

# EWB at Tufts

ENGINEERS  
WITHOUT  
BORDERS

Winter 2010  
UPDATE



## Hurricane Ida causes massive flooding in San Jose Villanueva while a new project emerges

It has been two years since the last newsletter and a lot has happened in that time regarding Tufts EWB in El Salvador. Tufts EWB traveled three more times to El Salvador: July 2008, January 2009 and July 2009. During the first two of these trips, Tufts EWB members educated the community of Arada Vieja on the proper use and maintenance of their water distribution and filtration system, aided the community in establishing a maintenance fund for the system, and assessed the effectiveness of the filtration system. After the second trip, Tufts EWB left

Arada Vieja confident of our efforts to ensure the sustainability of the project.

Unfortunately, when we returned in July 2009, we found that political and religious disputes had affected the cooperation of the community to contribute to the maintenance fund for the system. Many families had not contributed to the maintenance fund at all, and those who had been were no longer contributing.

During the fall of 2009 heavy rains from Hurricane Ida caused severe flooding in San José Villanueva. The embankment around the aquaculture ponds in Arada Vieja gave way, and the tilapia and shrimp farm was lost. When the river level crested, much of the piping and the RAM pump were swept downstream. With some luck, the community was able to recover the

pump. However, it is still unknown whether the pump requires major repairs or replacement. It is our hope that this blow to the community will compel them to reconcile their differences and repair the system without financial aid from Tufts EWB.

Meanwhile, having believed that our project in Arada Vieja was coming to a

## In the Newsletter

1. El Salvador Project Update
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Would you like to donate?

for **2010**

In order to continue our mission of designing and implementing sustainable development projects for communities around the world while shaping Tufts students into socially and globally responsible engineers and citizens, we ask our alumni to give back to the organization that has given so much. With the current economic climate, funding is tight and donations of any size would be beneficial to the organization. To make a contribution [click here](#) and use Gift Designation 3 and earmark the donation to EWB. You can also make a donation through our website at <http://ase.tufts.edu/ewb>.



Segment of homemade rainwater collection system alongside a household in Porvenir, El Salvador (left) Water conference in Mayor's office of San Jose Villanueva set up by Epilogos Charities and ACUA (right)



close, in January of 2009 we performed a preliminary assessment on the feasibility of a water project in the nearby community of Porvenir. The community expressed the need for more water than their springs provided, especially towards the end of the dry season. After an additional assessment trip to the community in July 2009, Tufts EWB signed a Memorandum of Understanding with the community to take on the project. We are currently helping the community establish a water committee while exploring the implementation of a well, point of use treatment of river water, and improved rain water harvesting systems in the community.

We envision that during our project in Porvenir we will continue to be in contact with Arada Vieja, giving us the opportunity to assess the impacts of the water filtration project, while providing technical and organizational support to the community.

### BP Solar donates 12 solar panels to the Haiti project

The Haiti project is not an official EWB project, but instead is working closely with the Institute for Global Leadership (IGL) and a Tufts student group called RESPE. We are continuing our work in Balan, a community in Northern Haiti and plan to install a solar panel system that will be used to provide electricity for a community meeting place and school. During the fall 2009

semester, our Haiti team finalized the project plans and received a donation of 12 solar panels from BP Solar. The group has been working with a professional engineer from the Boston area and is assembling a technical team for the upcoming assessment trip.

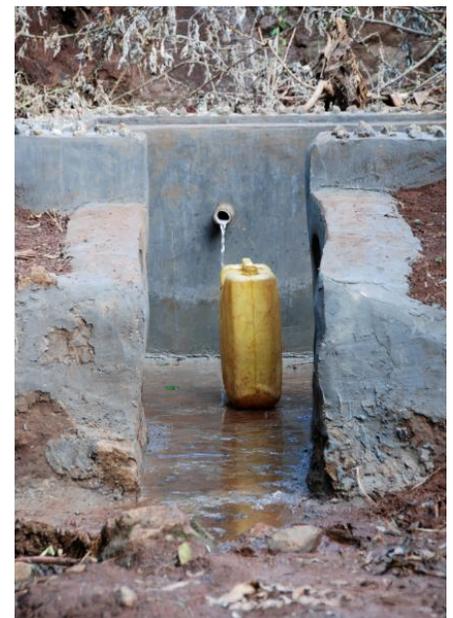
### Efforts underway to rekindle the Ecuador project

Since the last trip to Cristal, Ecuador in January 2008, Tufts EWB had temporarily ceased working on the water project in Ecuador primarily due to a lack in leadership after the graduation of the entire Ecuador team. However, with the return of Professor Matson, the team's faculty advisor, and the desire for Tufts EWB to quantify the impact of a Tufts EWB project, efforts are underway to rekindle the Ecuador project. During the 2010 spring semester, a newly formed Ecuador team will plan for a post-assessment trip to El Cristal with the aim of traveling to the community during the summer of 2010. Tufts EWB will conduct water quality tests to measure the effectiveness of the newly built slow-sand filters as well as conduct health surveys to quantifiably assess the impact that Tufts EWB had on the community. This information will guide Tufts EWB in future water projects as well as aid

Tufts EWB in receiving funding for these future projects.

### Students plan for assessment trip to Uganda

Led by sophomores Scott McArthur and Ian MacLellan, a team of Tufts EWB members are beginning a new project working with the Shilongo Village, which is located in Eastern Uganda, about 10 kilometers outside of Mbale. After a visit to the community by Scott McArthur and frequent email correspondences with a local NGO, Shilongo Village identified water access as their most pressing need. The community has approximately 125



Shilongo's sole source of water



Elder council of the Shilongo Village

families consisting of 1,000 individuals who rely almost entirely on one spring for all their fresh water.

The group plans on traveling for an assessment trip in the summer of 2010 to investigate the community health issues and to survey the land in order to determine the most appropriate locations to tap the groundwater or provide additional water access. The group will be working with the local NGO to set up a community organization to oversee the key decisions regarding the project's implementation, maintenance, and sustainability.

Efforts this past semester have been focused on funding the upcoming assessment trip, networking with local organizations, and learning about the culture and dynamics of the community.

In the course of the upcoming spring semester the group plans to continue funding and networking efforts while beginning to plan for an assessment trip. The group will work with members of the

El Salvador team as they research design possibilities regarding water access.

### Tufts EWB hosts a slow sand filtration workshop

In February of 2009 Tufts EWB hosted a slow sand filtration workshop. Over 70 people attended from Tufts University, the Boston Professional Chapter, Northeastern University, Harvard University, MIT, Olin College, and Boston University. The workshop was a great success as it demonstrated the leadership and progressiveness of the Tufts chapter of EWB. Our initiative in holding the workshop sparked stronger communication among the EWB chapters in the Boston region and encouraged other chapters to hold their own workshops. As several of the other EWB chapters in the Boston area are working on similar projects in similar regions of the world, the sharing of expertise and research among the chapters spurred from

these workshops has been and will continue to be extremely rewarding.

### Fundraising now a major part of Tufts EWB

Last semester the El Salvador project applied to three grants made available by EWB-USA; however, with hundreds of EWB chapters across the nation competing for these grants, we were not successful. The Tufts EWB chapter received some funding from the Tufts School of Engineering as well as a few corporate donations. Tufts EWB continues to receive donations from private donors and this support has helped tremendously. In the spring semester, both the Uganda and El Salvador teams will be entering the 100 Projects for Peace competition sponsored by the Davis United World College program. Winners are chosen from each university and receive \$10,000 for their project. In addition, both teams will be applying for several grants during the spring semester as well as carry out more traditional fundraising efforts such as selling Tufts EWB t-shirts and other Tufts EWB merchandise, putting together a charity auction, and collaborating with local businesses such as the Uno Chicago Grill in Porter Square to hold charity dinner nights. Through this multifaceted approach, Tufts EWB aims to raise \$20,000 by the end of the current academic year in May 2010. So far we are slightly less than halfway to our goal



Photos from the slow sand filtration workshop



and need the help of our alumni to come up with new approaches to fundraising. It is clear that fundraising will now be an integral element of our efforts in order to

ensure the sustainability of our own organization. The strength of Tufts EWB stems from the passion of our members and alumni. Alike to everything else we

do in this organization, our passion will be the driving force as we raise funds for these enriching and constructive development projects.

January	February	March	April
Second semester general interest meeting	Pizzeria Uno fundraiser	Tufts EWB hosts community health workshop	Loj retreat
Group meetings begin	TAC Review for trip to El Salvador	Executive Board Elections	Faculty Review Roundtable
Pre-trip report due for El Salvador trip during spring break		Trip to El Salvador during spring break	Visioning Meeting

## TUFTS ENGINEERS WITHOUT BORDERS



### ABOUT OUR ORGANIZATION...

IT IS THE MISSION OF THE TUFTS CHAPTER OF ENGINEERS WITHOUT BORDERS TO EXPAND THE TRADITIONAL CAPACITIES OF ENGINEERING THROUGH THE EXPOSURE TO DIVERSE DISCIPLINES AND INTERNATIONAL EXPERIENCES IN ORDER TO FOSTER A UNION OF IDEAS AND PEOPLE, BETWEEN CULTURES AND ACROSS THE FACILITIES OF LIBERAL ARTS AND ENGINEERING, ULTIMATELY, TO BETTER PROVIDE FOR THE NEEDS OF OUR FUTURE WORLD.

2009-2010  
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Engineers Without Borders is a student-run organization at Tufts University

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(yet to be determined)  
Ecuador Leader

If you would like to contact us regarding any of the articles in this newsletter please email us at [tuftsewb@gmail.com](mailto:tuftsewb@gmail.com). Also, please visit our website at <http://ase.tufts.edu/ewb>.