

**Soil and Water Sciences Department  
Graduate Student Exit Seminar**

**Speaker:** **Jonathan Diller**  
**M.S. Thesis Degree Candidate**

**Advisor:** Dr. Samira Daroub

**Title:** **An Analysis of Pollutant Removal  
Performance of the Wetland Basins in the  
International BMP Database with  
Relationship to the Area of the Wetland  
Systems and the Watershed Area**



**Date:** Thursday, March 1st

**Time:** 2:00 pm – 3:00 pm

**Location:** McCarty Hall A, Room 3177

The International BMP Database is a large collection of data, voluntarily submitted, that is comprised of information on stormwater treatment best management practices. The data contains information on many different types of BMPs. This study evaluated the pollutant removal performance of the BMPs classified as Wetland Basins. The study sought to determine if there was a relationship between the watershed and wetland areas, and the pollutant removal performance. It also looked at the overall performance of the wetlands basins for the pollutants included in the study. The analysis found that removal efficiency of total suspended solids and ortho-phosphate increased linearly as the permanent pool area of the wetlands to watershed area was higher. Total P and other metals did not follow this relationship, indicating other factors impacting removal. Overall, all locations had at least 50% removal efficiency for all pollutants regardless of location, size, or ratio of watershed to wetland area.

For our off-campus students, off-campus faculty, and on-campus students who cannot attend, this seminar can be viewed via live or watched at a later date via this link: [Jonathan Diller](#). In addition, all seminars are archived for viewing on our [SWSD Seminar Page](#).