

Soil and Water Sciences Department Graduate Student Exit Seminar

Speaker: Traci Goodhart M.S. Thesis Degree Candidate

Advisor: Matthew Deitch, Ph.D.

Title:Examining the Spatial and Temporal Dynamics of Stormwater
Pollutants in an Urbanized Watershed of Northwest Florida

Date: Monday, April 8, 2019

Time: 3:00 pm – 4:00 pm

Location: McCarty Hall A, Room 3177

The Pensacola Bay System (PBS) in northwest Florida includes multiple interdependent estuarine waterbodies, major rivers, and headwater streams. The research describes the hydrologic dynamics observed, and the spatial and temporal variations of pollutants within an urbanizing watershed of northwest Florida. Increased area with impervious surface and variations in land use create spatial differences, affecting flow dynamics, pollutant concentrations and loading. The results of this study found distinct variations in hydrologic response, concentration, and load among sites emphasizing the need for spatially explicit monitoring in this urbanized watershed to better understand the dynamics of stormwater pollutants as they relate to land use and urban infrastructure. Commercial land use, effective impervious area, and total imperviousness found within this watershed are areas that contribute most to pollutant concentrations and load. These areas may be best suited for mitigation and provide a unique opportunity to apply adaptive management techniques to improve water quality and overall stream function.

This seminar can be viewed via live or watched later via this link: <u>Traci Goodhart</u>. Viewers of the live stream may now ask questions by clicking on the message icon at the bottom. Questions will be read at the end during the question and answer portion. In addition, all seminars are archived for viewing on our <u>SWSD Seminar Page</u>.