



ENGINEERS
WITHOUT
BORDERS
USA

ORANGE COUNTY Professionals

EWB's Mission is to develop relations with communities in developing nations and foster the development of sustainable infrastructure projects to improve the lives of members of the communities.

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February 2016

EWB-OC NEWSLETTER

Announcements

- ✚ 2016 Board Election in January
- ✚ Board Positions Opening for Treasure and El Salvador Project Lead
- ✚ 2015 Corporate Challenge Winning Team

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PRESIDENT'S COLUMN



Greetings EWB members and friends, and Happy New Year! I hope that you had a wonderful holiday season, and that 2016 brings much health and happiness to you. Wow, what a year 2015 was! Our four international projects have been moving forward at light-speed, bringing clean water to villages in Kenya, Honduras and El Salvador and sanitation systems to impoverished areas right outside of Tecate and Tijuana in Mexico. As I look back on the year, I am so proud of the achievements of our members, and look forward to seeing what 2016 brings under the Chapter Presidency of Greg Henk. Greg is a seasoned engineer with a wealth of experience in infrastructure project delivery, mentorship and service around the world. I look forward to supporting him in growing the impact of our chapter.

Thank you for taking the time to read our exciting chapter updates and, as always, I welcome personal contact President@EWB-OC.org for any enquiries or ideas about how to make our chapter bigger and better!

Sincerely,
Angela Whiteside

STAY CONNECTED TO EWB-OC

Engineers and non-engineers of all backgrounds

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Kenya

Project Update and Future Outlook

By Servando Diaz

The Laikipia District Kenya Program currently encompasses both water supply and water storage projects. Our aim was to meet 100 percent of local community's water needs. In 2013, our team completed the roof-based Rainwater Catchment of our Water Project. The project left the community with the ability to store over 8000 gallons of usable rainwater. The unfinished phase of our project, which included the drilling and development of a shallow well, was halted due to incomplete permitting required to tap the aquifer. We are currently working with the local Water Resources Management Authority to resolve this issue at which time we will send a final team to complete this project. Recently, our partnered NGO went on to replicate our rain water catchment design at a similar community in need along the Tanzanian border, where our project installed a total of 4 systems, the NGO installed 28 additional rainwater catchment systems. Today, our team is looking to start a new project ideally within Kenya so that we may oversee the progress of our existing projects.



Rainwater Catchment System



The Samburu Woman Pulling Stored Water

Get Involved in Kenya Project

Project Team Meeting

Date: Every last Monday of each month

Time: 6:30pm – 8:00pm

Location: Michael Baker International, 14725 Alton Parkway, Irvine, CA 92618-2069

*detailed calendar see, <http://ewb-oc.org/calendar/>

For more information or question, please contact Servando Diaz @ kenya@ewb-oc.org

Honduras

Project Update and Future Outlook

By Steve Tedesco

In 2015 the Honduras Water Project completed several major milestones toward project completion. These included the completion of the 20,000 gallon elevated concrete water storage tank and drilling of a new well to fill the tank and provide water to the 350 citizens of Barrio Lempira and Colonia Lempira. Design of the final portions of the project are almost completed including the water pipeline network, well pump, well piping, and pump house. The communities have also agreed to pay for the cost for backhoe work and will assist with the pipeline installation. Local government agencies in Honduras have agreed to supply the well pump, piping and valves for the water system. Construction is expected to begin in spring 2016 on this final phase of the project and we expect to have the system operational by the end of summer 2016.



Well Pump in Olancho, Honduras

Completed Water Tank



Get Involved in Honduras Project

Project Team Meeting

Date: Every other Wednesdays

Time: 6:30pm – 7:00pm

Location: Tetra Tech, 17885 Von Karman, Suite 500, Irvine, CA 92614

Conference Call: (866) 692-5721, Pass-code: 9878785

*detailed calendar see, <http://ewb-oc.org/calendar/>

For more information or question, please contact Steve Tedesco @ honduras@ewb-oc.org



Mexico

Project Update and Future Outlook

By Mandy Wong

Following the installation of a pilot septic tank system in March, our team made three more trips in 2015 to provide further technical assistance, to lead education workshops, and to monitor the performance of the pilot system. In June, our team evaluated the physical feasibility of installing septic systems for 15 additional families. Community members shadowed our team as we surveyed the sites, learning what criteria to consider. In September, our education team led workshops on the topics of sanitation, health, and hygiene. Approximately 30 community members participated. Then in December, our technical team returned to host a town hall meeting to explain various commonly used sanitation systems and answer O&M related questions. Around 35 community members walked away from the meeting with an understanding of how their existing sanitation systems worked, and the benefits of the pilot septic tank system.



OC EWB volunteers hosted a sanitation education session to community members in September, 2015



Site assessment trip in June



Talking to families about their existing sanitation system in December

A big thank you to our volunteers for their continuous dedication!

El Salvador

Project Update and Future Outlook

By Ty Keith

Pumping System Design Support, at Las Delicias, El Salvador

Community – Las Animas, Las Delicias, El Rosario, the Community Water Board – ADSA, and the local Mayor's office, Local Partner Organization – ENLACE, EWB-USA Orange County Professional Chapter. Build a clean water distribution system for up to 10,000 people. Provide hygiene education and training to 300 community leaders in three communities. And provide water distribution system operations and maintenance training of the local water board. Program started in 2008 and is scheduled for completion in 2016. The project is located roughly 50 kilometers north of San Salvador.

Current efforts consist of completing Phase 6 of the Milagro water project initiated in 2008. The completion of Phase 6 includes developing and implementing a water distribution system between various reservoirs that were constructed in earlier phases of the project. This involves the design and construction of pumping systems to complete the distribution system and the design and installation of necessary control systems. This project addresses a decades-long basic community need. Water-borne illness is a long-standing problem, and delivery of the current water supply imposes a severe financial strain on the community.

Stage 6

Distribution line to Las Delicias for 823 families



For more information or questions, please contact Ty Keith at elsalvador@ewb-oc.org

San Diego Safari Park Bridge Project

Project Update and Future Outlook

By Greg Henk

EWB-OC is partnering with ASCE-OC in joint outreach projects with both the San Diego Zoo's Wild Animal Park (WAP) and the US Forest Service, both in SoCal. Both of the outreach projects are designed to solicit EWB and ASCE members' involvement at two levels. The first level is on an Engineering level to design small bridge railings and forest improvements (e.g., picnic grounds, etc.) and at a Volunteer level (Saturday or weekend activities) to help to physically install the WAP's bridge railings and to make physical improvements to the Forest Service's trail, grounds, etc.

We are currently finalizing the design of the WAP bridge railings and hope to have a joint Association weekend installation project in Spring 2016. We are also meeting with the USFS in mid-April to advance our project development for the Wildwood Picnic area and for our first weekend Volunteer trip.



Greg Henk Project Lead



Wild Animal Park Bridge (Top View)



Wild Animal Park Bridge (Bottom View)



Wild Animal Exhibit

For more information or question, please contact Greg Henk at localprojects@ewb-oc.org

MEMBERS SPOTLIGHT

El Salvador – BEYOND THE CALL OF DUTY

By Ty Keith



Isamar Escobar is

the driving force behind the success of EWB-OC's Project Milagro currently being constructed in El Salvador.

According to the project team lead, Ty Keith, "Isamar makes my job easy. We are very fortunate to have her on our project team."

Isamar received her Bachelor of Science degree in Civil Engineering from the University of California, Irvine.

She is part of the stormwater group at Michael Baker International, a leading provider of engineering, development, intelligence and technology solutions with global reach and mobility.

UPCOMING EVENTS

Monthly OC EWB Board Meetings

Date: February 23, 2016; March 22, 2016, April 26, 2016

Bi-Weekly Honduras Meetings

Date: February 17, 2016; March 2, 2016, March 16, 2016

*detailed calendar see, <http://ewb-oc.org/calendar/>



FUNDRAISING

By Anand Helekar

The 2015 Corporate Challenge was conducted on Saturday, September 12, 2015. The event is held annually at the UC Irvine Athletic Center. A total of eight teams (Burns & McDonnell, EEC, GHD, Langan, Michael Baker, Tetra Tech, and two teams from Applied Medical) participated in this year's event. Events included volleyball, a relay race, Heads Up, a catapult challenge, and the favorite, the Odyssey Obstacle Course. Each team consisted of 8 to 12 members. Donations for coffee, bagels, and doughnuts were made by Starbucks (across from UC Irvine), Bagels & Brew in Aliso Viejo, and Miss Donuts in Fullerton. Burns & McDonnell won 1st Place, Applied Medical (Team #1) won 2nd Place, and EEC won 3rd Place. All proceeds from the Corporate Challenge went to the Kenya, Honduras, El Salvador, and Corazon, Mexico projects that are currently being conducted by the EWB Orange County Chapter. The event was very spirited and was great fun for everyone involved. The 2016 Corporate Challenge will be schedule for September or October 2016.

Congratulation 2015 Corporate Challenge



For more information or question, please contact Anand Helekar @ fundraising@ewb-oc.org

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Thank You

I'll close by thanking all of our wonderful sponsors who have donated their money and in-kind assistance to our projects throughout 2015. As you have read, your support has facilitated the direct and significant improvement of thousands of lives throughout the year in some of the world's poorest areas. Please continue to stand by our side as we expand our reach in 2016.

For any enquiries, please email me directly at President@EWB-OC.org

President, Angela Whiteside

