

**C. Rhett Jackson, Ph.D., P.E.**  
**John Porter Stevens Distinguished Professor of Water Resources**  
**Warnell School of Forestry and Natural Resources**  
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**Curriculum Vitae**  
**Fall 2020**

**Areas of Specialization:** My research interests include the effects of human land use activities, specifically forestry, agriculture, and urbanization, on water quality and aquatic habitat and the effectiveness of best management practices (BMPs) in reducing such nonpoint source pollution. A particular current interest of mine is the relationship between riparian vegetation and channel structure and stream temperature. My work is trans-disciplinary, and I frequently collaborate with ecologists, animal biologists, and biogeochemists. Most of my applied research is viewed through the lens of hillslope hydrologic processes, my basic research interest.

**Academic and Professional History**

Academic Degrees: Ph.D., Hydrology, Dept. of Civil and Env. Engr., Univ. of Washington, 1992  
MSE, Civil and Environmental Engineering, Duke University, 1985  
BSE, Civil and Environmental Engineering, Duke University, 1983

Directorships, Scientific Leadership:  
2016-2021 Lead PI, Coweeta LTER (CWT)  
2015-2016 Transitional lead Principal Investigator, Coweeta LTER (CWT)  
2012-2021 Science Advisory Committee, CWT LTER

Administrative Positions:  
2018 – present Graduate Coordinator, Warnell School of Forestry and Natural Resources

Academic Positions: The University of Georgia  
2018 – present John Porter Stevens Distinguished Professor of Water Resources  
2020 – present Adjunct Professor, College of Engineering  
2008 - 2018 Professor, Warnell School of Forestry and Natural Resources  
2003 - 2008 Associate Professor, Warnell School of Forestry and Natural Resources  
1997 - 2003 Assistant Professor, Warnell School of Forestry and Natural Resources

Other Academic Positions:  
1997 Visiting Lecturer, University of Washington  
1996 Lecturer, Shoreline Community College, Seattle, WA  
1992 Lecturer, Seattle University, Seattle, WA

Other Professional Positions:  
1994 - 1997 Senior Hydrologist and Principal, Pentec Environmental, Edmonds, WA  
1992 - 1994 Hydrologist and Planner, King County Surface Water Management, WA  
1987 - 1988 Part-time intern, Congressman Mike Lowry's Seattle Office, WA  
1985 - 1987 Project Engineer, Los Angeles County Sanitation Districts, CA

**Awards**

2019 Water Resources Research Editor's Choice Award for Klaus and Jackson (2018)  
2019 Editor's Citation for Excellence in Reviewing for Water Resources Research  
2011 Faculty Award for Outstanding Teaching, Warnell School of Forestry and Natural Resources  
2010-2011 Senior Teaching Fellows Program, University of Georgia  
2008 Honors Day Acknowledgment for Outstanding Teaching  
2008 Inducted into University of Georgia Teaching Academy  
2003 Richard B. Russell Undergraduate Teaching Award (UGA's highest award for young faculty)  
2002 Honors Day Acknowledgment for Outstanding Teaching

**Courses of Instruction**

Regular teaching load includes three to four classes per year, including: CRSS/FORS 3060 - Soils and Hydrology, WASR 4110/6110 - Forest Hydrology, WASR 4400 - Introduction to Wetlands, WASR 8200 -

Hillslope Hydrology, and, occasionally, HONS 1990H - Resource Scarcity: Technological Substitution for Land and Water. Classes taught in UNO/UGA Innsbruck Summer Study abroad program (2013, 2015, 2017): Environmental Science; Comparative Natural History: The Austrian Alps vs. Southeastern US; Glaciers, Floods, and Landslides: living in a dynamic landscape

### **Graduate Advising**

#### *PhD Major or Co-Major Professor (8 graduated, 2 in-progress):*

Alexandra Peneda de Pinho (2003, joint with Larry Morris) – Research Professor in Brazil  
Li Guoyuan (2006) – Hydrologic Consultant  
Josh Romeis (2008) – Deceased (Post-Doc at U. Arkansas)  
Denise Carroll (2009) – Instructor, Georgia Southern University  
Katie Price (2009, joint with Al Parker in Geography) – Hydrologic Consultant  
- 2010 Excellence in Research by Graduate Students Award for Math and Physical Sciences  
Kathleen Rugel (2013, joint with Steve Golladay in Ecology) – SESYNC Fellowship, book author  
Kristin Kraseski (2015) – NGO  
Seth Younger (2020)  
Jacob Lafontaine (current)  
Scott Raulerson (current)

#### *MS Major or Co-Major Professor (27 graduated, 1 in-progress):*

Mary Motte Rhett Walker (1998) – Environmental Consultant  
Brian Normanly (1998) – Environmental Consultant  
Melinda Mosner Dalton (1999) – USGS Hydrologist  
Chris Sturm (2000, joint with David Leigh in Geography) – City Water Planner  
Jennifer Keyes (2001) – Environmental Consultant  
Sarah Cross (2001) -  
Kirk Martin (2001) - Businessperson  
Jason Ward (2001) – USACOE Hydrologist  
Stephanie Hyder Laseter (2002) – USFS Scientist  
Chris Decker (2002) – EPA Scientist  
Lane Rivenbark (2002) – Environmental Consultant  
Jim White (2003) - Deceased  
Joan Schneier (2006) - NCDENR  
Will Summer (2006) – North Carolina Clean Water Action Program  
Noah Fraser (2006) – Environmental Consultant  
James Greco (2007) – Environmental Consultant  
Scott Terrell (2008) – Environmental Consultant  
Margaret Williamson (2011) – Peace Corps, Environmental Scientist  
Damion Drover (2011) – PhD @ Virginia Tech, Environmental and Data Scientist  
Lynsey Long (2011) – Georgia EPD Air Quality Division  
Justin Vining (2015) – Businessperson  
Allan Coats (2016) – Water Quality Forester, NC Forest Service  
Cody Matteson (2018) – Environmental Consultant  
Johnson Jeffers (2018) – Youth Camp Director  
Lauren Brockman Gill (2019) – Environmental Consultant  
Jenny Sanders (2019) – State WQ Agency  
Elizabeth Tuttle (2020) – USFS Scientist  
Caleb Sytsma (current)

#### *MNR Major Professor or Co-Major Professor (5 graduated):*

Adam Martin (2010)  
Andrea Althoff (2012)  
Samantha Marchman (2013, joint with Dale Greene)  
Herschel Winters (2014)  
Randi Butler (2016)

*PhD Committee Memberships:* 31 graduated, 4 current

*MS Committee Memberships:* 57 graduated, 2 current

*MFR/MNR Committee Memberships:* 6 graduated, 0 current

Have hosted three visiting scholars from China.

## Publications and Presentations

Publications marked with an asterisk (\*) have been refereed; those marked with a dagger (†) have been peer-reviewed.

### Refereed and Peer-Reviewed Journal Articles

- (85) \*Younger, Seth E, C.R. Jackson, Todd C. Rasmussen. 2020. Relationships among forest type, watershed characteristics, and watershed ET in rural basins of the Southeastern US. *Journal of Hydrology* 591: 125316. [10.1016/j.jhydrol.2020.125316](https://doi.org/10.1016/j.jhydrol.2020.125316)
- (84) \*Matteson, Cody, T., C. Rhett Jackson, Darold B. Batzer, Susan B. Wilde, and Johnson B. Jeffers. 2020. Nitrogen and Phosphorus Gradients from a Working Farm through Wetlands to Streams in the Georgia Piedmont, USA. *Wetlands* 40:2139-2149.
- (83) \*Dudley, M.P., M. Freeman, S. Wenger, C.R. Jackson, and C.M. Pringle. 2020. Rethinking foundation species in a changing world: the case for *Rhododendron maximum* as an *emerging* foundation species in shifting ecosystems of the Southern Appalachians. *Journal of Forest Ecology and Management* 472:118240.
- (82) \*Raulerson, S., C. R. Jackson, Nathan D. Melear, Seth E. Younger, Maura Dudley, and Katherine J. Elliott. 2020. Do southern Appalachian Mountain summer stream temperatures respond to removal of understory rhododendron thickets? *Hydrological Processes* 34(13):3045-3060.
- (81) \*Bitew, Menberu M., C. Rhett Jackson, David C. Goodrich, Seth E. Younger, Natalie A. Griffiths, Kellie B. Vaché, Benjamin Rau. 2020. Dynamic domain kinematic modeling for predicting interflow over leaky impeding layers. *Hydrological Processes* 34(13):2895-2910.
- (80) \*Coats, W.A. and C.R. Jackson. 2020. Riparian Canopy Openings on Mountain Streams: Landscape controls upon temperature increases within openings and cooling downstream. *Hydrological Processes* 34(8):1966-1980. doi: [10.1002/hyp.13706](https://doi.org/10.1002/hyp.13706)
- (79) \*Gaiser, E.E., D.M. Bell, M.C.N. Castorani, D.L. Childers, P.M. Groffman, C.R. Jackson, J.S. Kominoski, D.P.C. Peters, S.T.A. Pickett, J. Ripplinger, and J.C. Zinnert. 2020. Long Term Ecological Research and Evolving Frameworks of Disturbance Ecology. *Bioscience* 70(2):141-156.
- (78) \*Rastetter, E., M.D. Ohman, K.J. Elliott, J.S. Rehage, V.H. Rivera-Monroy, R.E. Boucek, E. Castañeda-Moya, T.M. Danielson, L. Gough, P.M. Groffman, C.R. Jackson, C.F. Miniati, G.R. Shaver. In Press. Future trajectories for ecosystems in the U.S. Long-term Ecological Research Network: The importance of time lags. *Ecosphere*.
- (77) \*Lee, R.M., K.J. McGuire, B.D. Strahm, J.D. Knoepp, C.R. Jackson, and R.D. Stewart. 2020. Revisiting the Hewlett and Hibbert (1963) hillslope drainage experiment and modeling effects of decadal pedogenic processes and leaky soil boundary conditions. *Water Resources Research*. 56, e2019WR025090. [https://doi.org/ 10.1029/2019WR025090](https://doi.org/10.1029/2019WR025090).
- The above paper received an Editor's Highlight in EOS, the AGU newsletter.*
- (76) \*Bitew, Menberu, Seth E. Younger, C. Rhett Jackson, Enhao Du, and Damion Drover. 2019. Wetness Index based on Landscape position and Topography (WILT): Modifying the TWI to incorporate landscape position relative to water bodies. *Journal of Environmental Management* 255:109863.
- (75) \*Rugel, K., C.R. Jackson, J. Dowd, R. McDowell, T.C. Rasmussen, and S.W. Golladay. 2019. Using hydrogeomorphic patterns to predict groundwater discharge in a karst basin: Lower Flint River Basin, southwestern Georgia, USA. *Journal of Hydrology – Regional Studies* 23:100603.
- (74) \*Webster J.R., R.M. Stewart, J.D. Knoepp, and C.R. Jackson. 2019. Effects of instream processes, discharge, and land cover on nitrogen export from southern Appalachian Mountain catchments. *Hydrological Processes* 33:283-304.
- (73) \*Caldwell, P.V., C.R. Jackson, C.F. Miniati, S.E. Younger, J.A. Vining, J.J. McDonnell, D.P. Aubrey. 2018. Woody bioenergy crop selection can have large effects on water yield: A southeastern United States case study. *Biomass and Bioenergy* 117:180-189.

- (72) \*Griffiths, N.A., B.M. Rau, K.B. Vache, G. Starr, M.M. Bitew, D.P. Aubrey, J.A. Martin, E. Benton, C. Rhett Jackson. 2018. Environmental effects of short rotation woody crops for bioenergy: What is and isn't known. *Global Change Biology Bioenergy* 11:554-572. doi.10.1111/gcbb.12536
- (71) \*McDonnell JJ, J. Evaristo, K. Bladon, J. Buttle, I. Creed, S. Dymond, G. Grant, A. Iroume, C.R Jackson, J. Jones, T. Maness, K. McGuire, D. Scott, C. Segura, R. Sidle, and C. Tague. 2018. Forest water sustainability, Commentary. *Nature Sustainability* 1:378-379.
- (70) \*Klaus, J. and C.R. Jackson. 2018. Interflow Is Not Binary: a Continuous Shallow Perched Layer Does Not Imply Continuous Connectivity. *Water Resources Research* 54, 5921–5932.
- WRR Editors' Choice Award for 2018.** (Awarded to less than 1% of papers published each year)
- The above paper also received an Editor's Highlight in EOS, the AGU newsletter.*
- (69) \*McDonald, J.M., D.S. Leigh, and C.R. Jackson. 2018. Continental-, Watershed-, and Local-Scale Influences on Winter Stormflow Characteristics in the Southern Blue Ridge Mountains of Western North Carolina. *Journal of Hydrology* 563:643-656.
- (68) \*Cecala, K.K., J.C. Maerz, B.J. Halstead, J.R. Frisch, T.L. Gragson, J. Hepinstall-Cymerman, D.S. Leigh, C.R. Jackson, J.T. Peterson, and C.M. Pringle. 2018. Multiple drivers, scales, and interactions influence southern Appalachian stream salamander occupancy. *Ecosphere* 9(3):e02150.
- (67) \*Jackson, C.R., J.R. Webster, J.D. Knoepp, K.J. Elliott, R.E. Emanuel, P.V. Caldwell, and C.F. Miniati. 2018. Unexpected ecological advances made possible by long-term data: A Coweeta example. *WIREs Water* DOI: 10.1002/wat2.1273
- (66) \*Jackson, C.R., R.A. Bahn, and J.R. Webster. 2017. Water quality signals from rural land use and exurbanization in a mountain landscape: What's clear and what's confounded? *Journal of the American Water Resources Association* 53(5):1212-1228.
- (65) \*Tatum, V.L., C.R. Jackson, M.W. McBroom, B.R. Baillie, E.B. Schilling, and T.B. Wigley. 2017. Effectiveness of forestry best management practices (BMPs) for reducing the risk of forest herbicide use to aquatic organisms in streams. *Forest Ecology and Management* 404:258-268.
- (64) \*Griffiths, N.A., C.R. Jackson, M.M. Bitew, A.M. Fortner, K.L. Fouts, K. McCracken, J.R. Phillips. 2017. Water quality effects of short-rotation pine management for bioenergy feedstocks in the southeastern United States. *Journal of Forest Ecology and Management* 400:181-198.
- (63) \*Jackson, C.R., E. Du, J. Klaus, N.A. Griffiths, M. Bitew and J.J. McDonnell. 2016. Interactions among hydraulic conductivity distributions, subsurface topography, and transport thresholds revealed by a multi-tracer hillslope irrigation experiment. *Water Resources Research* 52(8):6186-6206.
- (62) \*Du, E., C.R. Jackson, J. Klaus, J.J. McDonnell, N.A. Griffiths, M.F. Williamson, J.L. Greco, and M. Bitew. 2016. Interflow dynamics on a low relief hillslope: Lots of fill, little spill. *Journal of Hydrology* 534:645-658.
- (61) \*Griffiths, N.A., C.R. Jackson, J.J. McDonnell, J. Klaus, E. Du, and M. Bitew. 2016. Dual nitrate isotopes clarify the role of biological processing and hydrologic flowpaths on nitrogen cycling in subtropical low-gradient watersheds. *Journal of Geophysical Research Biogeosciences* 121(2):422-437.
- (60) \*Frisch, J.R., J.T. Peterson, K.K. Cecala, J.C. Maerz, C.R. Jackson, T.L. Gragson, and C.M. Pringle. 2016. Patch occupancy of stream fauna across a land cover gradient in the southern Appalachians, USA. *Hydrobiologia* 773:163-175.
- (59) \*Rugel, K., S.W. Golladay, C.R. Jackson, T.C. Rasmussen. 2016. Delineating groundwater/surface water interaction in a karst watershed: Lower Flint River Basin, southwestern Georgia, USA. *Journal of Hydrology: Regional Studies* 5:1-19.
- (58) †Drover, D.R., C.R. Jackson, M. Bitew, and E. Du. 2015. Effects of DEM scale on the spatial distribution of the TOPMODEL topographic wetness index and its correlations to watershed characteristics. HESSD MS No.: hess-2015-275 MS. (HESSD is the online discussion forum for Hydrologic and Earth Systems Science).

- (57) \*Marchman, S.C., M. Miwa, W.B. Summer, S. Terrell, D.G. Jones, S.L. Scarbrough, and C.R. Jackson. 2015. Clearcutting and Pine Planting Effects on Nutrient Concentrations and Export in Two Mixed Use Headwater Streams; Upper Coastal Plain, Southeastern US. *Hydrological Processes* 29(1):13-28.
- (56) \*Jackson, C.R., D.S. Leigh, S. Lynsey Scarbrough, John F. Chamblee. 2015. Herbaceous versus forested riparian vegetation: Narrow and simple versus wide, woody, and diverse stream habitat. *River Research and Applications* 31(7):847-857.
- (55) \*Scarbrough, S.L., C.R. Jackson, S. Marchman, G. Allen, J. Louch, and M. Miwa. 2015. Herbicide concentrations in first-order streams following routine application for competition control in establishing pine plantations. *Forest Science* 61(3):604-612.
- (54) \*Straight, C.A., C.R. Jackson, B.J. Freeman, and M.C. Freeman. 2015. Diel patterns and temporal trends in spawning activities of Robust Redhorse and River Redhorse in Georgia, assessed using passive acoustic monitoring. *Trans. Amer. Fisheries Society* 144:563-576.
- (53) \*Klaus, J, J.J. McDonnell, C.R. Jackson, E. Du, and N.A. Griffiths. 2015. Where does streamwater come from in low relief forested watersheds? A dual isotope approach. *Hydrology and Earth Systems Science* 19:125-135.
- (52) \*Jensen, C.K., D.S. Leigh, and C.R. Jackson. 2014. Scales and Arrangements of Large Wood in First-through Fifth-order Streams of the Blue Ridge Mountains. *Physical Geography* 35(6):532-560.
- (51) †Jackson, C.R. 2014. Forestry best management practices: A mitigated water pollution success story. *J. Forestry* 112(1):47-49.
- (50) †Jackson, C.R., M. Bitew, and E. Du. 2014. When interflow also percolates: Downslope travel distances and hillslope process zones. Invited Commentary. *Hydrological Processes* 28:3195-3200.
- (49) \*Long, S.L. and C.R. Jackson. 2014. Variation of stream temperature among mesoscale habitats within stream reaches: southern Appalachians. *Hydrological Processes* 28:3041-3052.
- (48) \*Booth, D.B., K.A. Kraseski, and C.R. Jackson. 2014. Local and watershed-scale determinants of summertime urban stream temperatures. *Hydrological Processes* 28:2427-2438.
- (47) \*Jackson, C.R. and D.J. Martin. 2012. Comment on "Does timber harvest influence the dynamics of marine-derived nutrients in southeast Alaska streams?" *Canadian Journal of Fisheries and Aquatic Sciences* 69:1894-1897.
- (46) \*Li G., C.R. Jackson, and K.A. Kraseski. 2012. Modeled riparian stream shading: Agreement with field measurements and sensitivity to riparian conditions. *Journal of Hydrology* 428:142-151.
- (45) \*Tedela, N.H., S. McCutcheon, T.C. Rasmussen, R.H. Hawkins, W.T. Swank, J.L. Campbell, M.B. Adams, C.R. Jackson, and E.W. Tollner. 2012. Runoff curve numbers for ten small forested watersheds in the mountains of the Eastern United States. *Journal of Hydrologic Engineering* 17(11):1188-1198.
- (44) \*Harper, M.A., D.P. Batzer, C.R. Jackson, and R. Fenoff. 2012. Temporal and spatial variability of invertebrate communities in potential reference headwater streams of the Georgia Piedmont. *J. Freshwater Ecology* 27(2):273-285.
- (43) \*Palta, M.M., T.W. Doyle, C.R. Jackson, J.L. Meyer, and R.R. Sharitz. 2012. Changes in diameter growth of *Taxodium distichum* in response to flow alterations in the Savannah River. *Wetlands* 32:59-71.
- (42) \*Rugel, K., C.R. Jackson, J.J. Romeis, S.W. Golladay, D.W. Hicks, and J.F. Dowd. 2012. Effects of irrigation withdrawals on streamflows in a Karst environment: Lower Flint River Basin, Georgia, USA. *Hydrological Processes*. 26:523-534. DOI 10.1002/hyp8149.
- (41) \*Fraser, N., C.R. Jackson, D.E. Radcliffe. 2011. A paired watershed investigation of silvicultural BMPs revisited: BF Grant Memorial Forest, Georgia. *Forest Science* 58(6):652-662.
- (40) \*Terrell, S.B., W.B. Summer, C.R. Jackson, M. Miwa, D.G. Jones. 2011. Harvest, site preparation, and firebreak effects on hydrology and sediment transport in Coastal Plain headwater streams. *Trans. Amer. Soc. Agricultural and Biological Engineers* 54(6): 2117-2127.

- (39) \*Peterson, J.T. J. Wisniewski, J.P. Shea, and C.R. Jackson. 2011. Estimation of mussel population response to hydrologic alteration in a southeastern U.S. River basin. *J. Env. Management* 48:109-122. DOI 10.1007/s00267-011-9688-2
- (38) \*Romeis, J.J., C.R. Jackson, L.M. Risse, A.M. Sharpley, and D.E. Radcliffe. 2011. Hydrologic and phosphorus export behavior of small streams in commercial poultry-pasture watersheds. *J. American Water Resources Association* 47(2):367-385.
- (37) \*Price K., C.R. Jackson, A.J. Parker, T. Reitan, J. Dowd, and M. Cyterski. 2011. Effects of watershed land use and geomorphology on stream low flows during severe drought conditions in the southern Blue Ridge Mountains, Georgia and North Carolina, USA. *Water Resources Research* 47, W02516, doi:10.1029/2010WR009340.
- (36) \*Ice, G.G., G.W. Brown, J.A. Gravelle, C.R. Jackson, J.T. Light, T.E. Link, D.J. Martin, D.J. McGreer, and A.E. Skaugset. 2010. Discussion: Stream temperature relationships to forest harvest in western Washington, by Pollock, M.M. et al. *Journal of the American Water Resources Association* DOI: 10.1111/j.1752-1688.2010.00456.x.
- (35) \*Galang, M.A., L.A. Morris, D. Markewitz, C.R. Jackson, and E.A. Carter. 2010. Prescribed burning effects on the hydrologic behavior of gullies in the South Carolina Piedmont, USA. *J. Forest Ecology and Management* 259:1959-1970.
- (34) \*Price, K., C.R. Jackson, and A.J. Parker. 2010. Variation of surficial soil hydraulic properties across land uses in the southern Blue Ridge Mountains. *Journal of Hydrology* 383:256-268.
- (33) \*Jackson, C.R. and C.M. Pringle. 2010. Ecological benefits of reduced hydrologic connectivity in intensively developed landscapes. *Bioscience* 60(1):37-46.
- (32) \*Neary, D.G., G.G. Ice, and C.R. Jackson. 2009. Linkages between forest soils and water quality and quantity. *J. Forest Ecology & Management* 258:2269-2281.
- (31) \*Wenger, S.J., A.H. Roy, C.R. Jackson, E.S. Bernhardt, T.L. Carter, S. Filoso, C.A. Gibson, N.B. Grimm, W.C. Hession, S.S. Kaushal, E. Martí, J.L. Meyer, M.A. Palmer, M.J. Paul, A.H. Purcell, A. Ramirez, A.D. Rosemond, K.A. Schofield, T.R. Schueler, E.B. Sudduth, and C.J. Walsh. 2009. Twenty-six key research questions in urban stream ecology: an assessment of the state of the science. *Journal of the North American Benthological Society* 28(4):1080-1098.
- The above paper has become an instant classic and is now reprinted in the following book. *Urban Ecology: Critical Concepts in Geography*. 2015. Ian Douglas, Editor. Routledge Press.
- (30) \*Carter, T. C.R. Jackson, A.D. Rosemond, C.M. Pringle, D.E. Radcliffe, W. Tollner, J.C. Maerz, D.S. Leigh, and A. Trice. 2009. Beyond urban gradient studies: barriers and opportunities for timely studies of urbanization effects on aquatic ecosystems. *Journal of the North American Benthological Society* 28(4):1038-1050.
- (29) \*Peterson, J.T., C.R. Jackson, C.P. Shea, and G. Li. 2009. The development and evaluation of a stream channel classification for estimating the response of fishes to changing streamflow. *Transactions of the American Fisheries Society* 138:1123-1137.
- (28) \*Radcliffe, D.E., Z. Lin, L.M. Risse, J. Romeis, and C.R. Jackson. 2009. Modeling phosphorus in the Lake Allatoona watershed using SWAT: I. Developing phosphorus parameter values. *Journal of Environmental Quality* 38:111-120.
- (27) \*Lin, Z., D.E. Radcliffe, D.E., L.M. Risse, J. Romeis, and C.R. Jackson. 2009. Modeling phosphorus in the Lake Allatoona watershed using SWAT: II. Effect of land use change. *Journal of Environmental Quality* 38:121-129.
- (26) \*Carroll, G.D. and C.R. Jackson. 2008. Observed relationships between urbanization and riparian cover, shredder abundance, and stream leaf litter standing stocks. *Fundamental and Applied Limnology* 173(3):213-225.
- (25) \*Pinho, A.P., L.A. Morris, C.R. Jackson, W.J. White, P.B. Bush, and A.T. Matos. 2008. Contaminant Retention Potential of Forested Filter Strips Established as SMZs in the Piedmont of Georgia. *J. Amer. Water Resources Assoc.* 44(6):1564-1577.

- (24) \*White, W.J., L.A. Morris, A.P. Pinho, and C.R. Jackson. 2007. Sediment retention by forested filter strips in the Piedmont of Georgia. *J. Soil and Water Conservation* 62(6):453-463.
- (23) \*Jackson, C.R., D.P. Batzer, S.S. Cross, S.M. Haggerty, and C.A. Sturm. 2007. Headwater Streams and Timber Harvest: Channel, Macroinvertebrate, and Amphibian Response and Recovery. *Forest Science* 53(2):356-370.
- (22) \*Freeman, M.C., C.M. Pringle, and C.R. Jackson. 2007. Hydrologic connectivity and the contribution of stream headwaters to ecological integrity at regional scales. *J. Amer. Water Resour. Assoc.* 43(1):5-14.
- (21) \*Li, G. and C.R. Jackson. 2007. Simple, Accurate, and Efficient Revisions to MacCormack and Saulyev Schemes: High Peclet Numbers. *Applied Mathematics and Computation* 186(1):610-622.
- (20) \*Carter, T. and C.R. Jackson. 2007. Vegetated roofs for stormwater management at multiple spatial scales. *Landscape and Urban Planning* 80(1-2):84-94.
- (19) \*Jackson, C.R., J.K. Martin, D.S. Leigh, and L.T. West. 2005. A Southeastern Piedmont Watershed Sediment Budget; Evidence for a Multi-Millennial Agricultural Legacy. *J. Soil Water Cons.* 60(6):298-310.
- (18) †Carroll, G.D. and C.R. Jackson. 2005. DISCUSSION: "Urbanization influences on aquatic communities in northeastern Illinois streams", by F. Fitzpatrick, M. Harris, T. Arnold, and K.D. Richards. *J. Amer. Water Res. Assoc.* 41(1):219-220.
- (17) \*Ward, J.M. and C.R. Jackson. 2004. Sediment trapping within forestry streamside management zones: Georgia Piedmont, USA. *J. Amer. Water Res. Assoc.* 40(6):1421-1431.
- (16) \*Rivenbark, B.L. and C.R. Jackson. 2004. Concentrated flow breakthroughs moving through silvicultural streamside management zones: southeastern Piedmont, USA. *J. Amer. Water Res. Assoc.* 40(4):1043-1052.
- (15) \*Rivenbark, B.L. and C.R. Jackson. 2004. Average discharge, perennial flow initiation, and channel initiation - small southern Appalachian basins. *Journal American Water Resources Association* 40(3):639-646.
- (14) \*Haggerty, S.M., D.P. Batzer, and C.R. Jackson. 2004. Macroinvertebrate response to logging in coastal headwater streams of Washington, USA. *Canadian Journal of Fisheries and Aquatic Sciences* 61: 529-537.
- (13) \*Pinho, A., L. daCosta, L.A. Morris, R. Jackson, W. White, and M. Martinez. 2004. Retencao de atrazina, picloram e caulinita em zona riparia localizada em area de silvicultura. *Engenharia na Agricultura, Vicoso-MG* 12:260-270.
- (12) \*Jackson, C.R. and C.A. Sturm. 2002. Woody debris and channel morphology in first- and second-order forested channels in Washington's Coast Ranges. *Water Resources Research* 38(9), 1177, doi:10.1029/2001WR001138
- (11) \*Booth, D.B., D. Hartley, and R. Jackson. 2002. Forest cover, impervious surface area, and mitigation of stormwater impacts in King County, WA. *Journal of the American Water Resources Association* 38(3):835-846.
- (10) \*Haggerty, S.M., D.P. Batzer, and C.R. Jackson. 2002. Macroinvertebrate assemblages in perennial headwater streams of the Coastal Mountain range of Washington, USA. *Hydrobiologia* 479:143-154.
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### Chapters in Books

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- (12) †Richardson, J.R., R.D. Moore, C.R. Jackson, and D.P. Kreuzweizer.. In press. Chapter 5: Current streamside forest management effects on aquatic habitat and fish. *In Reflections on Forest Management; Can Fish and Fiber Coexist?* R. Danehy and A. Dolloff, Eds. American Fisheries Society.
- (11) †Morris, LM., and C.R. Jackson. 2015. Interactions of Soils and Land Uses with Water Quantity and Quality. *In Ecosystem Services*, Nick Comerford, Ed. ACSESS Books, Madison, WI.
- (10) †Jackson, C.R., J.A Thompson, and R.K. Kolka. 2014. Wetland Soils and Hydrology. *In Ecology of Freshwater and Estuarine Wetlands*, 2<sup>nd</sup> Edition, D.P. Batzer and R. Sharitz, Editors. University of California Press.
- (9) †Parker, D., J.T. Anderson, C.R. Jackson, B. Miller, and A. Rosenberger. 2014. Grand Challenge 2: Water; In A Science Road Map for Food and Water. Association of Public and Land Grant University (APLU) Experiment Station Committee on Organization and Policy – Science and Technology Committee.
- (8) †Jackson, C.R. 2013. Timber Harvesting - Influence on Water Yield and Water Quality. *In Encyclopedia of Environmental Management*. Taylor and Francis, New York.
- (7) †Webster, J.R., E.F. Benfield, K. Cecala, J.F. Chamblee, C. Dehring, T. Gragson, J. Hepinstall, C.R. Jackson, J. Knoepp, D. Leigh, J. Maerz, C. Pringle, and H.M. Valett. 2012. Water quality and exurbanization in southern Appalachian streams. Pages 91-106 in P.J. Boon and P.J. Raven (editors). *River Conservation and Management*. Wiley-Blackwell, Chichester, UK.
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Science: Past, Present, and Future, Rauscher, Johnsen, and Doudrick, Eds. USDA Forest Service Southern Research Station General Technical Report SRS-75.

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### **Published Reviews**

†Jackson, C.R. 2006. Book Review: "Hydrology: an introduction" by Wilfried Brutsaert, Cambridge Press. *J. American Water Resources Association* 42(2): 529-530.

†Jackson, C.R. 2004. Book Review: "An Introduction to the Environmental Physics of Soil, Water and Watersheds" by C. Rose, Cambridge Press. *J. American Water Resources Association* 40(6):1666-1667.

### **Other Professional Publications in Journals**

†Jackson, C.R., W.T. Swank, and R. Olszewski. 2005. John D. Hewlett (1922-2004). Obituary. *EOS* 86(12):124.

†Jackson, C.R., W.T. Swank, and R. Olszewski. 2005. Hydrologist: John D. Hewlett (1922-2004). Obituary. *Hydrological Processes* 19:2093-2095. doi:10.1002/hyp.5885.

### **Select Proceedings Papers and Published Reports (since 2002)**

Griffiths, N.A., C.R. Jackson, J.I. Blake, J. Jeffers, B. Rau, G. Starr, and K. Vache. 2019. ENVIRONMENTAL EFFECTS OF SHORT-ROTATION LOBLOLLY PINE PRODUCTION FOR BIOENERGY AND EVALUATION OF CURRENT FORESTRY BEST MANAGEMENT PRACTICES. Dept. of Energy, Oak Ridge National Laboratory, ORNL/TM-2018/1055. 77p.

Rugel, K., S.W. Golladay, and C.R. Jackson. 2011. Identifying groundwater/stream interaction in the Lower Flint River Basin using multiple stream parameters and remote sensing datasets. Proceedings of the Georgia Water Resources Conference, April 11-13, University of Georgia.

Markewitz, D., C.R. Jackson, N. Fraser, and D. Radcliffe. 2011. Streamwater dissolved organic carbon and total dissolved nitrogen: Effects of timber harvest in the Georgia Piedmont. Proceedings of the Georgia Water Resources Conference, April 11-13, University of Georgia.

Sheridan, R.M., G.D. Carroll, C.R. Jackson, T.C. Rasmussen, and J.L. Shelton. 2009. Simple alternative methods for the biological component of watershed assessments. Pp 51-60, Proceedings of the Georgia Water Resources Conference, April 27-29, University of Georgia.

Jackson, C.R. and M. Miwa. 2007. Importance of Forestry BMPs for Water Quality. Pp. 10-31 In Proceedings of the Louisiana Natural Resources Symposium: Human and Other Impacts on Natural Resources – Causes, Quantification, and Implications, August 13 and 14, Louisiana State Univ., Baton Rouge, LA.

Wrona, A., D. Wear, J. Ward, R. Sharitz, J. Rosenzweig, J. Richardson, D. Peterson, S. Leach, L. Lee, C. R. Jackson, J. Gordon, M. Freeman, O. Flite, G. Eidson, M. Davis, and D. Batzer 2007. Restoring ecological flows to the lower Savannah River: a collaborative scientific approach to adaptive management. Proceedings of the 2007 Georgia Water Resources Conference, , March 27-29, T. Rasmussen, G.D. Carroll, and A. Georgakakos, Eds. University of Georgia, Athens, GA. 12 pp.

Olszewski, R., and C.R. Jackson. 2006. Best management practices and water quality. *In A Primer on the Top Ten Forest Environmental and Sustainability Issues in the Southern United States*. Special Report 06-06. NCASI, Research Triangle, NC.

Meyer, J.L. K.L. Jones, G.C. Poole, C.R. Jackson, J.E. Kundell, B.L. Rivenbark, E.L. Kramer, W. Bumback. 2005. Trout Stream Buffer Study: Implications of Changes in Riparian Buffer Protection for Georgia's Trout Streams, Institute of Ecology, University of Georgia.

Li, G. and C.R. Jackson. 2005. Time-series stream temperature and dissolved oxygen modeling in the lower Flint River Basin. Proceedings of the Georgia Water Resources Conference, April 25-27, Kathy Hatcher, Ed, Institute of Ecology, University of Georgia, Athens, GA.

Romeis, J. and R. Jackson. 2005. Evaluation of total phosphorus in the Altamaha-Ocmulgee-Oconee River basin. Proceedings of the Georgia Water Resources Conference, April 25-27, Kathy Hatcher, Ed, Institute of Ecology, University of Georgia, Athens, GA.

Bradshaw, J.K., D. Radcliffe, K. Lichtenstein, M. Risse, M. Bakker, R. Jackson, and D. Markewitz. 2005. Land use effects on suspended sediment yield in six small Georgia watersheds. Proceedings of the Georgia Water Resources Conference, April 25-27, Kathy Hatcher, Ed, Institute of Ecology, University of Georgia, Athens, GA.

Carroll, G.D. and C.R. Jackson. 2003. Preliminary analysis of biotic indices and land cover within streams of the Georgia Piedmont. Proceedings of the 2003 Georgia Water Resources Conference, April 23-24. University of Georgia, Athens, GA.

Li, G. and C.R. Jackson. 2003. Physical and chemical characteristics of streams in the lower Flint River Basin. Proceedings of the 2003 Georgia Water Resources Conference, April 23-24. University of Georgia, Athens, GA.

Hale, V.C. and C.R. Jackson. 2003. Hydrologic modifications to the lower Savannah River. Proceedings of the 2003 Georgia Water Resources Conference, April 23-24. University of Georgia, Athens, GA.

Meyer, J., M. Alber, W. Duncan, M. Freeman, C. Hale, R. Jackson, C. Jennings, M. Palta, E. Richardson, R. Sharitz, J. Sheldon, and R. Weyers. 2003. Summary Report Supporting the Development of Ecosystem Flow Recommendations for the Savannah River below Thurmond Dam. River Basin Science and Policy Center, University of Georgia, Athens, GA.

Cowie, G., M. Davis, S. Holmbeck-Pelham, B. Freeman, M. Freeman, K. Hatcher, R. Jackson, A. Miller Keyes, M. Merrill, J. Meyer, E. Sutherland, S. Wenger. 2002. Reservoirs in Georgia: Meeting Water Supply Needs while Minimizing Impacts. Institute of Ecology, University of Georgia.

### **Professional Presentations since 2007 (invited presentations since 2002)**

Raulerson, S., C.R. Jackson, K.B. Vache, M. Meles B. 2020. Using Dupuit's equations to build a topographically based and GIS-driven water table model for estimating water table position and transit times. POSTER. American Geophysical Union Annual Meeting (virtual).

Jackson, C.R. 2020. CWT: The Future of the Southern Appalachian Mixed Deciduous Forest Ecosystem - A Story of Human Actions. 2020 LTER Science Council, May 5-7 (virtual).

Younger, S.E., D.P. Aubrey, and C.R. Jackson. 2019. Water budget comparison of two fast growing bioenergy tree species during canopy closure. POSTER. American Geophysical Union Annual Meeting, December 9-13, San Francisco, CA.

Jackson, C.R. and J. Klaus. 2019. Interflow travel distances calculated from worldwide data: Landscape controls on hillslope-valley connectivity. American Geophysical Union Annual Meeting, December 9-13, San Francisco, CA.

Raulerson, S. C.R. Jackson, and M. Bitew. 2019. Topographic and Statistically Based Model of Water Table Position, Groundwater Storage, and Transit Times. POSTER. American Geophysical Union Annual Meeting, December 9-13, San Francisco, CA.

McGuire, K.J., R.M. Lee, B.D. Strahm, J.D. Knoepp, R.D. Stewart, and C.R. Jackson. 2019. Revisiting a 50-year-old hillslope drainage experiment at the Coweeta Hydrologic Lab (**Invited**). American Geophysical Union Annual Meeting, December 9-13, San Francisco, CA.

Jackson, C.R. and C.F. Miniati. 2019. The Coweeta Long-Term Ecological Research Program at the Coweeta Hydrologic Laboratory. American Geophysical Union Annual Meeting, December 9-13, San Francisco, CA.

Raulerson, S.A., C.R. Jackson, N.D. Melear, S.E. Younger, M.P. Dudley, and K.J. Elliott. 2019. Effects of rhododendron removal on summer stream temperatures, southern Appalachian Mountains. 2019 Annual Meeting for the Ecological Society of America, August 12-16, Louisville, KY.

Jackson, C.R., J. Jeffers, N.A. Griffiths, B. Rau, M. Bitew, and K.B. Vache, 2019. Riparian denitrification prevents groundwater nitrate from reaching an intermittent blackwater stream. 2019 Annual Meeting for the Ecological Society of America, August 12-16, Louisville, KY.

Benfield, E.F. and C.R. Jackson. 2019. Sunny, narrow, hot, simple, and fertilized valley streams: No friends to native aquatic fauna. Coweeta (CWT) LTER 40 Year Retrospective Symposium, May 28th, Dillard House, Dillard, GA.

Jackson, C.R. 2019. CWT: Legacies, land use, disturbance history. 2019 LTER Science Council, May 14-16, Luquillo, Puerto Rico.

Sanders, J., Jackson, C. R., Welch-Devine, M. 2019. Mowers vs Growers: Riparian Buffer Management in the Southern Blue Ridge, U.S.A. Society for Freshwater Science Annual Meeting, May 19-23, Salt Lake City.

Gill, L.E., S.E. Younger, C.R. Jackson, D.P. Aubrey, P.V. Caldwell, J.J. McDonnell, K.F. Janzen, and J. Klaus. 2019. Applying isotopes, mass balance, and xylem deuterium correction to water use and sourcing of two biomass tree species. Georgia Water Resources Conference, April 16-17, University of Georgia, Athens, GA.

Sanders, J., M. Welch-Devine, and C.R. Jackson. 2019. Mowers versus growers: Riparian buffer management in the Southern Blue Ridge Mountains, USA. Georgia Water Resources Conference, April 16-17, University of Georgia, Athens, GA.

Younger, S.E., C.R. Jackson, and T.C. Rasmussen. 2019. Influence of forest and vegetation type on annual evapotranspiration estimated by water budgets across 46 rural basins in the southeastern U.S. Georgia Water Resources Conference, April 16-17, University of Georgia, Athens, GA.

Raulerson, S., C.R. Jackson, N.D. Melear, S.E. Younger, M. Dudley, and K.J. Elliott. 2019. Impacts of understory rhododendron removal on Southern Appalachian Mountain stream temperatures. POSTER. Georgia Water Resources Conference, April 16-17, University of Georgia, Athens, GA.

Griffiths, N.A., and C.R. Jackson. Short-rotation woody biomass sustainability. US Department of Energy Bioenergy Technologies Office 2019 Peer Review Meeting: Sustainability Platform, Denver, CO, March 2019. Oral presentation.

Jackson, C.R. 2019. Nonpoint pollutant transport viewed through hillslope hydrologic processes. **Invited Seminar**. Geosciences Dept. Seminar. Georgia State University. January 31.

Jackson, C.R. 2018. Building better urban streams. River Basin Center Mini-Symposium, December 5, University of Georgia.

Vache, K., M. Bitew, N.A. Griffiths, and C.R. Jackson. 2018. Hydrologic effects of short rotation woody crops at landscape scales modeled over multiple rotations. Society of American Foresters Annual Meeting, October 3-7, Portland, Oregon.

N.A. Griffiths, C.R. Jackson, G. Starr, B. Rau, K Vache, J. McDonnell, M. Bitew, E. Du, J. Klaus, J. Jeffers, K. Fouts, A. Fortner, K. McCracken, and J. Phillips. 2018. Environmental Effects of Short-Rotation Pine Production for Bioenergy: Findings from a Watershed Experiment. Society of American Foresters Annual Meeting, October 3-7, Portland, Oregon.

Tatum, V., C.R. Jackson, M. McBroom, B. Baillie, E. Schilling, and T. Wigley Jr. 2018. Effectiveness of Forestry BMPs for Reducing Risk of Herbicide Use to Aquatic Organisms. Society of American Foresters Annual Meeting, October 3-7, Portland, Oregon.

Jackson, C.R, T. Hwang, S. Laseter, C. Oishi, K. Novick, J. Knoepp, K. Elliott, N. Wurzbarger, C. Miniati. 2018. Climate Change – Coweeta (CWT) lightning presentation. NSF LTER All Scientists Meeting, September 30-October 4, Asilomar, CA.

Jackson, C.R., P. Caldwell, K. Elliott, T. Hwang, J. Knoepp, C. Miniati, C. Oishi, J. Webster, and N. Wurzbarger. 2018. Coweeta (CWT) and forest mesophication of the temperate montane deciduous forest of the Southern Appalachians: A response to species loss, BNF, climate change, and/or fire exclusion? NSF LTER All Scientists Meeting, September 30-October 4, Asilomar, CA.

Klaus, J. and C.R Jackson: How far does interflow travel down slope: a comparison study across seventeen hillslopes. 17th Biennial Conference ERB 2018 Euromediterranean Network of Experimental and Representative Basins (ERB) Innovative monitoring techniques and modelling approaches for analysing hydrological processes in small basins Darmstadt / Germany, September 11 - 14, 2018.

Jackson, C.R. 2018. Invasions, pests, land use, and climate change in southern Appalachian forests: Relative and layered effects and feedbacks. Coweeta LTER Summer Meeting, June 19-20, Coweeta Hydrologic Laboratory, Otto, NC.

Webster, J. and C.R. Jackson. 2018. Chemistry of small streams in the Upper Little Tennessee Basin: A complex story of biology, geology, and land use. Rain, Rivers, Fish and Faucets, Mainsprings Land Trust and Forward Franklin, June 16, Franklin, NC.

Jackson, C.R., J.R. Webster, K.K. Cecala, J.R. Frisch, J.E. Kirsch, J.C. Maerz, D.S. Leigh, J.T. Peterson, C.M. Pringle, and J.D. Knoepp. 2018. Hydrologic, Morphologic, and Water Quality Effects of Rural Development in Streams of the Southern Blue Ridge Mountains. Society for Freshwater Science Annual Meeting, May 20-24, Detroit, MI.

Dudley, M.P, S.Wenger, R. Jackson, K.J. Elliott, C.F. Miniati, and C.M. Pringle. 2018. Stream basal resources exhibit short-term resilience following reach-scale removal of a dominant riparian shrub. Society for Freshwater Science Annual Meeting, May 20-24, Detroit, MI.

Novick, K, C.R. Jackson, C. Oishi, and J. Knoepp. 2018. Organic Matter – CWT lightning presentation. NSF LTER Science Council Meeting, May 16-18, Madison, WI.

Klaus, J. and C.R. Jackson. 2018. Downslope travel distance and hydrologic connectivity: On the role of interflow in different landscapes. POSTER. European Geophysical Union Annual Meeting, April 8-13, Vienna, Austria.

Jackson, C.R. 2018. Forest managers must be educated in landscape management: examples from water quality and ecology. **Invited Presentation.** Forestry Leadership Series, School of Forestry, Oregon State University. January 18. Corvallis, OR.

Jackson, C.R., J.R. Webster, J.D. Knoepp, K. Elliott, R.E. Emanuel, and C. Miniati. 2017. Long-term stream discharge and chemistry observations reveal unexpected ecosystem dynamics: Coweeta Watershed 7 clearcut manipulation. 2017 American Geophysical Union Meeting, December 11-15, New Orleans, LA.

Rugel, K., S.W. Golladay, C.R. Jackson, T.C. Rasmussen, J.F. Dowd, and R.J. McDowell. 2017. Drivers and Effects of Groundwater-Surface Water Interaction in the Karstic Lower Flint River Basin, Southwestern Georgia, USA. 2017 American Geophysical Union Meeting, December 11-15, New Orleans, LA.

Jeffers, J.B., C.R. Jackson, B. Rau, C. Pringle, and C. Matteson. 2017. In Situ Groundwater Denitrification in the Riparian Zone of a Short-Rotation Woody Crop Experimental Watershed. POSTER. 2017 American Geophysical Union Meeting, December 11-15, New Orleans, LA.

Matteson, C., C.R. Jackson, S.B. Wilde, D. Batzer, J. Shelton, and J.B. Jeffers. 2017. Hydrologic Linkages Between Floodplain Wetlands and Adjacent Agricultural Lands. POSTER. 2017 American Geophysical Union Meeting, December 11-15, New Orleans, LA.

Younger, S.E. and C.R. Jackson. 2017. Variation of Annual ET Determined from Water Budgets Across Rural Southeastern Basins Differing in Forest Types. POSTER. 2017 American Geophysical Union Meeting, December 11-15, New Orleans, LA.

Brockman, L.E., S.E. Younger, C.R. Jackson, J.J. McDonnell, and K.F. Jantzen. 2017. Differential soil water sourcing of managed Loblolly Pine and Sweet Gum revealed by stable isotopes in the Upper Coastal Plain, USA. POSTER. 2017 American Geophysical Union Meeting, December 11-15, New Orleans, LA.

Aubrey, D.P., C.R. Jackson, J.J. McDonnell, C.R. Miniati, P.V. Caldwell, and S.E. Younger. 2017. Hydrologic Budgets for Short Rotation Loblolly Pine and *Eucalyptus*. USDA-NIFA AFRI Sustainable Bioenergy Annual Project Director Meeting. Tampa, FL. (**Invited**)

Jeffers, J.B., C.R. Jackson, B.M. Rau, C.M. Pringle, and C.T. Matteson. 2017. In situ groundwater denitrification in a riparian zone of a short-rotation woody crop experimental watershed. POSTER. Bottomland and Swamp Forests Symposium, October 31 – November 2, 2017, Wilmington, NC.

Matteson, C.T., C.R. Jackson, S.B. Wilde, D. Batzer, J. Shelton, and J. Jeffers. 2017. Hydrologic linkages between floodplain wetlands and adjacent agricultural lands. POSTER. Bottomland and Swamp Forests Symposium, October 31 – November 2, 2017, Wilmington, NC.

Jackson, C.R. and W.A. Coats. 2017. Can riparian forest cover cool streams that have warmed in the sun? 17<sup>th</sup> Annual Meeting of the American Ecological Engineering Society, May 23-25, Athens, GA.

Jackson, C.R. 2017. Shallow subsurface stormflow (interflow): Functioning to extend variable source areas upslope. **Invited Seminar**, Luxembourg Institute of Science and Technology, Belval, Luxembourg. May 2<sup>nd</sup>.

Jackson, C.R. and W.A. Coats. 2017. Do open-canopy mountain streams cool down after returning to forested conditions? Georgia Water Resources Conference, April 19-20, University of Georgia.

Fulton, S.G., J. Dowd, A. Thompson, and C. Rhett Jackson. 2017. Assessing how hydrologic isolation of coal mine spoils affects streamflow mechanisms and water chemistry using open source wireless technology. 2017 National Meeting of the American Society of Mining and Reclamation, April 9-13, Morgantown, WV.

Griffiths, N.A., C.R. Jackson, M. Bitew, K. Vache, J.J. McDonnell, G. Starr, B. Rau, and J. Blake. 2017. Short rotation woody biomass sustainability. 2017 Project Peer Review, USDOE Bioenergy Technologies Office, March 5-10, Denver, CO.

Bitew, M.M., C.R. Jackson, K.B. Vache, N. Griffiths, G. Starr, J. McDonnell, B. Rau, S.E. Younger, and K. Fouts. 2016. Water Quantity and Water Quality Impacts of Intensive Woody Biomass Feedstock Production in the Southeastern USA. POSTER. American Geophysical Union Annual Meeting, December 12-16, San Francisco, CA.

Vache, K.B., J. McDonnell, C.R. Jackson, and M.M. Bitew. 2016. Observation-based model development for groundwater dominated catchments. American Geophysical Union Annual Meeting, December 12-16, San Francisco, CA.

Jackson, C.R. and W.A. Coats. 2016. Riparian Canopy Gaps: within-gap heating and downstream cooling. POSTER. American Geophysical Union Annual Meeting, December 12-16, San Francisco, CA.

Jackson, C.R. 2016. Conceptual, theoretical, and philosophical considerations in water quality modeling. **Invited seminar**. Tianjin University of Science and Technology, December 9, Tianjin, China.

Rau, B.M., N. Griffiths, C.R. Jackson, J. Blake. Nitrogen cycling in short rotation pine. Soil Science Society of America Annual Meeting. Phoenix, AZ, 6-10, November 2016.

Bitew, M.M., C.R. Jackson, K. Vache, J.J. McDonnell, N. Griffiths, G. Starr, S. Younger, K. Fouts, and B. Rau. 2016. Modeling hydrologic impacts of intensive woody biomass feedstock production in the southeastern U.S. Short Rotation Woody Crop Science and Technology in an Uncertain Global Marketplace. POSTER. 11<sup>th</sup> Biennial Short Rotation Woody Crops Operations Working Group Conference, October 11-13, Fort Pierce, FL.

Jackson, C.R. and N. Griffiths. 2016. Short rotation woody biomass and water quality. **Invited Presentation**. Symposium on Watershed Scale Sustainability of Forest-Based Bioenergy Production. Sept. 28-29, North Carolina State University, Raleigh, NC.

Aubrey, D.P., C.R. Jackson, J.J. McDonnell, C.F. Minat, and P.V. Caldwell. 2016. Hydrologic budgets for short rotation loblolly pine and sweetgum. Ecological Society of America Annual Meeting, August 7-12, Fort Lauderdale, FL.

Griffiths, N.A., C.R. Jackson, M. Bitew, A.M. Fortner, J.R. Phillips, K. McCracken, and K. Fouts. 2016. Evaluating the water quality effects of short-rotation pine production for bioenergy using a watershed-scale experiment. Ecological Society of America Annual Meeting, August 7-12, Fort Lauderdale, FL.

Jackson, C.R. 2016. Influence of soils on vertical and lateral movement of water. **Invited Presentation.** Workshop on Hydrologic connectivity: Bridging terrestrial and aquatic systems in a karst landscape. Joseph Jones Ecological Research Center, July 19-20.

S.S. Panda, D.M. Amatya, R. Jackson, Y. Kim, B. Walters, and J. Nettles, 2016. Forest biomass estimation and ET correlation study with advanced geospatial technology for environmental and climate modeling. An Oral presentation at the 2016 ASABE Annual Int'l Meeting, July 17-20, Orlando, FL.

Jackson, C.R. 2016. Forest Hydrology and Water Quality: Grand Challenges in the U.S. **Invited Presentation.** NCASI Southern Regional Meeting, June 20-22, Chattanooga, TN.

Jackson, C.R., N.A. Griffiths, and B. Rau. 2016. Evaluating the environmental sustainability of woody biomass production for bioenergy in the southeastern US. **Invited Presentation.** Southeastern US bioenergy study tour sponsored by DOE and the Oak Ridge National Laboratory. April 13, Savannah River Site.

Jackson, C.R., M. Bitew, E. Du, N.A. Griffiths, L. Hopp, J. Klaus, J.J. McDonnell, and K. Vache. 2015. Headwater streams in porous landscapes: What's the contributing area? **Invited Presentation.** American Geophysical Union Conference, Dec. 14-19, San Francisco, CA.

Younger, S. and C.R. Jackson. 2015. Comparison of evapotranspiration and forest cover type in the southeast United States: A long-term water budget approach. POSTER. American Geophysical Union Conference, Dec. 14-19, San Francisco, CA.

Jackson, C.R. 2015. Forest hydrology: Grand challenges in the USA. **Invited Presentation.** Forest Hydrology Science Symposium and Workshop, December 9-11, Portland Oregon.

Jackson, C.R. 2015. Stream temperature and overhead canopy: How important is rhododendron? Riparian Forest Restoration Workshop, USDA Forest Service Coweeta Hydrologic Laboratory, October 27.

Griffiths, N.A., C.R. Jackson, M. Bitew, E. Du, K. Vache, J.J. McDonnell, N. Orlowski, J. Klaus, G. Starr, J.I. Blake, and B.M. Rau. 2015. Examining the effects of woody biomass production for bioenergy on water quality and hydrology in the southeastern United States. Webinar, National Bioenergy Day, October 21.

Jackson, C.R., C.F. Miniati, N. Heynen, and J. Webster. 2015. Coweeta (CWT) and the temperate montane deciduous forest of the southern Appalachians: *Topographically complex, climatically variable, disturbed at multiple time scales, and human modified and utilized.* POSTER. 2015 LTER All Scientists Meeting. August 30 – Sept. 2, Estes Park, CO.

Jackson, C.R. 2015. Coweeta LTER 2-min lightning presentation. 2015 LTER All Scientists Meeting. August 30 – Sept. 2, Estes Park, CO.

Griffiths, N.A., C.R. Jackson, J.J. McDonnell, M. Bitew, E. Du, and J. Klaus. 2015. Effects of short-rotation pine management for bioenergy on water quality in the southeastern United States. Society for Freshwater Science Annual Meeting. May 17-21, Milwaukee, WI.

Dupont, R., C.R. Jackson, and R. Psenner. 2015. Water and the landscape: Living with the natural environment. Lecture Series, UNO-Innsbruck International Summer School. July 13, Innsbruck, Austria.

- Jackson, C.R. 2015. Panel Discussion: Maximizing flow: Restoring the Savannah River Basin's natural flood patterns. Georgia Water Resources Conference, April 28-29, University of Georgia.
- Bahn, R.A. and C.R. Jackson. 2015. Effects of exurbanization in the Upper Little Tennessee River Basin: Sedimentation is predictable; flow and specific conductivity are not. Georgia Water Resources Conference, April 28-29, University of Georgia.
- Hopp L., K.B. Vaché, C.R. Jackson and J.J. McDonnell. 2015. Modeling subsurface stormflow initiation in low-relief landscapes. POSTER. European Geophysical Union Annual Meeting, April 12-17, Vienna, Austria
- Griffiths, N.A. and C.R. Jackson. 2015. Short rotation woody biomass sustainability. 2015 Project Peer Review, USDOE Bioenergy Technologies Office, March 23-27, Alexandria, VA.
- Caldwell, P., C.F. Miniat, D.P. Aubrey, C.R. Jackson, and J.J. McDonnell. 2015. Precipitation partitioning in short rotation bioenergy crops – implications for downstream water quality. POSTER. Fifth Interagency Conference on Research in the Watersheds. March 2-5, North Charleston, SC.
- Griffiths, N.A., C.R. Jackson, M. Bitew, E. Du, K.B. Vache, J.J. McDonnell, J. Klaus, B.M. Rau. 2015. Evaluating the effects of woody biomass production for bioenergy on water quality and hydrology in the southeastern United States. Fifth Interagency Conference on Research in the Watersheds. March 2-5, North Charleston, SC.
- Elliott, K.F., C.F. Miniat, J.D. Knoepp, M.A. Crump, and C.R. Jackson. 2015. Restoration of southern Appalachian riparian forests affected by Eastern Hemlock mortality. POSTER. Fifth Interagency Conference on Research in the Watersheds. March 2-5, North Charleston, SC.
- Morris, L.M. and C.R. Jackson. 2015. Georgia's cypress resource: reconciling perceptions of change with evidence of change. SESAF 2015 Annual Meeting, January 25-27, Saint Simons Island, GA.
- Jackson, C.R. 2015. Why assessing BMP effectiveness is more of a sociological question than a hydrological question. SESAF 2015 Annual Meeting, January 25-27, Saint Simons Island, GA.
- Jackson, C.R., L. Hopp, J.J. McDonnell, M. Bitew, E. Du, J. Klaus, and N.A. Griffiths. 2014. Interflow moving over leaky impeding layers: How far can we expect it to go? Poster. American Geophysical Union Conference, Dec. 15-19, San Francisco, CA.
- Griffiths, N.A., C.R. Jackson, J.J. McDonnell, M. Bitew, E. Du, and J. Klaus. 2014. Water quality response after two years of short-rotation pine management for bioenergy in the southeastern U.S. Poster. American Geophysical Union Conference, Dec. 15-19, San Francisco, CA.
- Bitew, M., C.R. Jackson, J.J. McDonnell, K. Vache, N.A. Griffiths, and J. Blake. 2014. Dynamic Downslope Travel Distance Modeling: Interflow Modeling from Bottom of Slope Upwards. Poster. American Geophysical Union Conference, Dec. 15-19, San Francisco, CA.
- Griffiths, N.A., C.R. Jackson, M. Bitew, E. Du, K.B. Vache, J.J. McDonnell, J. Klaus, and C.C. Trettin. 2014. Environmental sustainability of woody biomass production for bioenergy in the southeastern United States. 10th Biennial Meeting of the Short Rotation Woody Crops Operations Working Group July 17-19, Seattle, WA.
- Kraseski, K.A., D.B. Booth, and C.R. Jackson. 2014. Local and watershed-scale determinants of summertime urban stream temperatures. 3<sup>rd</sup> Symposium on Urbanization and Stream Ecology, May 15-17, Portland, OR.
- Griffiths, N.A., C.R. Jackson, M. Bitew, E. Du, K.B. Vache, J.J. McDonnell, and J. Klaus. 2014. Assessing BMP Effectiveness for Woody Biomass Production for Bioenergy in Groundwater-Dominated Coastal Plain Watersheds. Symposium on Forestry Best Management Practice Effectiveness in the Eastern US. May 12-15, Blacksburg, VA.
- Jackson, C.R. and J.V. Scneier. 2014. Spatial and Temporal Frequency of Overland Flow from Piedmont Pine Plantations. Symposium on Forestry Best Management Practice Effectiveness in the Eastern US. May 12-15,

Blacksburg, VA.

Carrol, G.D. and C.R. Jackson. 2014. Use of Simple Suspended and Bed Sediment Metrics to Explain Biotic Index Variability and Relationships between Fish and Macroinvertebrate Assemblage Metrics in Georgia Piedmont Streams Symposium on Forestry Best Management Practice Effectiveness in the Eastern US. May 12-15, Blacksburg, VA.

Jackson, C.R. 2014. The Oso Washington landslide: Glaciers, young landscapes, LiDAR, logging, and risk management. Warnell School seminar, April 24, University of Georgia.

Jackson, C.R., D.P. Aubrey, J.J. McDonnell, C.F. Miniati, and P. Caldwell. 2014. Pines vs. eucalyptus in the Upper Coastal Plain: How much water are they using and where are they getting it? An International Symposium on Evapotranspiration: Challenges in measurement and modeling from leaf to landscape scale and beyond. ASABE, April 7-10, Raleigh, NC.

Dalton, K, S.S. Panda, D. Amatya, C.R Jackson, J.E. Nettles, G.M. Chescheir. 2014. Evapotranspiration Parameter Estimation Model Development with Advanced Geospatial Technology. An International Symposium on Evapotranspiration: Challenges in measurement and modeling from leaf to landscape scale and beyond. ASABE, April 7-10, Raleigh, NC.

Vache, K.B., C.R. Jackson, M. Bitew, J. Blake, J.J. McDonnell, N. Griffiths. 2013. Potential impacts of intensive cellulosic biofuel production on water quality and quantity in the Upper Coast Plain. Poster. American Geophysical Union Conference, Dec. 9-13, San Francisco, CA.

Price, K. and C.R. Jackson. 2013. A multi-scale analysis of streamflow response to changes in evapotranspiration and soil hydrology in the Blue Ridge Mountains. (*Invited*). American Geophysical Union Conference, Dec. 9-13, San Francisco, CA.

Price, K., P.J. Denny-Frank, C.J. Harman, T. Purucker, C.R. Jackson, R.C. Sidle. 2013. Process scales in catchment science: a new synthesis. American Geophysical Union Conference, Dec. 9-13, San Francisco, CA.

Jackson, C.R. 2013. When Reductionist Engineers Meet High Dimensional Natural Systems: The Example of Stream Management and Restoration. **Invited Presentation**. Duke Univ. Dept of Civil and Environmental Engineering Seminar, November 25, Duke University.

Jackson, C.R , S.C. Marchman, M. Miwa, W.B. Summer, S. Terrell, D.G. Jones, S.L. Scarbrough. 2013. Nutrient and Herbicide Concentrations and Export from Clearcuts and Site-prepared Plantations; Upper Coastal Plain, Southeastern US. Society American Foresters Annual Meeting, Oct 23-27, Charleston, SC.

Jackson, C.R. 2013. BMP research at UGA. **Invited Presentation**. Southern Group of State Foresters 2013 Annual Meeting, June 3-6, Savannah, GA.

Langholtz, M.H., N.A. Griffiths, N.A., C.R. Jackson, J.J. McDonnell, J.I. Blake. 2013. Short rotation woody biomass sustainability. 2013 DOE Bioenergy Technologies Office (BETO) Project Peer Review, May 23<sup>rd</sup>, Arlington, VA.

Bahn, R. A. and C.R. Jackson. 2013. Variation in hydrologic and sediment transport behavior among the nine intensively monitored watersheds in the Upper Little Tennessee River Basin. Georgia Water Resources Conference, University of Georgia, Athens, GA.

Jackson, C.R. 2013. Riparian vegetation condition strongly affects channel morphology and habitat structure. Georgia Water Resources Conference, University of Georgia, Athens, GA.

Jackson, C. Rhett, Enhao Du, Julian Klaus, Natalie A. Griffiths, Jeffrey J. McDonnell, and John I. Blake. 2012. Whole hillslope irrigation reveals differential interflow behavior of dye tracers, conservative solutes and nutrients. POSTER. American Geophysical Union Conference, December 3-7, San Francisco, CA.



Du,Enhao, C. Rhett Jackson, and Margaret F. Wiliamson. 2012. Effects of measurement scale on saturated hydraulic conductivity estimates in loamy sand and argillic soils: from point to hillslope. POSTER. American Geophysical Union Conference, December 3-7, San Francisco, CA.

Du, E., C.R. Jackson, J.Blake, N.A. Griffiths, J. Klaus, J.J. McDonnell, K. Vache, M. Langholtz. 2012. Modeling water quality within biofuel production landscapes: integrating hillslope flow paths, deep groundwater dynamics, riparian groundwater interactions, and end-member chemistry. POSTER. American Geophysical Union Conference, December 3-7, San Francisco, CA.

Klaus, Julian, Jeffrey, J. McDonnell, Enhao Du, C. Rhett Jackson. 2012. Quantifying catchment water cycle connections via the local meteoric and evaporation water lines. POSTER. American Geophysical Union Conference, December 3-7, San Francisco, CA.

Natalie A. Griffiths, Patrick J. Mulholland, C. Rhett Jackson, Jeffrey J. McDonnell, John I. Blake, Enhao Du, Julian Klaus, and Matt H. Langholtz. 2012. Biogeochemistry of forested watersheds in the Southeastern U.S. prior to conversion to short-rotation pine for bioenergy. POSTER. American Geophysical Union Conference, December 3-7, San Francisco, CA.

Booth, Derek B., K. Kraseski, R.A. Bahn, and C.R. Jackson. 2012. Effects of surficial geology, lakes, and land use on urban stream temperatures: Metropolitan Seattle. Geological Society of America Annual Meeting, November 4-7, Charlotte, NC.

Jackson, C.R., D.S. Leigh, S. Lynsey Long, and J.F. Chamblee. 2012. Channel morphology, local riparian condition, and basin land cover associations; Southern Appalachians. Geological Society of America Annual Meeting, November 4-7, Charlotte, NC.

K.P. Dalton, S.S. Panda, D.M. Amatya, R. Jackson, H. Ssegane, G. Chescheir. 2012. Stomatal Conductance and Leaf Area Index Estimation Using Remotely Sensed Information. 3<sup>rd</sup> International Forests & Water in Changing Environment 2012 Conference, September 18-20, Fukuoka, Japan

Eason, J., L.M. Risse, R. Jackson, and J. Evans, 2012. In-Stream Sediment & Phosphorus Changes before and during Construction of a Stream Restoration Project. 2012 Land and Sea Grant National Water Conference, May 20-24, Portland, OR.

Rugel, K., R.J. McDowell, J.F. Dowd, J. C. Brock, S.W. Golladay, C.R. Jackson. 2012. Using remote sensing, stream chemistry and fracture trends to predict groundwater/stream interaction in karst medium: Lower ACF River Basin, Southwestern, GA, USA. Society for Freshwater Science 2012 Annual meeting, May 21, 2012, Louisville, KY.

Price, K., C.R. Jackson, A.J. Parker, and M. Cyterski. 2012. Effects of watershed land use and geomorphology on stream low flows during severe drought conditions in the southern Blue Ridge Mountains, Georgia and North Carolina. GSA Southesatern Section – 61<sup>st</sup> Annual Meeting, April 1-2, Asheville, NC.

Rugel, K., J.R. McDowell, J.F. Dowd, S.W. Golladay, and C.R. Jackson. 2012. Investigating groundwater/stream interaction between the Upper Floridan Aquifer and streams in the lower Flint and Chanttahoochee River basins, GA, USA, using stream chemistry, remote sensing, and bedrock fracture orientation. GSA Southesatern Section – 61<sup>st</sup> Annual Meeting, April 1-2, Asheville, NC.

Jackson, C.R.. Panelist. 2012. Scientific view of forest management and watershed health. Society of American Foresters Forest Management and Watershed Health Technical Symposium.Clean Water Act symposium, Feb. 17, Capitol Visitor Center, Washington, DC.

Du, E., C.R. Jackson, J. Klaus, and L. Hopp. 2011. Perching and interflow occurrence over a shallow argillic layer in a low relief upper Coastal Plain watershed. POSTER. 2011 American Geophysical Union Conference, December 5-9, San Francisco, CA.

Jackson, C.R., K.B. Vache, and E. Du. 2011. Parameter choice and constraint in hydrologic models for evaluating land use change. POSTER. 2011 American Geophysical Union Conference, December 5-9, San Francisco, CA.

Griffiths, N. and C.R. Jackson. 2011. What do we need to learn about global change effects in ecosystem science? Global Change Effects on Aquatic Systems: A symposium inspired by the work of Patrick J. Mulholland. November 5, Oak Ridge, TN.

Jackson, C.R. 2011. Forest Water Quality: What's the baseline for evaluation? American Fisheries Society 141<sup>st</sup> Annual Meeting, Sept 4-8, Seattle, WA

Jackson, C.R., K.B. Vache, E. Du, J.J. McDonnell, and J.I. Blake. 2011. Modeling issues in up-scaling field and small watershed biogeochemistry data from biomass production experiments. Ecological Society of America Annual Meeting 2011, August 8-12, Austin, TX.

Griffiths, N.A., P.J. Mulholland, C.R. Jackson, and C.T. Garten Jr. 2011. Biogeochemistry of forested watersheds in the Upper Coastal Plain of the Southeastern U.S. prior to short-rotation pine for bioenergy. Gordon Conference – Catchment Science: Interactions of Hydrology, Biology, and Geochemistry. July 10-15, Bates College, Lewiston, ME.

Mulholland, P.J., N.A. Griffiths, C.R. Jackson, J.J. McDonnell, J.I. Blake. 2011. Short rotation woody biomass sustainability. DOE Office of Biomass Programs Feedstocks Platform Review. April 6, Annapolis, MD.

Jackson, C.R. 2011. Effectiveness of Forestry Best Management Practices: How good is good enough? Dept. of Forestry and Environmental Conservation Seminar. Virginia Tech University, January 31, Blacksburg, VA.

Rugel, K., S.W. Golladay, C.R. Jackson, D.W. Hicks, and J.F. Dowd. 2010. Identifying groundwater-stream interaction in a Karst region: Lower Flint River Basin, Georgia, USA. POSTER. 2010 American Geophysical Union Conference, December 13-17, San Francisco, CA.

Jackson, C.R., L. Hopp, J.J. McDonnell, J. Greco, and J.I. Blake. 2010. Vadose zone hydrology in low relief terrain: The importance of lateral subsurface flow. POSTER. 2010 American Geophysical Union Conference, December 13-17, San Francisco, CA.

Williamson, M.F., C.R. Jackson, J.C. Hale, and H.F. Sletten. 2010. In-situ hydraulic conductivities of soils and anomalies at a future biofuel production site. POSTER. 2010 American Geophysical Union Conference, December 13-17, San Francisco, CA.

Webster, J.R., E.F. Benfield, K. Cecala, J.F. Chamblee, C. Dehering, T. Gragson, J. Hepinstall, C.R. Jackson, J. Knoepp, D. Leigh, J. Maerz, and H.M. Valett. 2010. Water quality and exurbanization in southern Appalachian streams. The Conservation and Management of Rivers: 20 Years On. University of York, England. 6-9 Sep 2010.

Jackson, C.R. 2010. Surprises, ironies, and paradoxes of water management in the ACF basin. ACF Water Conference and Summit, June 1-3, Kirbo Center at Bainbridge College, Bainbridge, GA.

Price, K., Jackson, C.R., Parker, A.J., Dowd, J., Reitan, T., and Cyterski, M. 2010. Effects of watershed land use and geomorphology on stream baseflows in the southern Blue Ridge Mountains. April 13-18, Association of American Geographers 2010 Annual Meeting in Washington, D.C.

Jackson, C.R. 2010. Applying a broad view of hydrologic connectivity to ACF water resource issues. UF Water Institute Symposium, February 24-25, Gainesville, FL.

Jackson, C.R. 2010. Water quality, flowpath, and hydrologic modeling issues related to intensified forestry for producing cellulosic biofuels. Watershed Perspective on Bioenergy Sustainability Workshop, Oak Ridge National Laboratory, February 3-4, Oak Ridge, TN.

- Jackson, C.R. 2009. A tour of ACF water quality issues. Session 33: Update on Stream Quality in Georgia. Georgia Environmental Conference, August 26-28, Savannah, GA.
- Jackson, C.R. 2009. Minimum explanatory complexity and the impossibility of universal stream classification. Joseph Jones Ecological Research Center Seminar, July 23, 2009.
- Carroll, G.D. and C.R. Jackson. 2009. Linkages between simple sediment metrics and aquatic communities in streams of the Piedmont ecoregion of Georgia. Georgia Water Resources Conference, April 27-29, University of Georgia.
- Romeis, J., C.R. Jackson, D.E. Radcliffe, and L.M. Risse. 2009. Variability in Streamflow, Water Quality, and Phosphorous Loading in Forested and Agricultural Headwater Streams in the Upper Etowah River Basin. POSTER. Georgia Water Resources Conference, April 27-29, University of Georgia.
- Price, K., C.R. Jackson, and A.J. Parker. 2009. Effects of Land Use on Baseflow Hydrology in the Southern Blue Ridge Mountains, USA. POSTER. Georgia Water Resources Conference, April 27-29, University of Georgia.
- Romeis, J., C.R. Jackson, L.M. Risse, D.E. Radcliffe, and P. Brown. 2009. Hydrologic phosphorus transfer following field-based identification of critical source areas. USDA-CSREES National Water Conference, February 8-12, St. Louis, MO.
- Jackson, C.R. 2009. Land Use and Water Quality Relationships in the ACF Basin. National Academy of Environmental Design Water and Sustainability Symposium. February 16-17, University of Florida.
- Jackson, C.R., M. Miwa, S.B. Terrell, W.B. Summer, and N.E. Fraser. 2008. Lessons Learned from Recent Paired Watershed Assessments of Forestry Operations in Georgia. Fall 2008 American Geophysical Union Conference, San Francisco, CA, December 15-19.
- Price, K., C.R. Jackson, and A.J. Parker. 2008. Variation of Surficial Soil Hydraulic Properties Across Land Uses in the Southern Blue Ridge Mountains. POSTER. Fall 2008 American Geophysical Union Conference, San Francisco, CA, December 15-19.
- Jackson, C.R. and C.M. Pringle. 2008. Un-natural but Ecologically Preferable Flow Regimes. Lake Seminole Workshop. November 17-18, Joseph Jones Ecological Research Center, Newton, GA.
- Jackson, C.R. 2008. Effectiveness of Southeastern Forestry BMPs and Remaining Scientific Issues. From Forest to Finished Products Conference and Expo. November 17-19, Georgia Center for Continuing Education, Athens, GA.
- Jackson, C.R. and C.P. Pringle. 2008. Un-natural but Ecologically Preferable Flow Regimes. Southeastern Environmental Flows Conference. October 27-29, Athens, GA.
- Rugel, K., S.W. Golladay, C.R. Jackson, J. Dowd, and D.W. Hicks. 2008. Assessing the Affects of Groundwater Withdrawals on Baseflow Recession Behavior of Coastal Plain Streams in Southwest Georgia Using Historic Stream Flow Records. Southeastern Environmental Flows Conference. October 27-29, Athens, GA.
- Price, K., A.J. Parker, and C.R. Jackson. 2008. Land Use Effects on the Surficial Hydrologic Characteristics of Soils in the Blue Ridge Mountains. Coweeta LTER Summer Meeting, Coweeta Hydrologic Laboratory, June 24, 2008.
- Jackson, C.R., R. Fuerstenberg, G. Lucchetti, K. Richter, and R. Timm. 2008. Retrospective Assessments of Streams Draining Ideal Developments: Unplanned Experiments to Explore the Upper Boundaries of Stormwater Mitigation. 2<sup>nd</sup> Symposium on Urbanization and Stream Ecology, Salt Lake City, UT, May 23-24, 2008.

- Price, K., A.J. Parker, and C.R. Jackson. 2008. Land Use Effects on the Surficial Hydrologic Characteristics of Alluvial and Saprolitic Soils in the Southern Blue Ridge Mountains. Association of American Geographers 2008 Annual Meeting, Boston, MA, April 15-19, 2008.
- Romeis, J.J., C.R. Jackson, D.E. Radcliffe, M.L. Risse, and J. Bryant. 2008. Phosphorus fluxes in headwater streams draining commercial poultry operations in the upper Etowah River basin, Georgia. POSTER. 2008 Carl E. Kindsvater Symposium on Water Resources and the Environment. March 25, Atlanta, GA.
- Romeis, J.J., C.R. Jackson, D.E. Radcliffe, M.L. Risse, and J. Bryant. 2008. Estimating phosphorus loads in streams draining poultry-pasture operations in the upper Etowah River basin, Georgia. 2008 USDA-Cooperative State Research, Education, and Extension Service National Water Conference, February 3-7, Sparks, NV.
- Jackson, C.R. 2008. The Eternal Conflict Between Parameter Parsimony and Full System Representation: Examples from Stream Geomorphology and Hydrology. Warnell School of Forestry and Natural Resources Seminar Series, University of Georgia, January 24, 2008.
- Jackson, C.R. and J.V. Schneier. 2007. Hortonian overland flow in humid forested environments: Occurrence, measurement, characterization, and importance. Fall 2007 American Geophysical Union Conference, San Francisco, CA, December 10-14.
- Romeis, J., C.R. Jackson, D.E. Radcliffe, L.M. Risse, and J. Bryant. 2007. Phosphorus Fluxes in Headwater Streams Draining Non-Research Poultry Operations in North-Central Georgia, USA. POSTER. Fall 2007 American Geophysical Union Conference, San Francisco, CA, December 10-14.
- Jackson, C.R. 2007. Riparian zone structure and function in the Southern Appalachians. Riparian Zone Workshop. USFS Coweeta Hydrologic Laboratory, Otto, NC. November 6.
- Jackson, C.R., D.M. Amatya, W.M. Aust, C.A. Dolloff, M. Miwa, C.C. Trettin, and R.W. Skaggs. 2007. Current paired watershed studies: the southeastern U.S. **Invited Presentation**. Society of American Foresters 2007 National Convention, October 23-27, Portland, OR.
- Terrell, S., W.B. Summer, and R. Jackson. 2007. Effects of timber harvesting and site preparation on hydrology and sediment transport. POSTER. Society of American Foresters 2007 National Convention, October 23-27, Portland, OR.
- Risse, L.M., D.E. Radcliffe, J. Romeis, R. Jackson, and Z. Lin, 2007. Phosphorus trading in the Etowah River Basin. Abstracts of the Soil and Water Conservation Society 2007 Annual Conference, July 21-25, 2007, Tampa, FL. [www.swcs.org](http://www.swcs.org) <<http://www.swcs.org>>, pg.135.
- Romeis, J.J., C.R. Jackson, D.E. Radcliffe, M.L. Risse, and J. Bryant. 2007. Variability in hydrology, soil phosphorus, and water quality of streams draining poultry-pasture operations in the Etowah River basin, Georgia. Poster. 2007 Annual SERA-17 Meeting, June 11-13. Fayetteville, Arkansas.
- Carroll, G.D. and C.R. Jackson. 2007. Piedmont stream litter inputs and fluxes: correlations with riparian conditions and urbanization. POSTER. Georgia Water Resources Conference, March 27-29, T. Rasmussen, G.D. Carroll, and A. Georgakakos, Eds. University of Georgia, Athens, GA.
- Galang, M., C.R. Jackson, L.A. Morris, D. Markewitz, and E.A. Carter. 2007. Hydrologic behavior of gullies in the South Carolina Piedmont. POSTER. Georgia Water Resources Conference, March 27-29, T. Rasmussen, G.D. Carroll, and A. Georgakakos, Eds. University of Georgia, Athens, GA.
- Risse, L.M., Z. Lin, D.E. Radcliffe, J. Romeis, and C.R. Jackson, 2007. Framework for Trading Phosphorus Credits in the Lake Allatoona Watershed. In: Watershed Management to Meet Water Quality Standards and TMDLs, Proceedings of the 10-14 March 2007 Conference, Crowne Plaza Riverwalk, San Antonio, Texas. Published by ASABE, St. Joseph, MI. pp. 44-52.

Jackson, C.R. 2007. Considerations in designing headwater stream studies to inform forest management decisions. *Riparian Management in Headwater Catchments: Translating Science into Management*. University of British Columbia, February 19-21. Vancouver, BC.

Andrade, T. M. C., Dias, H. C. T., Jackson, R. 2007. Variable Source Areas: Identification and Uses on Watershed Management. *In: XVI Simpósio de Iniciação Científica*. 7-10/feb/2007. Viçosa-MG. UFV.

Romeis, J.J., C.R. Jackson, D.E. Radcliffe, M.L. Risse, and J. Bryant. 2007. Phosphorus Delivery from Streams Draining Poultry Operations in The Upper Etowah River Basin, Georgia. *USDA-CSREES National Water Conference*, Jan. 28 - Feb. 1, Savannah, GA.

Jackson, C.R. 2007. Forests and water in the southeastern U.S. **Invited Presentation**, 4th Meeting of National Academies NRC Committee on Hydrologic Effects of Forest Management, January 22-23, Atlanta, GA.

Jackson, C.R. 2006. Legacy Agricultural and Current Forestry Sediments: Review of Recent Studies. **Invited Presentation**. NCASI Southern Regional Meeting, Charleston, SC, June 27.

Jackson, C.R. 2006. Roots, Rot, Regolith, Response. *Critical Zone Exploration Network (CZEN) Workshop*. USGS Water Science Office, Atlanta, GA.

Jackson, C.R. 2005. John D. Hewlett (1922-2004) and the variable source area concept. **Invited Presentation**. Fall 2005 American Geophysical Union Conference, San Francisco, CA, December 5-9.

Jackson, CR. 2004. Effectiveness of Forestry Best Management Practices. **Invited Presentation**. Alabama Department of Environmental Management WaterQuest and Nonpoint Source Watershed Forum, February 10-11. Birmingham AL.

Jackson, C.R. 2002. Managing water quality in sustainable forestry. **Invited Presentation**. NCASI Southern Regional Meeting, June 19. Savannah, GA.

#### **Research Grants (I am lead PI unless otherwise noted)**

Comparative Hydrologic Budgets and Water Use Efficiencies of Developing Woody Bioenergy Plantations. \$498,633. Douglas P. Aubrey is lead PI. 6/1/2019-5/31/2023. USDA NIFA.

Monitoring of groundwater nitrogen gradients from plantations to streams and measurement of riparian denitrification rates. \$340,000. 6/1/2017-9/30/2020. USDA Forest Service.

CWT LTER Renewal. \$2,516,000. Examining long-term southern Appalachian ecosystem dynamics through interactions and indirect effects. Rhett Jackson (PI) and 31 co-investigators from nine institutions and the USFS. 3/1/2017-2/28/21. Funded by NSF.

Fluvial Processes Research Coordination Support for the NPS-Southeast Coast I & M Network. \$197,754. 9/15/2016-8/31/2019. National Park Service.

Wetlands and agriculture. \$264,508. Darold Batzer (Entomology) is lead PI. USEPA. 10/2015-9/2019.

Monitoring, Analysis, and Synthesis of a Watershed Scale Assessment of Hydrologic and Water Quality Responses to Intensive Cellulosic Biofuel Silviculture. \$380,889. USDA Forest Service SRS. 7/1/2014-12/31/2018.

Continued Monitoring and Analysis of Hydrologic and Water Quality Responses to Basin-scale Intensive Woody Biomass Production. \$262,500. US Dept. of Energy Bioenergy Technology Office. March 15, 2014 – March 30, 2016.

Total Water Use and Source Partitioning in Woody Bioenergy Crops Determined by Coupled Mass Flux and Stable Isotope Signatures. Doug Aubrey (Warnell and SREL) is lead PI. My portion is \$250,958. USDA-AFRI. September 1, 2013 – August 31, 2019.

DEB 1440485. Coweeta LTER Renewal: The interacting effects of hydroclimate variability and human landscape modification in the southern Appalachian Mountains. Ted Gragson (PI) and 32 co-investigators from twelve Universities and the USDA Forest Service. Funded by NSF. \$2,593,333. 2014-2016.

Sustainable Water Use and Bioenergy: Application of Isotopic Tracer Techniques to Improve Methods for Estimating Water Use in Intensively Managed Woody Crop Systems. \$180,776. USDA Forest Service. December 14, 2012 – June 30, 2016.

Potential and Actual Evapotranspiration Estimation in Southeastern Watersheds Vegetated with Pine Forests Intercropped with Switchgrass. \$74,352. USDA Forest Service. November 1, 2011 – December 31, 2015.

Analysis of Chemistry and Herbicide Data from the Dry Creek Paired Watershed Study. \$32,050. National Council for Air and Stream Improvement. Jan 1, 2012 – June 30, 2013.

Development of a Summary of Biological, Hydrological, and Water Quality Information Relevant to the Savannah River Basin Sustainable Rivers Project. \$17,900. United States Army Corps of Engineers. Sept. 20, 2011 – August 31, 2012.

Monitoring of Robust Redhorse (*Moxostoma robustum*) Spawning Behavior Responses to Flow and Water Quality Variation. \$47,000. USGS. Sept. 1, 2011 – August 31, 2013.

Baseline Instrumentation and Watershed Characterization for Assessment of Hydrologic and Water Quality Response To Intensive Cellulosic Biofuel Silviculture. C.R. Jackson. \$326,000. Funded by USDOE and USDA Forest Service. December 14, 2009 – December 31, 2014. Continuation of the same for \$267,361.

Characterization of Flow Paths, Residence Times, and Media Chemistry in Complex Landscapes. C. R. Jackson (PI). \$291,000. USDA Forest Service. September 1, 2009 – August 31, 2014.

Evaluation of Sediment Dynamics at Gravel Bars in the Upper Savannah River. US Department of Defense, US Army Corps of Engineers. C.R. Jackson (PI) \$52,000. 9/15/2009 – 1/7/2011.

Identifying Locations of High Connectivity between Floridan Aquifer Water and Surface Waters at Lineament Intersections with Tributaries of the Lower Flint River. C.R. Jackson. \$18,000. Funded by USGS. March 1, 2009 – February 28, 2010.

DEB 0823293. Coweeta LTER Renewal: Southern Appalachia on the Edge – Exurbanization & Climate Interaction in the Southeast. Ted Gragson (PI) and 29 co-investigators from eight Universities and the USDA Forest Service. Funded by NSF. \$8,026,123. 2008-2014.

Lower Flint River Basin Habitat Conservation Planning. J.T. Peterson, C.R. Jackson, USGS, and GADNR. Funded by USFWS. \$117,000. August 1, 2007 – July 31, 2009.

Doctoral Dissertation Research: Geomorphic and Anthropogenic Controls on Baseflow Discharge of Southern Blue Ridge Mountain Streams. NSF Doctoral enhancement grant for Katie Price under the direction of A.J. Parker and C R. Jackson. NSF. \$12,000. April 1, 2007 – March 31, 2009.

Hillslope Flow Routing, Contaminant Transport, and Water Uptake in Zero-Order Watersheds Subject to Intensive Forest Plantation Management at the Savannah River Site, South Carolina. C.R. Jackson (PI). \$109,000 for initial efforts. USDA Forest Service. August 1, 2004 - April 30, 2008.

A framework for trading phosphorus credits in the Lake Alatoona watershed. D. Radcliffe (PI). Co-PIs: L. Fowler, C.R. Jackson, A. Keeler, M. Risse. \$550,000. USDA CSREES program. 2003-2007.

Investigation of the Effectiveness of Georgia's Silvicultural BMPs. C.R. Jackson (PI). Co-PIs: Larry Morris, Dan Markewitz, Todd Rasmussen, Dale Green, Ben Jackson. \$475,000 total over four years. USEPA. 2000-2004. Additional funding provided by NCASI (\$25,000) and Weyerhaeuser (\$16,000) for 2004-2006.

Phosphorus Storage and Transport in Headwaters of the Etowah River Watershed. \$18,000. USGS Georgia WRI. 2005.

The development and evaluation of tools for evaluating flow requirements in streams in the Lower Flint River Basin, Georgia. J.T. Peterson (PI). C.R. Jackson (Co-PI). Approximately \$400,000. Georgia DNR. 2001-2005.

Integrated Headwater Stream Riparian Management Study. C.R. Jackson (PI). Co-PIs: D.P. Batzer, B. Chapman, and J.B. Wallace. \$87,000 over two years. Funded by National Council for Air and Stream Improvement. 1998-2000.

Assessment of the recovery of macroinvertebrate and amphibian populations following logging of headwater streams in the Coast Range of Washington State. C.R. Jackson (PI) and D.P. Batzer (Co-PI). \$33,000 total over one year. Funded by Washington State Department of Natural Resources and the National Council for Air and Stream Improvement. 2001-2002.

Piedmont River Sediment Budget. C.R. Jackson (PI). Co-PIs: David Leigh, Larry West. \$66,000 total (\$20,000 initial, with two renewals of \$40,000 and \$6,000) over three years. Funded by National Council for Air and Stream Improvement. 1998-2001.

DeKalb County Dredging Assessment. Ben Jackson (PI). Co-PIs: C.R. Jackson, Jay Shelton, Terry Sturm (Georgia Tech). \$130,500 total (initially \$55,000 to UGA and \$70,000 to Georgia Tech with \$5,500 renewal for UGA). DeKalb County. 1998-2002.

Assessment of Timber Harvest Effects on Coastal Plain Depressional Wetlands. Darold Batzer (PI) and Rhett Jackson (Co-PI). \$30,000 total (\$10,000/year with renewal each year) over three years. Funded by Turner Foundation with cooperation and in-kind services from International Paper (formerly Union Camp). 1998-2001.

Trout stream buffer study. Jim Kundell (PI). Co-PIs: J. Meyer, L. Kramer, C.R. Jackson, and T. Rasmussen. School of Forest Resources portion totals \$75,000 (\$25,000 per year) over three years. Funded by the Georgia Legislature. 2000-2002.

Analysis of Hydrologic and Sediment Data from the Dry Creek Paired Watershed Study on Southlands Forest. \$126,000. Funded by NCASI with in-kind support from International Paper. August 1, 2002 – April 30, 2008.

### **Associate Editorships**

Frontiers in Forests and Global Change: Forest Hydrology – Associate Editor, 2018 -

Forest Science – Applied Research, Associate Editor, 2013 - 2016

Southern Journal of Applied Forestry, Associate Editor, 2006 – 2013 (ended with the transition of the journal)  
Wetlands, Associate Editor, 2007 – 2009.

### **Journals For Which I Have Conducted Peer Review (38 different journals)**

Water Resources Research; Hydrology and Earth Systems Science; Journal of Hydrology; Hydrological Processes; Advances in Water Research; Journal of the American Water Resources Association; Echohydrology; Wetlands; Journal of the North American Benthological Society; Freshwater Science; Bioscience; Journal of Environmental Quality; Forest Science; Canadian Journal of Forest Research; Journal of Environmental Engineering; ASCE Journal of Hydraulic Engineering; Transactions of the American Society of Agricultural and Biological Engineers; Transactions of the American Society of Agricultural Engineers; Transactions of the American Fisheries Society; Environmental Management; Forest Ecology and Management; Journal of Soil and Water Conservation; River Research and Applications; Soil Science Society of America Journal; Journal of Forestry; Southern Journal of Applied Forestry; Northern Journal of Applied Forestry; Journal

of Wildlife Management; Hydrogeology Journal; Journal of Environmental Modeling and Software; Landscape and Urban Planning; Nonlinear Analysis: Hybrid Systems; Earth Interactions; Ecological Engineering; Water (online); Environmental Pollution; Forests (online); Journal of Contaminant Hydrology.

### **Other Reviews**

NSF Panelist

Reviewer for various grant programs including NSF, USGS, NSERC, Sea Grant, CAL-FED, and others.

External reviewer for Master's in Natural Resources Program at NC State University

External P&T Dossier Reviewer for Several Universities Including: Oregon State University, University of British Columbia, University of Washington, Virginia Tech, Colorado, NC State, West Virginia, Auburn, Idaho, Missouri, Louisiana State University, Mississippi State University

Reviewer, NRC Report: Hydrologic Effects of a Changing Forest Landscape.

External Reviewer, West Virginia Flood Analysis Technical Team (FATT)

### **Public Service**

#### **Membership in Professional Societies**

American Geophysical Union

American Water Resources Association

Registered Professional Engineer in State of Washington since 1994

#### **Professional Conference Sessions Organized**

Co-Convener: Poster Session B11J - Ecological Insights into the Sustainable Development of Bioenergy from Forests, Fall 2019 American Geophysical Union Annual Meeting, December 9-13, San Francisco, CA.

Conference Organizer: Coweeta (CWT) LTER 40 Year Retrospective Symposium, May 28th, Dillard House, Dillard, GA.

Planning Committee, January 2015 SESAF meeting, Saint Simons Island, GA

Steering Committee Member, ASABE ET Conference, 2014

Steering Committee Member, NCASI Forestry BMP Symposium, 2014

Session Organizer, Moderator, 2012 LTER All Scientists Meeting, Estes Park Colorado: "Water Quality Variability across Climatically, Geologically, and Morphologically Similar Watersheds: Implications for stream ecosystems and ecological thresholds for anthropogenic change."

Co-Convener, Session H12, "Structuring and Informing Physically-based Watershed Models with Distributed Monitoring of Fluxes and State Variables", Fall 2011 American Geophysical Union Meeting, Dec. 5-9, San Francisco, CA.

Session Organizer, Moderator, 2007 Georgia Water Resources Conference Environmental Flows Panel

Group Leader, IAHS SLICE workshop, September 25-28, 2005, HJ Andrews Experimental Forest, OR.

Steering committee member, Forestry Best Management Practices Research Symposium, April 15-17, 2002, Atlanta GA.

#### **University Service**

Provost's Committee on Enhancing the Academic Environment, 2019 - 2020

Institute of Resilient Infrastructure Studies (IRIS), 2018 -

Deputy Director, Undergraduate Water Resources Certificate Program. 2002 – present.

River Basin Center Faculty, 2000-present

University P&T Professional and Applied Studies Review Committee, 2017, 2018, 2019 (group chair).

External Awards Committee, 2017.

President's Faculty Advisory Committee, 2016-2017

Search Committee Member, Crop and Soil Science, Assistant Professor of Pedology, 2016-2017.

Reviewer, Office of Vice President for Research Grant Program, 2011-2013.

Graduate Council, (Admission and Retention Committee) 2007- 2011 (Chair, ARC, 2009-2011)

University of Georgia Faculty Admissions Committee, 2005-2011. Secretary, 2005-2008.



Seach Committee Member, Dept. of Geology, Assistant Professor of Hydrogeology 2011  
Admissions Office Review Team, 2006-2007. Chairperson.  
Environmental Engineering Curriculum Committee, 2007.  
Engineering Distinguished Lecturer Committee, 2007 – 2008.  
University of Georgia Representative to Oconee River Greenway Commission, 1999-2006.  
Environmental Engineering Research Focus Committee, 2006.  
Member, Faculty of Engineering, 2002 – 2012.  
Member, Academy of the Environment, 2006 – 2009

### **Warnell School of Forestry and Natural Resources**

Graduate Affairs Committee, 2015-present  
Chair, Assistant Professor of Forested and Disturbed Soils Search Committee, 2019  
Data Literacy Lecturer Search Committee 2018-2019  
Recruitment Committee, 2016-2018  
Natural Resources Recreation and Tourism Search Committee, 2015  
Ad-hoc Committee to Edit Warnell P&T Guidelines, 2014  
Warnell Strategic Planning Committee, 2014-2015  
Energy Ecologist Search Committee, 2014-1015  
Graduate Affairs Committee, 2015-present  
Honors and Awards Committee, 2014-present  
Sustainability Search Committee, 2013  
Ad-Hoc Committee to Review Associate Dean for Research Position, 2013  
NRRT Search Committee, 2013  
Honors and Awards Committee, 2013-2016  
Alumni Staff Awards Committee, 2011-2013  
Third year review committee, 2011 (Chair)  
Natural Resources Recreation and Tourism Search Committee, 2010  
Ad-hoc Advisory Committee for Associate Dean for Academics Search, 2009 (Chair)  
Post-tenure Review Committee, 2009 (Chair), 2004  
Undergraduate Affairs Committee, 1997-2012. Chairperson 2007-2012  
Teaching Effectiveness Committee, 2004-2015, Chairperson 2012-2014  
Dean Search Committee, 2006-2007  
Fisheries Scientist Search Committee, 2006-2007  
Water Economist Search Committee, 2005  
Dean Search Committee, 2003  
Aquatic Toxicologist Search Committee, 2001  
Administrative Committee, 1999-2000, 2010-present  
Forest Finance Search Committee, 2010, 1998

### **Service to the Profession and Public**

Assisted with GFC/NCASI Cypress Initiative 2014-2015

Hydrologic monitoring advisor to Guangdong Province Forestry Administration. Two trips to Guangdong Province, China - September 2005 and September 2006. Presented lectures to Guangdong Forestry Research Institute and South China Agricultural University. Visited water quality monitoring installations and provided advice and reference materials for the research program. Hosted Director of Hydrologic Studies of the Guangdong Forest Research Institute as a visiting scholar at University of Georgia for one year.

Southern Forest Research Partnership (SFRP) Water Team member, 2004-end of the partnership

Senate Bill 460 Rules Committee - evaluated guidelines for issuance of variances to State of Georgia stream buffer laws. 2004.

Athens-Clarke County citizens stormwater advisory committee, 2003-2004.

Georgia Forestry Association Environmental Committee, 1999-present.

Georgia Forestry Association, Georgia Forestry Commission, and American Forests and Paper Association ad-hoc committees to revise Georgia's forestry BMPs for floodplains and ephemeral areas, 2001-present.

Organized and conducted field tours on BMP issues for industry representatives, GFC water quality foresters, NCASI Sediment group.

Provided floodplain and headwater BMP training workshops for GFC water quality foresters and industry representatives.

Co-instructor Harvest Planning continuing education short course, 2001, 2002, 2003, 2004, 2005, 2006.

Washington State Independent Science Panel - Adjunct member for technical review of State of Washington Stormwater Management Manual. 2003.

Lake Alatoona Preservation Authority Scientific Advisory Group. 2000-2003.

Lecturer and ad-hoc program committee, Forestry Agent Special Area Training (FASAT). 1998,1999, 2002.

Georgia Conservancy Sediment TMDL Technical Advisory Group. 2000-2002.

State of Georgia's Stream Buffer Variance Criteria Technical Advisory Committee. 2000. Chairperson.

Co-Chairperson, McNutts Creek Watershed Study Group. 1999-2001.

Various water quality presentations for the general public including League of Women Voters (Franklin, NC), Rotary Club (Ila, GA), Kiwanis Club, ASCE local chapter, Community Tree Council, Botanical Garden River Rambles, Greenfest Water Forum, LEAD Athens, Barrow Elementary School, Dustbowl Drought Awareness Benefit Concert, Georgia Public Television (Georgia Outdoors), Georgia Public Broadcasting, Atlanta Journal Constitution Editorials, Newsmakers with Tim Bryant WGAU radio show, Timber Talk Radio Show (Arkansas), and others.

Various water quality presentations and field trips for agencies, NGOs, and industry meetings including a Forest Hydrology and Water Quality Training Class for GAEPD, a forestry BMP field trip for a National Research Council Committee, a Forestry BMP workshop for MeadWestvaco, a Washington State DNR forested wetlands workshop, and others.