



From the Trees to the Tap: Forest Management in the Waynesville Watershed

Hosted by Forest Stewards and the Town of Waynesville

Tuesday October 4, 2022 | 9:00 – 3:00

www.foreststewardsguild.org/event/from-the-trees-to-the-tap-forest-management-in-the-waynesville-watershed/

Forests of Western North Carolina are not only beautiful and fun to recreate in, but they also help to supply clean water. This event will showcase the intersection of forest management and water quality. We will be joined by professionals from Coweeta Hydrologic Lab, NC State University, Western Carolina University, the Forest Stewards Guild, and the Town of Waynesville to talk about forests and water, from the trees to the tap.

To register: \$10 to attend and includes lunch and refreshments

AGENDA	
9:00-9:15	Welcome Dakota Wagner, Forest Stewards Guild Meet at Frog Level Brewing's GREEN ROOM in Waynesville, NC
9:15-9:40	The Importance of Forests for Water Quality Peter Caldwell, Coweeta Hydrologic Lab USFS
9:40-10:15	Changing Forests Effects on Water Katie McQuillan, NC State University Chris Oishi, Coweeta Hydrologic Lab USFS
10:15-10:25	Break
10:25-10:50	History of the Waynesville Watershed Paul Carlson, founding director of Mainspring Conservation Trust formerly Little Tennessee Land Trust (retired) Lee Galloway, Town Manager (retired)
10:50-11:15	Forest Stewardship Strategies in the Waynesville Watershed Peter Bates, Forest Stewards WCU
11:15-12:30	Lunch and shuttle to the watershed
12:30-3:00	Tour of the Watershed <ul style="list-style-type: none">• Forest Treatments with Peter Bates, Forest Stewards and WCU• NNIS Control with Sunny Himes, Forest Stewards and WCU Dept. of Biology• Water Quality Monitoring with Jerry Miller, WCU Dept. of Geosciences and Natural Resources
3:00-3:15	Travel back to parked cars, optional social (Have you ever wondered why there are so many breweries here? Good water makes good beer!)

Speaker Bios

Peter Bates is a professor in the Natural Resource Conservation & Management Program at Western Carolina University where he teaches and studies sustainable resource management in the southern Appalachians. He has been the President of Forest Stewards since its creation in 2008.

Peter Caldwell is a Research Hydrologist with the USDA Forest Service, Southern Research Station (SRS), Center for Integrated Forest Science (CIFS). Peter's responsibilities include conducting basic and applied research on watershed hydrology, riparian zone structure and function, and large-scale hydrologic modeling. He studies interactions between terrestrial vegetative communities and the hydrologic cycle, upscales site-level hydrological processes to larger watersheds, investigates global change impacts on water resources from headwater catchments to the national scale. Prior to joining the CIFS team, he served as Research Hydrologist at the Coweeta Hydrologic Laboratory and as a postdoctoral Research Hydrologist with the Eastern Forest Environmental Threat Assessment Center.

Paul Carlson was the founding director of The Land Trust for the Little Tennessee (now Mainspring Conservation Trust) which works in six counties west of the Balsam Mountains in NC. In that position he helped launch the Little Tennessee Sustainable Forestry Partnership with Western Carolina University and the Region A Council of Governments promoting working forests as a land conservation strategy. Together with Pete Bates of WCU he advised in the implementation of a working forest conservation easement in the Waynesville Watershed.

A native of Brevard, North Carolina, **Lee Galloway** graduated from Wingate College and the University of North Carolina-Chapel Hill in 1972. His major was in political science with a concentration on urban studies. In 1973, he began a 40-year career in municipal government, first in finance and then 36 years as a city manager. Most of his career has been in North Carolina, though he served 6 years in Virginia and 5 years in Georgia. The final 18 year of his career he served as the Town Manager of Waynesville, North Carolina, and during that time, he was involved in securing private property within the Waynesville Watershed and assisted in placing 8,000 acres of land under a conservation easement. He views this as one of the most meaningful and important experiences in which he was involved during his long career in local government and is still amazed at the many partners who were involved to make this happen.

Sunny Himes is an Associate Instructor in the Biology Department at Western Carolina University and a part-time employee of Forest Stewards, Inc. At WCU she teaches introductory courses in ecology, botany and foundational biology. She manages several projects and leads student crews in the summertime for Forest Stewards, Inc. For 20 years she has worked with local land trusts, stewardship organizations and private landowners to help them manage exotic invasive plants on their properties, as well as restore native plant communities, conduct prescribed burns, rescue rare plants and complete botanical inventories.

Katie McQuillan is a PhD student in the Center for Geospatial Analytics at North Carolina State University. Her research centers on understanding relationships between forests, disturbance, and water in a changing climate. Working with partners at The Nature Conservancy, she is investigating the potential for forest management to enhance resilience of forests and downstream water supply in the southern Appalachians.

Dr. Jerry R. Miller earned his B.S. degree in geology in 1982, and a Ph.D. in 1990, from Southern Illinois University, Carbondale. He received his M.S. degree in geology in 1985 from the University of New Mexico. Currently, he holds the Blanton J. Whitmire Professorship in Environmental Science at Western Carolina University. He has over 25 years of research experience that has focused on a wide variety of geologic/hydrologic questions, ranging from the transport and fate of toxic heavy metals and other contaminants within rivers and lakes to the restoration and management of riparian ecosystems. Dr. Miller's research has been published in over 75 refereed articles, and he is the co-author of several books, including two textbooks that are widely used in colleges and universities throughout the U.S. and Canada. He also a member of several professional societies including the Geological Society of America, the American Geophysical Union, and the Association of Earth Science Editors.

Chris Oishi is a Research Ecologist with the US Forest Service's Southern Research Station and the Team Leader for the Coweeta Hydrologic Laboratory & Experimental Forest in Otto, NC. Chris' research is broadly defined as ecohydrology,

focused on the interactions and feedbacks between ecology and the hydrologic cycle. He is particularly interested in how climate change affects plant water use, carbon sequestration, and ecological resilience in forested ecosystems. Chris holds a B.A. and Ph.D. from Duke University and a Master's degree from the Yale School of Forestry and Environmental Studies.

Special thanks to the following organizations. We could not have done this event without them!



Coweeta Hydrologic Laboratory

