

Forest Resources Seminar

Inspiring integration and innovation

Wednesday, November 29, 2017

4:00-5:00 followed by a social hour

302 Kaufert Lab

St. Paul Campus

Join the webex by following this link: <http://z.umn.edu/FRsem>

Measuring the complicated relationships between land cover, management, and surface water

presented by

Drs. Diana Karwan and Lucy Rose

Historically, the hydrologic effects of land cover management have been investigated through paired watershed experiments in small streams. We expand upon these studies in order to examine the effects of small scale land cover and management activities on larger streams and rivers. Additionally, we utilize extensive water chemistry data sets to examine spatial and temporal variability in the delivery of water and materials from the landscape to streams and rivers. Our work focuses on the relative importance of on-land versus in-stream hydrologic processes and sources of materials and how they combine to influence water quality in managed lands.

Dr. Diana Karwan is an Assistant Professor in the Department of Forest Resources focusing on Hydrology and Watershed Management. She studies the physical, chemical, and ecological processes that link weather, climate, and human activity to the watershed export of materials. Specifically, Dr. Karwan studies water cycling and the movement of fine suspended sediments using field-scale experiments, geochemical fingerprinting, and mathematical models.

Dr. Lucy Rose is a Postdoctoral Researcher in the Department of Forest Resources focusing on Hydrology and Biogeochemistry in forested watersheds. She holds a PhD in Geology and Planetary Science from University of Pittsburgh. Dr. Rose studies fate and transport of solutes, such as nitrate and dissolved organic carbon, and sediments in watersheds.