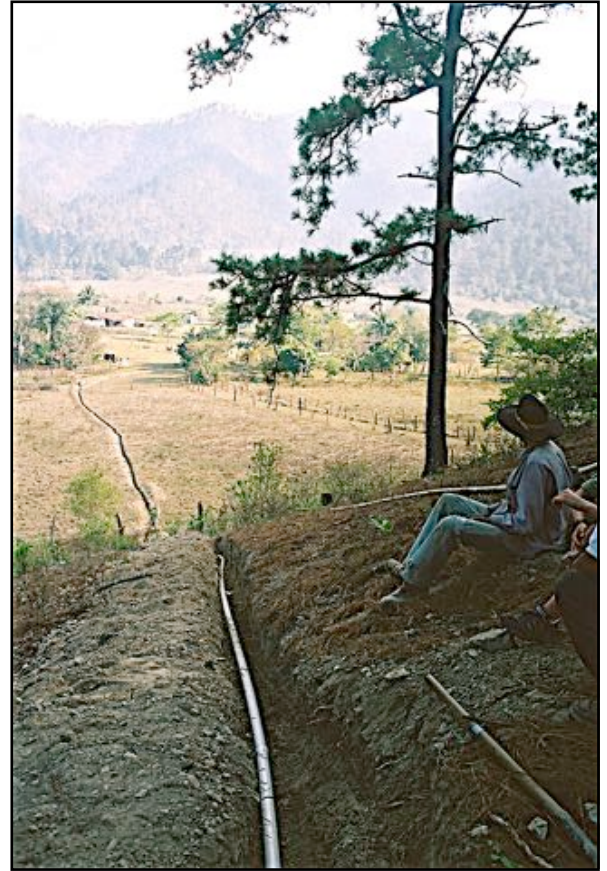
We want to acknowledge the following: our amazing mentor, Daniel Saulnier, who has shaped the team to succeed and reach goals beyond expectations since the very

beginning; our generous donors who without them, none of these projects would be possible; our student leaders, who always provide the energy and drive to the other members to bring the projects to realization; and to every single student who has helped in

any way. The assessments and implementations would not have advanced without them.

"The chapter has successfully completed projects in El Tecuan, Los Planes, El Chaguite, and Los Oreros and begun its fourth and fifth projects in El Carrizalito and Los Oreros"

Continued on next page



El Tecuan, 2005 | Photo: E. LaRoche



Los Planes, 2007 | Photo: J. Martin



El Chaguite, 2010 | Photo: D. Saulnier



Los Oros, 2011 | Photo: D. Saulnier



El Carrizalito, 2011 | Photo: R. Gordon

Honduras Committee Update (continued from previous page)

In that room stood our mentor, many students and alumni who have been a part of the Honduras team since the very beginning. The reality of the situation was difficult. However, there was a buzz running around the room: a sense of comfort that all these individuals were able

to put their minds and passion together to complete five projects in eight years while bettering hundreds of lives. Building on these past experiences, we are better prepared to take on future projects, whether it is in Honduras or in other regions in need. We look forward to future

challenges and the continuous support with helping others. The team understands the circumstances of the situation and will come together stronger than ever to create new opportunities and begin a new journey.

Uganda Technical Summary

By Emily Korot

In Uganda, water tanks are generally made from stainless or corrugated steel, HDPE, reinforced concrete, or brick masonry. EWB-NEU performed an alternatives analysis based on criteria including: design life, constructability, sustainability, and cost. After performing this analysis, the team determined a brick masonry tank was appropriate. However, after another assessment trip, it was found that local builders were better equipped to build reinforced concrete tanks, which was incorporated into the final design. In international development one of the keys to sustainability is to give the community a sense of ownership of the system; therefore,

community involvement will be an integral part of the system implementation.

The system will be gravity fed, and support approximately 12 tap stands throughout the village. The water supply will be pumped from a borehole (well) to a series of storage tanks located on Bbanda Hill, the highest spot in the village. Each tap stand is designed to have enough pressure to fill a 20-liter jerrycan in about one minute. The final design of the tank is concrete, reinforced with rebar and steel mesh. The foundation will be a traditional Ugandan design that uses brick to make a circle with an X through the middle.

The first tank is designed to have a 4.92 meter inner diameter and a height of 4 meters, providing a total capacity of 70,000 liters. The pipe network is designed to provide expansion to a second tank, which will be sized in the future to meet demand for the next 25 years. The roof will be a concrete slab with #4 rebar

placed in a grid formation for reinforcement. On the roof there will also be an access hatch to allow for maintenance and cleaning, along with a vent so there is air circulation in the tank. The inlets and outlets will be located near the base.

The distribution system and transmission main will be constructed of HDPE pipe. The pipelines will be located along the roads of the town to minimize the disturbance of farmland; EWB-NEU obtained landowner agreements for additional areas. Various pipe diameters were chosen to maintain pressure at tap stands and a self-cleaning velocity.

We have recently contacted a local mason in the area that is available for the prospective build time. We recently submitted our Pre-Implementation Report to EWB-USA and await approval of the Technical Advisory Committee in order to travel this summer!



Liz Cherchia sharing project plans with the Water Board, 2012 | Photo: K. O'Connell



Kelly O'Connell and a Ugandan Girl, 2012 | Photo: L. Cherchia



Andrew Rohrman and Kevin Rathbun surveying at a road crossing, 2012 | Photo: K. O'Connell



The Jerrycan Challenge

by Alyssa Stavola

Imagine carrying a 40-pound jerrycan a quarter of a mile. Now imagine doing that whenever you need water to drink, cook with, or bathe. This is what many people in developing countries do every single day. EWB-NEU created the Jerrycan Challenge to give perspective to those who have always had access to clean running water and may take it for granted.

This year EWB-NEU held two Jerrycan Challenges, one in the fall and one in the spring. Both had similar take home messages- 40 pounds is much heavier than expected, a quarter mile is much farther than expected, and I should probably go to the gym more. Most importantly however was the appreciation that in our homes clean water is as easy as the turn of a knob. You know what they say: don't judge a man until you've walked a quarter of a mile carrying his jerrycan.

Jerrycan Challenge, 2012 | Photo: K. O'Connell

EWB Bootcamp!

by Catherine McManus

As anyone currently involved in EWB-NEU knows, the project process is one that can be very extended, and it can be quite daunting to jump headfirst into EWB. To combat this steep learning curve, EWB-NEU hosted an EWB "Bootcamp!" which simulated a mock project that would walk members through the rigor and excitement of an actual EWB project.

Bootcamp! allowed new (and old!) members to experience the



Students from EWB-NEU and EWB-UNH meet over the weekend to participate in EWB Bootcamp! 2013 | Photo: I. Fendi

unique challenges of each phase of an EWB project, complete with surprise in-country challenges and disease outbreaks!

The participants this year represented a wide range of experiences including our friends from EWB-UNH who stayed for the weekend and added thought-provoking perspectives to the

discussions of chapter sustainability and efficiency. Participants ranging from freshmen to mentors (thanks for coming Dan and Keith!) were able to experience challenging and enlightening conversation, all while enjoying delicious burritos and pizza!

In Appreciation...

A few of our many sponsors are highlighted below

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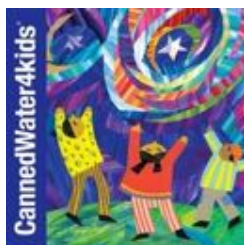
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**Congratulations to Maria Proulx,
the newly elected president for
2013-2014**

Donations

EWB-NEU is a group of dedicated students with ambitious goals for the future of our chapter and project locations, which can only move forward with your support. Please find information below on how to donate. All donations are tax deductible.

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