Watershed Storage and the Spatial Patterns of Streamflow Generation

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The storage and release of water to streamflow is a fundamental watershed process. Despite this, our understanding of the relationships between watershed storage state and streamflow magnitude are poorly understood, especially the roles of antecedent conditions, water redistribution patterns, and resulting hydrologic connectivity between uplands and streams. This presentation focuses on these concepts with examples from a highly instrumented and data-rich watershed located in Central Montana.

ABOUT THE SPEAKER

Dr. McGlynn is Professor of Hydrology & Biogeosciences at Duke University. His field-based research focuses on the spatial and temporal scaling of hydrological and ecological processes across natural and disturbed watersheds and stream networks. He has published over 70 refereed articles in hydrology and biogeosciences, serves on the board of directors for the Consortium of Universities for the Advancement of Hydrologic Science, Inc. (CUAHSI), and is currently the chair of the Division of Earth and Ocean Sciences in the Nicholas School of the Environment. Previous to his position at Duke, Brian was a professor at Montana State University in the Department of Land Resources and Environmental Sciences. Dr. McGlynn earned his M.S. and Ph.D. from the State University of New York College of Environmental Science and Forestry. Learn more at www.mcglynnlab.com.