

Challenges Summer 2012

Our challenges for the Summer of 2012 are designed to make it easier for new communities to adopt the AguaClara technologies. Our goals are to reduce costs, improve fabrications techniques, extend our designs to lower flow rates, improve our documentation, and create an AguaClara business to facilitate spread of the technologies.

We will be pushing the technology to an even smaller scale with a goal of meeting the needs for communities all the way down to 100 people. That will require developing new fabrication techniques for both flocculation and filtration (filter in a pipe).

We are exploring options for developing an AguaClara business to separate the implementation side from the R&D effort. Of course, the goal is to keep communication between implementation and R&D so that we can continue to improve the technologies based on feedback from the field.

Teams

Team Name	PDF	Lyx Zip	Advisor	Type of Research	Specialization	Resources	Location
Stacked Rapid Sand Filtration	? Unknown Attachment	? Unknown Attachment	Mickey	Design /fabrication	4540		B60 B
Demo Plant	? Unknown Attachment	? Unknown Attachment	Heidi	Design /Fabrication /Lab testing	4540/Systems	wet bench/shop	B60 A
Sedimentation Tank Hydraulics	? Unknown Attachment	? Unknown Attachment	Heidi	Lab Research	4540	PC	160
Fabrication	? Unknown Attachment	? Unknown Attachment	Heidi	Creation of jigs and procedures for assembling plant components		dry bench/shop	Project Lab
Floc Sed Optimization	? Unknown Attachment	? Unknown Attachment	Mickey	Lab Research	4540	PC	B60 A L end
Linear Chemical Dose Controller	? Unknown Attachment	? Unknown Attachment	Monroe	Component selection and fabrication	hands on design		Project Lab
Foam Filtration	? Unknown Attachment	? Unknown Attachment	Mickey	Lab Research	hands on design	PC	Project Lab
Ram Pump	? Unknown Attachment	? Unknown Attachment	Monroe	Lit Review /Design /Fabricate	3310	shop/sump pump/water tank	Project Lab

Design team challenges (Tori Klug)

The [design team challenges](#) are available in a separate google doc.

The source file for the tables is [Challenges Summer 2012.xlsx](#).