News and Updates

News Archive

New Blog

AguaClara at Cornell has started a blog. We hope that features like RSS and email subscriptions will make it easier to keep track of AguaClara's progress, and at the same time make it easier for us to provide you with updates.

Plant AutoCAD Flythrough

A new 3-D rendering and flythrough of the Atima AguaClara facility has been posted on our YouTube Channel.

Design Tool Source Posted

The Design Tool source code has been posted online here. This is in keeping with AguaClara's open design philosophy and a step forward in opening up AguaClara's design algorithms to peer review and dissemination.

Update from the Director

July 14, 2011 Good afternoon!

I hope that you are all having a great summer!

I've been meaning to write an update on AguaClara for some time and the accelerating pace of the AguaClara team has kept me fully occupied. Here are some highlights.

Gail Richardson has joined the AguaClara Advisory Council. She brings passion for Honduras, professional experience in public relations, and lives in NYC.

The AguaClara summer internship program at Cornell continues to grow. This summer the program doesn't offer credit or pay and has over 30 students and graduates participating. I am paying the incoming and outgoing design team leaders and an M.Eng. graduate who is designing an improved chemical doser. The program has Cornell institutional support and so it should be possible to continue offering this in future years. I am particularly pleased with the progress that we are making on our designs. Summer internships for a few student leaders have an incredible return on investment.

An M.S. student and an M.Eng. graduate are in Honduras supervising the design and construction of the first Stacked Rapid Sand Filter at the Tamara, Honduras AguaClara facility. The foundation for the 12 L/s Stacked Rapid Sand Filter is being poured right now and in the coming weeks the filter will be completed. Stacked Rapid Sand Filters have the potential to overcome the limitations of previous filtration technologies and to allow widespread adoption of the AguaClara technologies in countries where filtration is required by law for surface water supplies.

Jeff Will graduated with an M.Eng. in May and has a Fulbright Fellowship to work with APP in Honduras starting next week. This once again makes it possible for us to keep the APP-Cornell connection going without requiring a lot of funding. Sarah Long will be ending her AguaClara Engineer position with APP in December and Dan Smith will be ending his term in February of 2012.

Len Lion and I will be traveling to Honduras from August 1 - 8 to visit project sites, create a vision for the coming year, and meet with government officials and the Pan-american Agricultural University at Zamorano where they hope to build an AguaClara plant.

A Cornell MBA graduate from Colombia is pursuing the possibility of creating a new business that would become the AguaClara implementation partner in Colombia.

The Guatemalan government ministry that provides technical support to municipalities is planning to send a delegation to visit AguaClara facilities in Honduras next month./

We will be receiving \$15,000 for one of the three proposals (Stacked Rapid Sand Filtration, Automated Design Tool, Foam Filtration) that we submitted to the EPA People/Planet/Prosperity competition last December. The proposal that EPA reviewers liked best was our proposal for point of use filtration using porous foam.

The AguaClara team in Honduras has a new (used) pickup truck enabling them to retire the Tayo to short trips (with gratitude to Ken Brown!). The additional vehicle has been greatly appreciated especially given the multiple AguaClara projects underway in Honduras this summer.

The Marcala plant upgrade to 55 L/s was completed a few months ago. That plant is serving 15,000 people and brings the total population served by AguaClara facilities to 25,000!

The Alauca plant construction is proceeding very rapidly. You can see photos of the construction on our Picassa site (https://picasaweb.google.com/CUAguaClara/AlaucaProject).

The Atima project is proceeding through the pre-construction phases. It has Rotary approval and it is expected to move into construction soon.

The Millennium Water Alliance, MWA, has submitted a proposal to Nestle for a shared value award that is based on scaling up AguaClara in Honduras. The MWA connection has a lot of potential. We just need one of the joint proposals to be funded! Dan Smith has been submitting multiple proposals with APP in an effort to increasing funding for the Honduras side of the AguaClara program.

Cornell and College of Engineering Development offices seem to have a new openness to looking for funding for the AguaClara program. Although nothing has materialized yet, the door is open for working together. There are conversations about meetings with previous donors and I am hopeful that it will be possible to increase the level of support for AguaClara at Cornell so that we can continue to focus on Research, Invent, Design, Empower!

Warmest regards,

Monroe Weber-Shirk

AguaClara Engineering Trip to Honduras

Twenty-one Cornell students in the AguaClara program spent two weeks of their winter break traveling in Honduras and learning about the sustainability of various drinking water treatment technologies. The AguaClara team has developed a series of water treatment technologies that do not require any electricity and that are able to transform highly turbid surface waters into safe drinking water. The team at Cornell partners with Agua Para el Pueblo in Honduras to implement the Cornell technologies. While in Honduras they traveled over 1400 miles with many of those miles on dirt roads. The team visited five communities with AguaClara water treatment plants and two communities where AguaClara plants are on schedule to be constructed this year.

Sedimentation Tank Hydraulics Team Develops Floc Blanket in New Design

The Sedimentation Tank Hydraulics team is working on designing a new tank that has optimal geometry for floc blanket formation. In past years, the team was successful in forming floc blanket in labs but failed to form them in full-size plants. Doing so would allow a shallower, more materials-efficient geometry than the current sedimentation tank design, which translates into a better plant for a lower cost. Team leader Anna Lee says, "We are still working on designing the sedimentation tank. Our schematic drawing and the AutoCAD drawings of the model will be part of our first reflection report." To view the Sedimentation Tank Hydraulics reports visit the team page.

AguaClara's Spring Benefit Concert

The biannual benefit concert was a great success, thanks to the participation of local artists Alan Rose & the Restless Elements, Julianna Richer Daily, Larry Lin, and Pouria Pezeshkian! Special thanks to the Nines for hosting this event once again. For those that missed it, photos are available on AguaClara's Picasa page here, and of course we encourage everyone to come out for the concert next semester.

Volunteer Opportunities

AguaClara is currently taking local volunteers! As of this semester, the team is open to individuals willing to help out with any aspect of the project. Teams are involved in a variety of tasks and range from Foam Filtration Research to the Design Team. Those without significant engineering experience are welcome to participate and learn more about AguaClara and the water filtration system. Additionally, they are welcome to participate on the Outreach Team which works to spread the word about AguaClara both locally and globally. Projects include updating the website, planning fundraising events, creating promotional materials, and contacting potential funding sources. Volunteer opportunities vary in length of time commitment and every participant will receive a certificate at the end of their commitment as verification of their contribution to AguaClara. Anyone interested should send an email to CUAquaclara@gmail.com.