

# nIm42

## Natalie Mottl's Individual Contribution Page

### Spring 2016 Contributions

Continuing her work from last semester, Natalie is working with the Enclosed Stacked Rapid Sand Filtration Team (EStaRS). The research focus this semester is developing a manometer system for operators to use to test fluidization of the bed and to compile headloss data for the lab scale filter. Natalie is the lead coordinator with AguaClara's partners including APP who will be constructing EStaRS filters in Honduras later this year. Additionally, Natalie continues to optimize the lab set-up and document findings for subsequent semesters.

### Fall 2015 Contributions

This semester, Natalie is working with the Enclosed Stacked Rapid Sand Filtration Team (EStaRS). Natalie's major focus this semester is to learn how the filter works and help test the orifice inlet system. The main contribution to the team was providing solutions for clogging in the inlets. Over the semester we developed different methods such as slowly transitioning from backwash to forward filtration.

### Spring 2015 Contributions

As a member of the Fabrication sub-team, I will be working on the successful testing of the weir system scale model built by last semester's team. We will assemble the pump and pipes, then run tests to prove that the weir system will help regulate the flow rate of water through the plant. The testing will be done by running water through the model and recording how fast the water runs through depending on the position of the movable weir.

Once the testing is complete and the support for the weir system is provided, I will join another aspect of the Fabrication team. I will assist in the fabrication of the large-float valve, a new innovation in the plant that will regulate flow rate through regulating the amount of water dispelled from the storage tank.