

jem384

Julia Morris's Individual Contribution Page

Spring 2011 Contributions

This semester I am a member of the Turbidimeter Team. Our goal is to design a low budget (under \$20), accurate turbidimeter. These turbidimeters will be provided to candidate communities to determine the source water turbidity range and hence the type of water treatment required. My teammates and I created a prototype. The prototype consists of an LED light covered with a design which is lowered into a tube of turbid water. A relationship between the depth that the design was no longer visible and turbidity was found and a scale was made accordingly.

Fall 2011 Contributions

This semester I am a member of the Turbidimeter/Inlet Manifold team. Our goals for this semester include making the current turbidimeter design more accurate and able to measure lower turbidity (1-5 NTU), create an AutoCAD drawing of our design, write a journal article to submit to the Journal of Environmental Engineering describing the turbidimeter design and use, and to design a method to fabricate the new inlet manifold diffusers by late October.

Spring 2012 Contributions

This semester I am on the Design Team. My task for this semester is to implement the Sedimentation Tank Economic Analysis done by several groups in Fall 2011 CEE 4540 class into the AguaClara Design code. To do this I will analyze the methods that each team took to minimize the cost of the sedimentation tanks, create an algorithm that given a certain plant flow rate returns the number of sedimentation tanks and bays, and implement that algorithm into the sedimentation design code.

Summer 2012 Contributions

This summer I was apart of the Design team. I worked on adding the Low Flow Plant designs into the Design Tool. The low flow flocculator and the low flow sedimentation tank designs were added to the Design Tool.

Fall 2012 Contributions

This semester I was on the design team. I continued to work on improving the Low Flow Plant designs. The low flow flocculator and sedimentation tank designs were finalized and I worked on creating a smaller entrance tank design for low flows.

Content created by Anonymous

There are no pages at the moment.
