## njc74

## Nick Coyle's Individual Contribution Page

Spring 2015 Contributions

This semester, I am on the StaRS Filter Theory Team. The goals of this subteam for the semester are to determine if there is clogging across the 0.2 mm slots in the pipes which transport water into and out of the filter. Also, the team plans to determine the physics behind floc and colloid removal in the filter. I am the Materials Coordinator for this semester and so far, I've helped gather the appropriate materials together for the team's experiments (slotted pipe, tank, cables, etc.) and I've created the AutoCAD drawing (SlottedPipeSchematic.dwg) for the slotted pipe apparatus which is being used in the ongoing experiments. Currently I am helping in the setup and maintenance of the apparatus before and during each experiment, as well as operating Process Controller to run the experiments. In the future, I will analyze the head loss through the slotted pipes and determine whether it is significant enough to switch to a new design for injecting water into the tank (perhaps a U-shaped design).