Patrick Lindsey E90 Project Selection Memo October 2, 2007

Several past E90 projects have dealt with the constructed wetlands site in the Crum. My work in the spring will build upon these previous projects, in particular those of Marc Jeuland '01, who is responsible for the construction of the site, and Colton Bangs '07, who last year restarted work and data measurement after a hiatus of several years. Specifically, my project will include the development of a detailed hydrologic model of the site, continued evaluation of nutrient removal efficiency and the construction of a system that can be used to evaluate the effect of varying water levels and flow rates on the site. If time permits, some additional work with the existing solar energy system may be done, but the specifics of this are not known at this time.

Since I was abroad during the Fall 2006 semester, I was unable to take E63: Water Quality and Pollution Control. This project offers me a chance to make up for that lost opportunity; however, it also means that I have a great deal of ground to cover. I anticipate having to start the learning process sometime this fall.

Professor Arthur McGarity will serve as my advisor for this project.