Intern Amanda Doremus’ project, co-sponsored by the DWRC and the UD’s Department of Plant and Soil Sciences, was titled “Water Quality Performance for Paired Bioretention Basins.” She was advised by Dr. Carmine Balascio of the UD’s Department of Plant and Soil Sciences.

Abstract

My research project, Water Quality Performance for Paired Bioretention Basins, studied bioretention basins as a stormwater control measure to treat water in compliance with regulations. The purpose of this research was to compare the results of water treatment using a standard DNREC media versus an advanced media within the bioretention system. Stormwater samples were collected using ISCO 6700 Autosamplers. The first sampler collected water at the head of the system to capture untreated stormwater. Water was divided and passed through a standard DNREC media, and separately through an advanced media. The water was again sampled at the end of each of these outlets. Some of the results show that the advanced media has better phosphorus retention. Since technical issues have caused incomplete data sets, more data are needed to make further conclusions.