

The SIUC Watershed Science team has two 2-year graduate research assistantships available in the School of Forestry and Horticulture at Southern Illinois University (forestry.siu.edu). Students with an interest in water, soils, and/or nutrient dynamics in agricultural watersheds are encouraged to apply. Our research focuses on nutrient dynamics, especially phosphorus, and seeks to understand how phosphorus and other nutrients are moving through watersheds. One project will focus on quantifying phosphorus and sediment contribution from streambank erosion in two Illinois watersheds. Cross-sectional surveys, drone flights, and erosion pins will be used to determine the contribution of erosion to phosphorus to the stream water. The second project will focus on the performance of agricultural best management practices, specifically water and sediment control basins (WASCoBs). The WASCoB project seeks to quantify their trapping efficiency for nutrients and sediment carried via water, and those deposited in the sediments. Drone imagery, feldspar clay pads, and automated water samplers will be used in the research.

A successful candidate will be self-motivated and able to work independently and as part of team, have strong analytical and communication skills, basic knowledge of GIS, and be able to work in a variety of weather conditions. A background in forestry, soils or hydrology, natural resource management, environmental science, agricultural management, or closely related field is preferred. Candidates must have a U.S. driver's license. Positions will begin during the summer or fall semester of 2024.

To apply please email a resume/CV and cover letter to **Dr. Jon Schoonover** (jschoon@siu.edu). For full consideration, applications must be received by February 19, 2024.

