# Jennifer L. Bouldin

# CURRICULUM VITAE

Jennifer L. Bouldin, PhD Dean, College of Sciences & Mathematics Professor of Environmental Biology Director, Ecotoxicology Research Facility Arkansas State University P.O. Box 1030 State University, AR 72467

Office: 870-972-3079

email: jbouldin@astate.edu

# ACADEMIC BACKGROUND

- 1977 **B.S. Medical Technology**. University of Arkansas School for Medical Sciences, Little Rock, AR.
  - 1985 Specialist in Blood Banking. College of American Pathologists.

2004 Ph.D. Environmental Sciences. Arkansas State University.

Subdiscipline-Ecotoxicology Advisor: Jerry L. Farris

Dissertation: Interaction of Agricultural Runoff with Vegetated Aquatic Systems to Reduce Potential Toxicity

# HONORS AND AWARDS

- 2013 Paul Harris Fellowship, Rotary International
- 2008 James Bailey Memorial Educator of the Year, AR Water Environment Association
- 2005 Elsevier / SETAC Best Student Poster Presentation, Baltimore, MD
- 2005 Environmental Sciences Doctoral Research Award
- 2004 Judd Hill Award, MidSouth SETAC platform presentation
- 2003 MidSouth SETAC, Second place platform presentation

2001-2002 Arkansas Environmental Federation's Randall Mathis Scholarship for Environmental Studies

# **PROFESSIONAL EXPERIENCE**

- 2023-present Dean, College of Sciences & Mathematics
- 2022-2023 Interim Dean, College of Sciences & Mathematics
- 2021-2022 Associate Dean, College of Sciences & Mathematics
- 2021-2023 Interim Director, Environmental Sciences Program
- 2016-present Professor of Environmental Biology, Dept of Biological Sciences
- 2006-present Director, A-State Ecotoxicology Research Facility
- 2012-2016 Associate Professor of Environmental Biology, Dept of Biological Sciences; Director, A-State Ecotoxicology Research Facility
- 2009-2012 Assistant Professor of Environmental Biology, Dept of Biological Sciences Director, A-State Ecotoxicology Research Facility
- 2006-2009 Assistant Research Professor

Director, A-State Ecotoxicology Research Facility

- 2002-2006 Quality Assurance/Quality Control Manager, A-State Ecotoxicology Research Facility
- 1991-2000 Blood Bank Supervisor, Arkansas Methodist Medical Center Paragould, AR

# **PEER-REVIEWED PUBLICATIONS**

- Lydy, V.R., Regn, O.Z., Bouldin, J.L. 2023. Toxicant Responses and Culturing Characteristics of Long-Term Laboratory-Reared and Field Populations of *Ceriodaphnia dubia*. In press: *Environmental Toxicology & Chemistry*.
- Abugazleh, M.K., Ali, H., Chester, J.M., Bouldin, J.L. 2023. Aquatic toxicity of hydroquinone and catechol following metal oxide treatment to *Ceriodaphnia dubia* and *Pimephales promelas*. *Ecotoxicology* 32, 656–665. https://doi.org/10.1007/s10646-023-02672-5
- Atwell, A.K., Bouldin, J.L. 2022. Effects of agricultural intensity on nutrient and sediment contributions within the Cache River Watershed, Arkansas. *Water* 2022, 14, 2528. https://doi.org/10.3390/w14162528
- Martin, E.R., Godwin, I.A., Cooper, R.I., Aryal, N., Reba, M.L., Bouldin, J.L. 2021. Assessing the impact of vegetative cover within Northeast Arkansas agricultural ditches on sediment and nutrient loads. *Agriculture, Ecosystems and Environment.* 320: 107613, https://doi.org/10.1016/j.agee.2021.107613
- Wright, R.E., Griffin, T.W., Guha, G., Bouldin, J.L. 2018. Economic investigation of crop selection on a Northeast Arkansas farm. *Journal of American Society of Farm Managers and Rural Property Appraisers* (AFSMRA), 81:177-191 http://asfmra.org/resources/asfmra-journal.
- Aryal, N., Reba, M.L., Straitt, N., Teague, T.G., Bouldin, J.L. and Dabney, S. 2018. Impact of Cover Crop and Season on Nutrients and Sediment in Runoff Water Measured at the Edge of Fields in the Mississippi Delta of Arkansas. *Journal of Soil & Water Conservation*. www.swcs.orgdoi:10.2489/jswc.73(1) 24- 34.
- McCauley, J.R., **Bouldin, J.L**. 2016. Cadmium Accumulation in Periphyton from an Abandoned Mining District in the Buffalo National River, Arkansas. *Bull Environ Contam Toxicol*. 96:757-761. DOI 10.1007/s00128-016-1813-8.
- Frasher, S.K., Woodruff, T.M., Bouldin, J.L. 2016. Comparison of measured to modeled estimations of nonpoint source contaminants using conservation practices in an agriculturally-dominated watershed in northeast Arkansas, USA. *Bull Environ Contam Toxicol.* 96:762-766. DOI 10.1007/s00128-016-1823-6.
- Rosado-Berrios, C.A., **Bouldin, J.L**. 2016. Turbidity and Total Suspended Solids on the Lower Cache River Watershed, AR. *Bull Environ Contam Toxicol*. 96:738-743. DOI 10.1007/s00128-016-1793-8.
- DeMali, H.M., Trauth, S.E., Bouldin, J.L. 2016. Heavy Metals, Parasites, and Environmental Conditions Affecting Breeding Populations of Spotted Salamanders (*Ambystoma maculatum*). Bull Environ Contam Toxicol. 96:732-737. DOI 10.1007/s00128-016-1752-4
- **Bouldin, J.L**., Klasky, J.W.P., Green, V.S. 2016. Earthworm preference bioassays to evaluate land management practices. *Bull Environ Contam Toxicol.* 96:767-772. DOI 10.1007/s00128-016-1744-4
- Kilmer, M.K., Bouldin, J.L. 2016. Detection of Lead (Pb) in Three Environmental Matrices of the Cache River Watershed, Arkansas. Bull Environ Contam Toxicol. 96:744-749. DOI 10.1007/s00128-016-1743-5

- Justus, B.J., Burge, D.R.L., Cobb, J.M., Marsico, T.D., Bouldin, J.L. 2016. Macroinvertebrate and diatom metrics as indicators of water-quality conditions in connected depression wetlands in the Mississippi Alluvial Plain. *Freshwater Science* 35(3):1049–1061. DOI: 10.1086/687605
- Sammarco, P.W., Kolian, S.R., Warby, R.A.F., Bouldin, J.L., Subra, W.A., Porter, S.A. 2015. Concentrations in human blood of petroleum hydrocarbons associated with the BP/Deepwater Horizon oil spill, Gulf of Mexico. *Archives of Toxicology* 90(4) 829-837. DOI 10.1007/s00204-015-1526-5
- Kennon, M.E., Bouldin, J.L. 2015. Aquatic Effects of a Localized Oil Spill on Lake Conway, AR and Its Tributaries. *Journal of Arkansas Academy of Sciences*. 69:60-68.
- Kilmer, M.K., Poe, N., Chappell, S., Bouldin, J.L. 2015. Natural Nutrient Sources in the Cache River Watershed, Arkansas. *Journal of Arkansas Academy of Sciences*. 69:68-74.
- Brueggen-Boman, T.R., Choi, S., Bouldin, J.L. 2015. Response of Water Quality Indicators to the Implementation of Best Management Practices in the Upper Strawberry River Watershed, Arkansas. Southeastern Naturalist 14(4):697-713.
- Park, S.H., Aydin, M., Khatiwara, A., Dolan, M.C., Gilmore, D.F., Bouldin, J.L., Ahn, S., Ricke, S.C. 2014. Current and Emerging Technologies for Rapid Detection and Characterization of Salmonella in Poultry and Poultry Products. *Food Microbiology* 38:250-262. http://dx.doi.org/10.1016/j.fm.2013.10.002
- Sammarco, P.W., Kaltofen, M., Kolian, S.R., Warby, R.A.F., Bouldin, J.L., Subra, W.A., Porter, S.A. 2013. A response to Wilson et al. A critique of the manuscript: Distribution and concentrations of petroleum hydrocarbons associated with the BP/Deepwater Horizon oil spill, Gulf of Mexico. *Marine Pollution Bulletin*. 79:391-392.
- Sammarco, P.W., Kolian, S.R., Warby, R.A.F., Bouldin, J.L., Subra, W.A., Porter, S.A. 2013. Distribution and concentrations of petroleum hydrocarbons associated with the BP/Deepwater Horizon Oil Spill, Gulf of Mexico. *Marine Pollution Bulletin*. 73: 129-143. http://dx.doi.org/10.1016/j.marpolbul.2013.05.029.
- Kennon, J.T., Vaughan, G.L., Grippo, A.A., **Bouldin, J.L**. 2013. Testing for toxins using *Daphnia* spp. and table salt. *Science Scope* 36 (8):28-36.
- Reba, M.L., Daniels, M., Chen, Y., Sharpley, A., Bouldin, J.L., Teague, T.G., Daniel, P., Henry, C.G. 2013. A Statewide Network for Monitoring Agricultural Water Quality and Water Quantity in Arkansas. *Journal of Soil & Water Conservation* (68)2: 45A-49A. <u>www.swcs.org</u>, doi:10.2489/jswc
- Leigh, K.L., Bouldin, J.L., Buchanan, R. A. 2012. Measurement of accumulation of semiconductor nanocrystal quantum dots<sup>TM</sup> by *Pimephales promelas*. *Dose Response Journal*. Dose Response. 10(3): 331–343. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3430395/
- Brueggen, T.R., **Bouldin, J.L**. 2012. Establishing baseline data in the subwatersheds of the Strawberry River, AR, prior to implementation of agricultural best management practices. *Journal of Arkansas Academy of Science* 66: 41-49.
- Gilmer, A.M., Rosado-Berrios, C.A., **Bouldin, J.L**. 2012. Establishing baseline nutrient and sediment input in the Lower Cache River Watershed, AR. *Journal of Arkansas Academy of Science* 66: 62-66.

- Leigh, K.L., Bouldin, J.L., Buchanan, R.A. 2011. Effects of Exposure to Semiconductor Nanoparticles on Aquatic Organisms. *Journal of Toxicology* (2012), 9 pp. doi:10.1155/2012/397657, http://www.hindawi.com/journals/jt/2012/397657/
- Angima, S.A., Bouldin, J.L., Green, V.S., Woodruff, T.C. 2011. Effect of soil amendments on soil enzyme activities and active carbon on a managed Douglas-Fir forest ecosystem. *Journal of the National Association of County Agricultural Agents* 4(1): 1-12. ISSN 2158-9429.
- Bouldin, J.L., Warby, R.A.F., Yu, P., Teague, T.G. 2011. Sustainable Cotton Production: The Effects of Best Management Practices on Water, Sediment and Soil Quality. Pp 100-105 in: Derrick M. Oosterhuis (ed), Summaries of Arkansas Cotton Research 2010, Arkansas Agricultural Experiment Station Research Series 589. http://arkansasagnews.uark.edu/1356.htm
- Kennedy, A.J., Hull, M.S., Bednar, A.J., Goss, J.D., Gunter, J.C., Bouldin, J.L., Vikesland, V.J., Steevens, J.A. 2010. Fractionating nanosilver: importance for determining toxicity to aquatic test organisms. *Environmental Science and Technology* 44: 9571-9577.
- Brueggen, T.R., Dowling, C.B., **Bouldin, J.L.** 2010. Tributary contribution to the Spring River, AR as determined by water quality analyses. *Journal of Arkansas Academy of Science*. 64: 70-76.
- Bouldin, J.L., Sappington, D.R., Brueggen, T.R. 2010. Best Management Practices for Improved Water Quality in Cotton Production. Pp 188-198 in: Derrick M. Oosterhuis (ed), Summaries of Arkansas Cotton Research 2009, Arkansas Agricultural Experiment Station Research Series 582. http://arkansasagnews.uark.edu/582-32.pdf
- Teague, T.G., Shumway, C., Green, S., Bouldin, J.L., Fowler, L. 2010. Crop Protection and Tillage – Focusing Management to Build Sustainable Cotton Systems Pp 142-150 in: Derrick M. Oosterhuis (ed), Summaries of Arkansas Cotton Research 2009, Arkansas Agricultural Experiment Station Research Series 582. http://arkansasagnews.uark.edu/582-24.pdf
- Bouldin, J.L., Ingle, T.M., SenGupta, A., Alexander, R., Buchanan, R.A. 2009. Aqueous Toxicity, Uptake and Transfer of QDots in Freshwater Algae and *Ceriodaphnia dubia*. Proceedings for the International Conference on the Environmental Implications and Applications of Nanotechnology. http://scholarworks.umass.edu/tei/2/ p. 7-12.
- SenGupta, A., Bouldin, J.L., Ingle, T.M., Buchanan, R.A. 2009. Uptake and Distribution of Quantum Dots in *Artemia franciscana* and *Pimephales promelas* and a Comparative Study of Dietary vs. Aqueous Uptake in *Pimephales Promelas*. Proceedings for the International Conference on the Environmental Implications and Applications of Nanotechnology. http://scholarworks.umass.edu/tei/2/ p. 85-90.
- Teague, T.G., Green, S., Bouldin, J.L., Shumway, C., Fowler, L. 2009. Tillage and pest control – Where should we focus management in building a sustainable cotton system? Pp 137-147 in: Derrick M. Oosterhuis (ed), Summaries of Arkansas Cotton Research 2008, Arkansas Agricultural Experiment Station Research Series 573. http://arkansasagnews.uark.edu/573-23.pdf
- **Bouldin, J.L**., Ingle, T.M., SenGupta, A., Alexander, R., Hannigan, R.E., Buchanan, R.A. 2008. Aquatic toxicity and food chain transfer of Quantum Dots in

freshwater algae and *Ceriodaphnia dubia*. *Environ Toxicol Chem*. 27(9):1958-1963.

- Krauth, D.M., **Bouldin, J.L.**, Green, V.S., Wren, P.S, Baker, W.H. 2008. Evaluation of a polyacrylamide soil additive to reduce agricultural-associated contamination. *Bull Environ Contam Toxicol.* 81(2):116-123.
- Ingle, T.M., Alexander, R., Bouldin, J.L., Buchanan, R.A. 2008. Absorption of semiconductor nanocrystals by the aquatic invertebrate *Ceriodaphnia dubia*. Bull Environ Contam Toxicol. 81(3):249-252.
- Stephens, W.W., Moore, M.T., Farris, J.L., Bouldin, J.L., Cooper, C.M. 2008. Considerations for assessments of wadable drainage systems in the agriculturally dominated deltas of Arkansas and Mississippi. Arch Environ Contam Toxicol 55: 432-441.
- Ingle, T., Alexander, R., Hannigan, R., Buchanan, R., Bouldin, J. 2007. Detection, Measurement and Toxicology of Semiconductor Nanocrystals in *Ceriodapnia dubia*. Proceedings of NSTI Nanotechnology, Santa Clara, CA. 2007 2:612-616.
- **Bouldin, J.L.**, Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2007. Assessment of diazinon toxicity in sediment and water of constructed wetlands using deployed *Corbicula fluminea* and laboratory testing. *Arch Environ Contam Toxicol* 53(2): 174-182.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2006. Hydroponic uptake of atrazine and lambda-cyhalothrin in *Juncus effusus* and *Ludwigia peploides*. *Chemosphere* 65(6): 1049-1057.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr, Stephens, W.W., Cooper, C.M. 2005. Evaluated fate and effects of atrazine and lambda-cyhalothrin in vegetated and unvegetated microcosms. *Environmental Toxicology* 20(5): 287-298.
- **Bouldin, J.L**., Bickford, N.A., Stroud, H.B., Guha, G.S. 2004. Tailwater recovery systems for irrigation: benefit/cost analysis and water resource conservation technique in Northeast Arkansas. *Arkansas Academy of Science* 58: 23-31.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Cooper, C.M. 2004. Vegetative and structural characteristics of agricultural drainages in the Mississippi Delta landscape. *Environmental Pollution* 132: 403-411.
- Bouldin, J.L., Milam, C.D., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2004. Evaluating toxicity of Asana XL (esfenvalerate) amendments in agricultural ditch mesocosms. *Chemosphere* 56 (7): 677-683.
- Milam, C.D., Bouldin, J.L., Schulz, R.L., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2004. Evaluating acute toxicity of methyl parathion application in constructed wetland mesocosms. *Environmental Toxicology* 19: 471-479.
- Christian, A.D., Bouldin, J., Bickford, N., Kanieski, L., McBride, A., McCord, S.B., Sako, A., Farris, J.L. 2003. Winter and spring water quality of the Big Creek Watershed, Craighead County, Arkansas: Nutrients, habitat, and macroinvertebrates. *Journal of the Arkansas Academy of Science* 57: 27-36.

Schulz, R., Moore, M.T., Bennett, E.R., Milam, C.D., Bouldin, J.L., Farris, J.L., Smith, S. Jr., Cooper, C.M. 2003. Acute toxicity of methyl-parathion in wetland mesocosms: Assessing the influence of aquatic plants. *Arch Environ Contam Toxicol* 45 (3): 331-336.

# **BOOK CHAPTERS / EDITOR**

- **Bouldin, J.L**. editor Bowman's *Ecology* 5<sup>th</sup> edition. 2020. Oxford University Press, New York NY.
- Chen, Y., Daniels, M., Reba, M., Bouldin, J.L., Teague, T.G., Henry, C., Daniel, P., Shrestha, S., Farrelly, J., Frame, D., Radatz, A., Busch, D. 2016. Agriculture in the Mississippi River Basin: effects on water quality and aquatic resources, and basin-wide restoration. American Fisheries Society Symposium 84:293-309. American Fisheries Society, Bethesda, MD, USA.
- **Bouldin, J.L.** & Wright, R.E. 2011. Chapter 6: Water Sustainability in Biomass Production, <u>Plant Biomass Conversion</u>, Wiley-Blackwell, edited by Elizabeth Hood, Peter Nelson, and Randy Powell. ISBN 978-8136-1694-4.

## DATA RELEASE:

Pieri, A.M., Harris, J.L., Bouldin, J.L., Schaeffer, T.W., Steevens, J.A., Hodges, S,W., and Rodman, A.R., 2022, A quantitative survey of freshwater mussels of the Buffalo National River, Arkansas from 2019 to 2021: U.S. Geological Survey data release, <u>https://doi.org/10.5066/P90QXS3B</u>.

#### **TECHNICAL CONTRIBUTIONS:**

Cooper, R.I., **Bouldin, J.L.** 2022. ASTM E1733-22 Standard Guide for Use of Lighting in Laboratory Testing, American Society for Testing and Materials International, West Conshohocken, PA, USA, September 12, 2022.

## **ARTICLES IN NON PEER REVIEWED PUBLICATIONS**

- Sappington, D.R., Brueggen, T.R., Bouldin, J.L., Green, V.S., Shumway, C., and Teague, T.G. 2010. Improving Water Quality with Better Management Practices in Midsouth Cotton. Proceedings of the Beltwide Cotton Conference. Pp 622-627. http://www.cotton.org/beltwide/proceedings/2005-2010/index.htm.
- **Bouldin, J.L.** 2010. Conference will include information for all. *The Jonesboro Sun*. 107 17: A9 17 January 2010.
- Ogendi, G.M., **Bouldin, J.L**. 2009. Bioenergy crops may be beneficial for soil and water. *The Jonesboro Sun*. 106 172: A8-A9 21 June 2009.
- **Bouldin, J.L**. 2009. Arkansas State University monitors protection of Arkansas' rivers. *The Jonesboro Sun.* 106 60: A8. 1 March 2009.
- **Bouldin, J.L**., Wilkie, J. 2009. Get land priorities in order. Using aerial photography and GIS can help cities and towns focus on areas with the most potential for recreation and conservation purposes. City & Town: Official publication of the Arkansas Municipal League. January 2009 65(1): 38-39.
- **Bouldin, J.L**. 2008. A-State faculty studies bioenergy alternatives. *The Jonesboro Sun* 105 342: A8-A9. 7 December 2008.
- **Bouldin, J.L**., Wilkie, J. 2008. ASU helps in land planning. *The Jonesboro Sun* 105 307: A8-A9. 2 November 2008.

- Bouldin, J.L. 2008. Elimination of pesticides from wetlands studied. *The Jonesboro* Sun 105 300: A8-A9. 26 October 2008.
- **Bouldin, J.L**. 2008. ASU researchers study nanoparticles, effects. *The Jonesboro Sun* 105 279: A9. 5 October 2008.
- **Bouldin, J.L**. 2007. A-State faculty traces historic development of agriculture to ancient Iraq. *The Jonesboro Sun* 104 238: A8-A9. 26 August 2007.
- Gopalan, M. B., Bouldin, J.L., Farris, J.L. 2006. Use of Biomonitoring at Farm-scale to Formulate and Assess the Impacts of Improved Cotton Farming Practices upon Reduction of Ecological Risk. Proceedings of an International Perspective on Environmental and Water Resources, New Delhi, India. 19 December 2006.
- **Bouldin, J.L**. 2006. Mississippi Delta was once covered with forests. *The Jonesboro Sun* 103 351: A9. 17 December 2006.
- **Bouldin, J.L**. 2006. ASU researchers describe role of ditches. *The Jonesboro Sun* 103 246: A6. 3 September 2006.

#### **IN REVIEW / IN PREPARATION MANUSCRIPTS**

- Cooper, R.I., **Bouldin, J.L**. Effects of LED lights at various spectrums as an alternative to incandescent for *Ceriodaphnia dubia* and *Daphnia magna* culturing and testing.
- Cooper, R.I., Warby, R.A.F., Aylsworth, E.T., Bednarz, J.C., Dolan, M.C., **Bouldin, J.L**. Development of a non-lethal method for sampling avian (migratory passerine) adipose tissue. In review: *Journal of Field Ornithology*.
- Rosado-Berrios, C.A., Bouldin, J.L. Single and mixture toxicity of acephate (Orthene 97) and thiamethoxam (Centric 40WG) on *Ceriodaphnia dubia* and *Pimephales promelas*. In review: *Bulletin of Environmental Contamination and Toxicology*.

## JOURNAL REVIEWER:

Aquatic Toxicology Archives of Environmental Contamination and Toxicology Bulletin of Environmental Contamination and Toxicology Chemosphere Environmental Engineering Science Environmental Pollution Environmental Science & Technology Environmental Toxicology & Chemistry Herpetological Conservation and Biology Journal of Hazardous Materials Nanotoxicology Pesticide Biochemistry & Physiology Regulatory Toxicology and Pharmacology Science of the Total Environment Sensors

2022 – present <u>Senior Editor:</u> *Bulletin of Environmental Contamination and Toxicology* <u>INTERNAL REVIEWER</u>: USDA, Agricultural Research Station, National Sedimentation Laboratory, Oxford, MS.

# **TECHNICAL REPORTS**

- **Bouldin, J.L**. 2019. Final report: Strawberry River Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2016-2019.
- **Bouldin, J.L**. 2019. Final report: Bayou DeView Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2016-2019.
- **Bouldin, J.L**. 2019. Final report: Biological Assessment of Agricultural Ditches. USDA Natural Resource Conservation Service. 2015-2019.
- **Bouldin, J.L**., Fluker, B.L., Harris, J.L. 2019. Final report: Mussel Survey of Cadron Creek, Point Remove Creek and Big Piney Creek and Major Tributaries with Population Assessments for Two Species of Concern. US Fish and Wildlife Services. 483 pages. 2015-2019.
- **Bouldin, J.L**. 2018. Final report: Little River Ditches Phase II Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2015-2018.
- **Bouldin, J.L**. 2017. Annual report: Biological Assessment of Agricultural Ditches. USDA Natural Resource Conservation Service. 2015-2016.
- **Bouldin, J.L**. 2017. Annual report: Little River Ditches Phase II Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2015-2016.
- **Bouldin, J.L**. 2016. Final report: Middle Cache River Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2013-2016.
- **Bouldin, J.L**. 2016. Annual report: Little River Ditches Phase II Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2014-2015.
- **Bouldin, J.L**., Whalen, J.K., Harris, J.L. 2015. Mussel Communities in the Ozark National Forest. Final report to USDA Forestry Commission.
- **Bouldin, J.L**. 2015. Annual report: Middle Cache River Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2014-2015.
- **Bouldin, J.L**. 2015. USEPA Region VI, Cache River Connected Depressions Site Reporting Grant Agreement Number: CD-00F353-01-0. 2010-2014.
- **Bouldin, J.L**. 2015. Final report: Larkin Creek Lateral 1-A Phase II Monitoring. Arkansas Natural Resource Commission 319 Grant. 2012-2014.
- **Bouldin, J.L**. 2015. Final report: Cache River Watershed Monitoring. Arkansas Natural Resource Commission 319 Grant. 2012-2014.
- **Bouldin, J.L**. 2014. Final report: Water Quality Monitoring for Little River Ditches Watershed. Arkansas Natural Resource Commission 319 Grant. 2011-2013.
- **Bouldin, J.L**. 2014. Annual report: Middle Cache River Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2013-2014.
- **Bouldin, J.L**. 2013. Annual report: Little River Ditches Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2012-2013.
- **Bouldin, J.L**. 2013. Annual report: Larkin Creek Subwatershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2012-2013.
- **Bouldin, J.L**. 2013. Annual report: Cache River Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2012-2013.
- **Bouldin, J.L.** 2013. Sustainable cotton production Water, sediment, and soil quality of best management practices. Annual report for Cotton, Inc.
- **Bouldin, J.L**. 2012. Final report: Water quality sampling and analysis for nutrients and TSS on the upper Strawberry River subwatersheds. Arkansas Natural Resource Commission 319 Grant. 2008-2012.

- **Bouldin, J.L**., Brueggen, T.R. 2012. Continued Investigation of Land Use and Best Management Practices on the Strawberry River Watershed. Arkansas Water Resources Center 104B Program Project – March 2011 - February 2012.
- **Bouldin, J.L**. 2012. Annual report: Little River Ditches Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2011-2012.
- **Bouldin, J.L**., Choate, J.H. 2012. Sustainable cotton production water and soil quality of best management practices. Annual report for Judd Hill Foundation.
- **Bouldin, J.L.** 2012. Sustainable cotton production Water, sediment, and soil quality of best management practices. Annual report for Cotton, Inc.
- **Bouldin, J.L**. 2012. Annual report: Cache River Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2011-2012.
- Bouldin, J.L. 2012. Annual report: Water Quality Monitoring on Larkin Creek Lateral 1-A, St. Francis County, AR - Phase II. Arkansas Natural Resource Commission 319 Grant. 2011-2012.
- Bouldin, J.L., Brueggen, T.R. 2011. Investigation of Land Use and Best Management Practices on the Strawberry River Watershed. Arkansas Water Resources Center 104B Program Project – March 2010 - February 2011.
- **Bouldin, J.L**., Warby, R.A.F., Yu, P. 2011. Sustainable cotton production Water, sediment, and soil quality of best management practices. Annual report for Cotton, Inc.
- **Bouldin, J.L**. 2011. Annual report: Little River Ditches Watershed monitoring. Arkansas Natural Resource Commission 319 Grant. 2010-2011.
- Bouldin, J.L. 2011. Annual report: Water Quality Monitoring on Larkin Creek Lateral 1-A, St. Francis County, AR - Phase II. Arkansas Natural Resource Commission 319 Grant. 2010-2011.
- **Bouldin, J.L**., Warby, R.A.F. 2010. Larkin Creek Water Quality Monitoring Project Final Report. Arkansas Natural Resource Commission 319 grant.
- **Bouldin, J.L**., Sappington, D.R., Brueggen, T.R. 2010. Water and Sediment Quality Improvements as a Result of Best Management Practices for Sustainable Cotton Production. Annual Judd Hill Foundation (2009) report.
- **Bouldin, J.L**., Sappington, D.R. 2010. Groundwater Quality and Use at Judd Hill Plantation. Annual Judd Hill Foundation (2009) report.
- **Bouldin, J.L**. 2010. Annual report for Cotton, Inc. Sustainable cotton production Water, sediment, and soil quality of best management practices.
- **Bouldin, J.L.** 2010. Annual report (2009) for Arkansas Natural Resources Commission. Water quality sampling and analysis for nutrients and TSS on the upper Strawberry River subwatersheds.
- **Bouldin, J.L** 2009. Annual report (2008) for Arkansas Natural Resources Commission. Water quality sampling and analysis for nutrients and TSS on the upper Strawberry River subwatersheds.
- **Bouldin, J.L**., Conrad, J.M., Bednarz, J.J., Klasky, J.W. 2008. Identification of priority conservation areas in Craighead County, AR for the Jonesboro Parks and Recreation Commission. 43 pp.
- **Bouldin, J.L**. Green, V.S. 2008. Groundwater Quality and Use at Judd Hill Plantation Annual report to Judd Hill Foundation.

- **Bouldin, J.L**., Green, V.S., Brueggen, T.R. Ogendi, G.M., Teague, T.G. 2008. Striving toward sustainable cotton production and improved water quality. Annual report to Judd Hill Foundation.
- **Bouldin, J.L**. 2007. EPA GRANT (#EM833253) Mississippi Embayment Regional Ground Water Study annual QA report.
- **Bouldin, J.L**. 2006. EPA GRANT (#EM833253) Mississippi Embayment Regional Ground Water Study annual QA report.
- **Bouldin, J.L**. 2006. Aqueous Product Testing for Ciba Specialty's Stormwater Polyacrylimide Tablets. Ciba Specialty, Inc. 12 pp.
- Farris, J.L., **Bouldin, J.L**. 2005. *Corbicula fluminea* metal accumulation comparison to *Elliptio complanata*. RIDOLFI, Inc. 37 pp.
- Farris, J.L., Bouldin, J.L., Stephens, W.W. 2004. Fort Chaffee Maneuver Training Center Scaleshell Mussel Survey and GIS database. Military Department of Arkansas, Fort Smith, AR. 143 pp.
- Farris, J.L., Christian, A.D., **Bouldin, J.L**. 2004. Bayou Macon, McGehee, Arkansas Freshwater Mussel Survey. HNTB Corporation. Kansas City, MO. 20 pp.
- Farris, J.L., Bouldin, J.L. Stephens, W.W. 2003. Fort Chaffee Maneuver Training Center Scaleshell Mussel Survey and GIS database. Military Department of Arkansas, Fort Smith, AR. 166 pp.
- Farris, J.L., Bouldin, J.L. Stephens, W.W. 2003. Mussel and Water Conditions on Robinson Maneuver Training Center, Arkansas, and GIS database. Military Department of Arkansas, North Little Rock, AR. 223 pp.
- **Bouldin, J.L**., Farris, J.L., Milam, C.D. 2002. Measured Responses of the Asian Clam (*Corbicula fluminea*) to Runoff Associated with Urbanization: A Multifaceted Biomonitoring Approach in a Watershed Assessment of Northwest Arkansas. City of Rogers Urban Watershed Management Plan. 45 pp.

## **FUNDED GRANTS**

- **Bouldin, J.L.,** Regn, O.Z. 2023-2027. (\$1,117,957) Arkansas Natural Resources Division. Cache River Watershed Monitoring for 2-Stage Ditches.
- **Bouldin, J.L.,** Boves T. 2022-2025. (\$447,439) Wetland Reserve Easements (WRE) Ecological Monitoring USDA NRCS. Subaward of UAPB (\$3,000,000).
- **Bouldin, J.L.,** Cooper, R.I. 2021-2024. (\$547,891) Arkansas Natural Resources Commission. Eleven Point Watershed Monitoring.
- **Bouldin, J.L.,** Cooper, R.I. 2021-2024. (\$780,720) Arkansas Natural Resources Commission. North Fork White River Watershed Monitoring.
- **Bouldin, J.L.,** Cooper, R.I. 2019-2022. (\$536,349) Arkansas Natural Resources Commission. Bayou DeView Watershed Monitoring.
- **Bouldin, J.L.,** Cooper, R.I. 2019-2022. (\$688,220) Arkansas Natural Resources Commission. Buffalo River Watershed Monitoring.
- **Bouldin, J.L.,** Cooper, R.I. 2019-2022. (\$403,968) Arkansas Natural Resources Commission. Middle White River Watershed Monitoring.
- Bouldin, J.L., Harris, J.L. 2019-2021. (\$146,517) Subaward of Steevens, J., Wang, N,
   Bouldin, J.L., Harris, J.L., Hodges, S. USGS Natural Resources Preservation
   Program. Informing a conservation strategy for freshwater mussels in the Buffalo

River: Evaluating mussel population trends and potential effects of elevated nitrogen on mussel recruitment.

- **Bouldin, J.L**., McKay, T., Cooper, R.I. 2018-2023. (\$149,988) USDA NLGAC. Native bee community composition in Mississippi Delta soybean fields and their effect on yield.
- **Bouldin, J.L.,** Cooper, R.I. 2017-2020. (\$1,118,122) Arkansas Natural Resources Commission. Upper Cache River Watershed Monitoring.
- **Bouldin, J.L.,** Cooper, R.I. 2017-2020. (\$666,563) Arkansas Natural Resources Commission. White River Watershed Monitoring.
- **Bouldin, J.L.** 2016-2019. (\$535,062) Arkansas Natural Resources Commission. Bayou DeView Watershed Monitoring.
- **Bouldin, J.L.**, Fluker, B.L., Harris, J.L. 2016-2019. (\$692,017) Arkansas Natural Resources Commission. Strawberry River Watershed Monitoring.
- **Bouldin, J.L**., Fluker, B.L., Harris, J.L. 2015-2019 (\$49,698) Mussel Survey of Cadron Creek, Point Remove Creek and Big Piney Creek and Major Tributaries with Population Assessments for Two Species of Concern, US Fish & Wildlife Services.
- **Bouldin, J.L.** 2015-2019. (\$1,199,844) Biological Assessment of Agricultural Ditches in the Arkansas Delta Ecoregion, USDA NRCS CEAP.
- **Bouldin, J.L.** 2015-2017. (\$75,000) Edge of Field Suspended Sediments Comparisons, USDA NRCS CEAP.
- **Bouldin, J.L.** 2014-2018. (\$213,229) Arkansas Natural Resources Commission. Little River Ditches Watershed Monitoring Phase II.
- **Bouldin, J.L.** 2014. (\$10,000). Cotton, Inc. Sustainable cotton production Water and sediment quality of best management practices.
- **Bouldin, J.L**. 2013-2016. (\$550,430) Arkansas Natural Resources Commission. Middle Cache River Watershed Monitoring.
- Bouldin, J.L., Harris, J.L., Posey, W. 2013. (\$14,981) Arkansas Game & Fish Commission. Status Assessment Survey for Scaleshell Mussel Leptodea leptodon (Rafinesque) in Arkansas.
- **Bouldin, J.L.** 2013. (\$10,000). Cotton, Inc. Sustainable cotton production Water and sediment quality of best management practices.
- Bouldin, J.L., Reba, M. 2012 2015 (\$140,213) Building the Capacity for Edge-of-Field (EOF) Monitoring of Conservation through Field Demonstration, Regional Coordination, Training and Outreach. Subcontract Daniels, M., Busch, K., Sharpley, A., Reba, M., Henry, C., Chen, Y., Bouldin, J., Teague, T., Johnson, J. (\$1,978,596) UofAEX.
- **Bouldin, J.L.** 2012. (\$10,000). Cotton, Inc. Sustainable cotton production Water, sediment, and soil quality of best management practices.
- Marsico, T. D., McKay, T., Ali, H., **Bouldin, J.L**. August 2011-July 2016. (\$567,185) NSF. The Experiential Learning Fellowship (ELF) Program.
- Ahn, S., Kennedy, D., Choi, S., Bouldin, J.L. 2011-2013. (\$149,571) USDA-NIFA. Study on prevalence and characterization of Shiga toxin-producing *E. coli* (STEC) from cattle farms in Arkansas Delta Region.
- **Bouldin, J.L.**, Teague, T.G., Reba, M., Warby, R.A.F. 2011-2013. (\$222,928) Arkansas Natural Resources Commission. Little River Ditches Watershed Monitoring

- **Bouldin, J.L.**, Warby, R.A.F. 2011-2014. (\$465,652) Arkansas Natural Resources Commission. Cache River Watershed Monitoring.
- Teague, T.G., Shumway, C.R., **Bouldin, J.L**. 2011-2013 (\$184,214) USDA. Integrating Soil, Crop and Pest Monitoring Using Spatial Technology on Arkansas Cotton Farms to Achieve Nutrient Loss Reduction.
- **Bouldin, J.L.**, Warby, R.A.F. 2011-2014. (\$199,017) Arkansas Natural Resources Commission. Water Quality Monitoring on Larkin Creek Lateral 1-A, St. Francis County, AR - Phase II.
- Warby, R.A.F., Bouldin, J.L., Choate, J.C. 2011-2012. (\$5,566) Judd Hill Foundation. Sustainable cotton production – Water, sediment, and soil quality of best management practices: A trace metal perspective.
- **Bouldin, J.L.,** Warby, R.A. 2011. (\$10,000). Cotton, Inc. Sustainable cotton production Water, sediment, and soil quality of best management practices.
- **Bouldin, J.L**., Brueggen, T. R., Warby, R.A., 2011-2012. (\$47,954). US Geological Society 104B. Continued Investigation of Land Use and Best Management Practices on the Strawberry River.
- Bouldin, J.L., Marsico, T.D., Warby, R.A.F. Justus, B.G., Wise, J.A. 2011 2014.
   (\$317,661) US EPA Region 6 Wetland Program Development Grants.
   Identification of Biological Methods for Evaluating Wetland Water-Quality Conditions in Arkansas.
- Bouldin, J.L., Teague, T.G., Reba, M. 2011-2014. (\$53,000 technical support). USDA NRCS CCPI: Mississippi River Basin Healthy Watershed Initiative (MRBI) Project: Little River Ditches Nutrient Loss Reduction Project. Collaborative with Cripps, R.W. and Glover, C. (\$3,156,614 total grant)
- Bouldin, J.L., Teague, T.G., Reba, M. 2011-2014. (\$53,000 technical support). USDA NRCS CCPI: Mississippi River Basin Healthy Watershed Initiative (MRBI) Project: Lower St. Francis Nutrient Loss Reduction Project. Collaborative with Cripps, R.W. and Glover, C. (\$2,971,836 total grant)
- **Bouldin, J.L.**, Warby, R.A. 2010-2013. (\$296,917) NSF MRI. Acquisition of a GC/MS to Facilitate Interdisciplinary Ecotoxicological and Analytical Research and Teaching at Arkansas State University. (NSF# CBET-1040466)
- Teague, T.G., Green, V.S., Bouldin, J.L., Shumway, C.R. 2010. (\$35,000) Cotton, Inc. Integrating Soil and Water Conservation and Pest Management strategies for Sustainable Cotton Production.
- Teague, T.G., Bourland, F., Bouldin, J.L., Danforth, D., Green, V.S., Morris, K., Mozaffari, M., Rothrock, C., Shumway, C. 2010 -2012. (\$120,000) 2010 AR Cotton State Support Committee. Integrating soil and plant monitoring to improve soil and water conservation for sustainable cotton production.
- **Bouldin, J.L.**, Warby, R.A. 2010. (\$10,000) Cotton, Inc. Sustainable cotton production Water, sediment, and soil quality of best management practices.
- **Bouldin, J.L.**, Warby, R.A. 6/15/2010 11/15/2010. (\$10,000) Arkansas Natural Resources Commission. Larkin Creek Lateral 1-A Monitoring.
- **Bouldin, J.L**. 2010-2011. (\$66,000) US Geological Society 104B. Assessment of water quality and stream bank stability following BMP implementation on the upper Strawberry River watershed.
- **Bouldin, J.L**., Harris, J., 2009 2014. (\$31,250) USDA Forest Service. Mulberry River/Ozark St. Francis National Forest Mussel Survey.

- Bouldin, J.L., Harris, J., 2009 2011. (\$29,483) US Fish & Wildlife Service. Rangewide Morphometric and Meristic Comparison of *Potamilus capax* (Green 1832) Shell Shape and Soft Anatomy.
- Bouldin, J.L., Grippo, A.A., Kennon J.T., Miller, C.A., Risch, T.S. 2008-2014.
   (\$2,242,556) NSF Division of Graduate Education. GK-12 Environmental Sciences and Molecular Biosciences in the Natural State. (NSF#0809317)
- Pratte, J.M., **Bouldin, J.L.**, Risch, T.S. 2009-2011. (\$388,945) NSF Research Experiences for Undergraduates: Research Internships in Science of the Environment. (NSF#DBI-0552608)
- **Bouldin, J.L**. 2009. (\$10,000) Cotton, Inc. Sustainable cotton production Water, sediment, and soil quality of best management practices.
- Green, V.S., **Bouldin, J.L**. 2008-2011. (\$393,600) Department of Energy. Environmental sustainability of bioenergy cropping systems. Midsouth/Southeast Bioenergy Consortium award #DE-FG36-08GO88036. (\$1,968,000 total award)
- Teague, T.G., Green, V.S., Bouldin, J.L., Shumway, C.R. 2009. (\$35,000) Cotton, Inc. Integrating Soil and Water Conservation and Pest Management strategies for Sustainable Cotton Production.
- **Bouldin, J.L**., Green, V.S. 2008-2012. (\$142,008) Arkansas Natural Resources Commission. Water quality sampling and analysis for nutrients and TSS on the upper Strawberry River subwatersheds.
- Pratte, J.M., Kennon, J.T., Green, V.S., **Bouldin, J.L.**, Gilbert, E. 2008-2010. (\$3,000) SENCER, SENCER Implementation.
- **Bouldin, J.L**., Green, V.S. 2009-2010. (\$12,705) Contract with The Nature Conservancy. Measures of water quality in the Cache River.
- Wilkie, J. (\$29, 060). 2007-2008. AR Forestry Commission: Urban Forestry Committee. City of Jonesboro Urban Conservation. (\$5,900) Bouldin, J.L., V.S. Green, parcel assessment.
- **Bouldin, J.L**., Shumway, C.R., Green, V.S. 2008-2009. (\$4,927) ASU Faculty Enhancement grant. Soil and water conservation in sustainable cotton production.
- Green, V.S., **Bouldin, J.L**. 2008-2009. (\$5,914) ASU Faculty Enhancement grant. Cotton production practices to enhance soil quality.
- Buchanan, R.A., **Bouldin, J.L.**, 2008 2009 (\$12,500) NSF. Supplement to URM RISE-UP to fund Minority High School Student Research Fellows.
- Bouldin, J.L., Hannigan, R.E., Dowling, C.B., Morrow, J. 2007-2009. (\$111,570) NSF GEO Accelerated Research into Science of the Environment (ARISE) Program. (NSF #0703701)
- Green, V.S., Christian, A.D., **Bouldin, J.L**. 2007-2010. (\$190,835) NSF MRI. Acquisition of Biogeochemical Analytical Instrumentation for Enhanced Interdisciplinary Research and Training at Arkansas State University.
- **Bouldin, J.L**., Green, V.S. 2007-2008. (\$2,000) Judd Hill Foundation. Characterization of groundwater resources at Judd Hill Plantation, Poinsett County, AR.
- **Bouldin, J.L**., Baker, W.H. 2007-2008. (\$4,115) ASU Faculty Enhancement grant. Measured and modeled fate and effects of diazinon in agricultural ditch ecosystems.

- Green, V.S., **Bouldin, J.L**. 2007-2008. (\$5,475) ASU Faculty Enhancement grant. Remediation of agricultural runoff nitrogen and phosphorus with vegetated ditches.
- Hannigan, R.E., Dowling, C.B., **Bouldin, J.L.** 2006 2009 (\$144,000) US EPA. Mississippi Embayment Regional Ground Water Study.
- Farris, J.L., **Bouldin, J.L**., Phillips, G.C., Green, V.S. 2006-2009. (\$193,400) US EPA. Delta Center for Agricultural Water Use.
- **Bouldin, J.L**., Green, V.S. 2006. (\$2,000). Judd Hill Foundation. Comparison of Laboratory and Field Use of a Soil Additive to Reduce Agricultural Associated Contamination.

# PENDING GRANTS

- **Bouldin, J.L.**, Medina-Bolivar, F. NSF MRI (\$584,514) Acquisition of an UHPLC-TQ and DESI for Facilitation of Interdisciplinary Ecotoxicological and Analytical Research at Arkansas State University.
- **Bouldin, J.L.,** Cooper, R.I. 2022-2025. (\$1,096,893) Arkansas Natural Resources Division. Strawberry River Watershed Monitoring.

# **GRANTS NOT FUNDED**

- **Bouldin, J.L.**, Dolan, M.C., Larkin, P. (\$1,583,745) Development and testing of assays as a monitoring tool for SARS-CoV detection in wastewater. (NIH not funded)
- **Bouldin, J.L**. 2020 (\$5,188) Kays Foundation, COVID-19, Park Closures, Septic Systems and Water Quality in the Buffalo National River. (not funded)
- **Bouldin, J.L.** 2020 (\$514,605) NSF MRI Acquisition of an LC-MS/MS for Facilitation of Interdisciplinary Ecotoxicological and Analytical Research at Arkansas State. (not funded)
- **Bouldin, J.L**., Justus, B., Quinn, J. 2017-2018 (\$171,261) Arkansas Game & Fish Commission SWIG. A Baseline Evaluation Necessary to Monitor the Long-Term Effects of Land Use Changes Planned for Two Ecologically Sensitive Watersheds in Northeastern Arkansas, The Spring and Strawberry Rivers. (not funded)
- **Bouldin, J.L**., Justus, B., Quinn, J. 2017-2018 (\$180,051) Arkansas Game & Fish Commission SWIG. A Baseline Evaluation Necessary to Monitor the Long-Term Effects of Land Use Changes Planned for Two Ecologically Sensitive Watersheds in Northeastern Arkansas, The Eleven Point and Currant Rivers. (not funded)
- Bouldin, J.L., Adams, G., Adams, R, Connolly, M., Justus, B., Wentz, N., Wagner, B. 2017-2020 (\$497,968) US Geological Society 104g. A Baseline Evaluation Necessary to Monitor the Long-Term Effects of Land Use Changes Planned for Four Ecologically Sensitive Watersheds in the Black River Basin, Northeastern Arkansas. (not funded)
- **Bouldin, J.L.,** Warby, R.A. 2012-2013 (\$66,000) US Geological Society 104B. Water quality monitoring following implementation of Best Management Practices in the Cache River Watershed. (not funded)
- Pratte, J., Warby, R.A.F., McKay, T., Bouldin, J.L., Marsico, T.D., Lorence, A., Ali, H. (\$98,000) Arnold and Mabel Beckman Foundation. Arkansas State University 2011 Beckman Scholars Program Proposal. (not funded)
- Saarnio, D., **Bouldin, J.**, Pearce, A., Miller, C., (\$996,840) Best Practice Assessment Model for STEM Education, NSF. (not funded)

- Zeng, L., **Bouldin, J**., Jackson- Pitts, M., Teague, T.G. (\$1,038,478) Technology Education through EXploration of Teaching Science (TEXTS), NSF. (not funded)
- **Bouldin, J.L.,** Buchanan, R.A., Aga, D., Schneider, R. (\$599,981) Biotransformations of Quantum Dots in the Food Chain of Aquatic Systems, US EPA. (not funded)
- **Bouldin, J.L**., Harris, J., (\$61,859). Status Survey of the Rabbitsfoot, *Quadrula c. cylindrica* (Say 1817), in the Little River Basin, Arkansas. Pending AR Game & Fish Commission. (not funded)
- Kolian, S. (\$479,185), 2010. Investigation, Delineation, and Analysis of Subsurface Oil and Dispersants in the northwest Gulf of Mexico. (NOAA, Rapid Response Proposals, Gulf Oil Spill). (Warby, R.A.F., **Bouldin, J.L.**; Consultants) (not funded)
- Kolian, S. (\$929,585), 2010. Characterization of the Effects of a Crude Oil Spill on Coral Communities Residing on Oil and Gas Platforms. (NOAA, Rapid Response Proposals, Gulf Oil Spill). (Warby, R.A.F., **Bouldin, J.L.**; Consultants) (not funded)

# ADDITIONAL RESEARCH PARTICIPATION

- City of Jonesboro, AR (Wilkie, Jason, Principal Investigator). 2007-2008 (\$29, 060). AR Forestry Commission: Urban Forestry Committee.
- Project QA Officer for EPA GRANT #EM833253 Mississippi Embayment Regional Ground Water Study.
- Researcher (Bouldin, J.L., Principal Investigator). 2006. (\$4,400). CIBA Specialties, Inc. Aquatic toxicity determination for product registration.
- Researcher (Farris, J.L., Principal Investigator). 2005. (\$10,000). RIDOLFI, Inc. *Corbicula fluminea* metal accumulation comparison to *Elliptio complanata*.
- Researcher (Farris, J.L., Principal Investigator). 2004. (\$18,487). Engineering-Environment Management, Inc. Fort Chaffee Maneuver Training Center Scaleshell mussel survey.
- Researcher (Farris, J.L., Principal Investigator). 2001-2003. (\$91,699). Potesta and Associates. Assessment of fish community responses to a coal slurry spill in the Tugfork River in Kermit, West Virginia.
- Researcher (Farris, J.L., Principal Investigator). 2002. (\$26,488). Parsons Engineering Science, Inc. Bioassessment of water and sediment quality on Robinson Military Training Area.
- Researcher (Farris, J.L., Principal Investigator). 2002-2003. (\$6,496). Parsons Engineering Science, Inc. Fort Chaffee Maneuver Training Center Scaleshell Mussel Survey.
- Researcher (Farris, J.L., Principal Investigator). 1998-2003. (\$974,503). Agricultural Research Service Mid-South Area Edge of field ecosystems for water quality improvement.

## **Science Advisory Councils**

- Arkansas Rivers Association (2008-present)
- City of Jonesboro, AR Urban Forestry (2007-present)
- Mississippi Embayment Regional Ground Water Study (2006-2011)

# PRESENTATIONS

- Singleton, B.L., Spence, A.L., **Bouldin, J.L**. 2023. Total Nitrogen and Phosphorus in the Bayou DeView River in Northeastern Arkansas from 2016 to 2022. Create@State, Arkansas State University, Jonesboro, AR, 18-20 April 2023.
- Shobowale K., Bouldin J.L., Evaluation of Water Quality Parameters along the Eleven Point Watershed, Arkansas. Create@State, Arkansas State University, Jonesboro, AR, 18-20 April 2023.
- Dyer, P.M., Craddock, N.R., **Bouldin, J.L**. 2023. Analysis of Biological Contamination in the Buffalo River Headwaters, AR. Create@State, Jonesboro, AR. 18-20 April 2023.
- DeRoin, R.N., **Bouldin, J.L**. 2023. Assessing Sediment and Whole Effluent Toxicity of the Middle White River Subwatersheds, Arkansas. Arkansas Soil & Water Education Conference, Jonesboro, AR. 25 Jan 2023.
- Dyer, P.M., Craddock, N.R., **Bouldin, J.L**. 2023. Nutrient Activity in Headwaters of the Buffalo River. Arkansas Soil & Water Education Conference, Jonesboro, AR. 25 Jan 2023.
- Singleton, B.L., Spence, A.L., **Bouldin, J.L**. Analyses of Six Years of Nutrient Data from the Bayou DeView River in Northeastern Arkansas. Arkansas Soil & Water Education Conference, Jonesboro, AR. 25 Jan 2023.
- Shobowale K., Bouldin J.L. 2023. Evaluation of Water Quality Parameters along the Eleven Point Watershed, Arkansas. Arkansas Soil & Water Education Conference, Jonesboro, AR. 25 Jan 2023.
- Pieri, A.M., Harris, J.L., Matthews, M.W., Hodges, S.W., Rodman, A.R., Bouldin, J.L., Christian, A.D. 2023. Comparison of Twelve Mussel Bed Assemblages Quantitatively Sampled at a 15-Year Interval in the Buffalo National River, AR. Freshwater Mollusk Conservation Society, Portland, OR. 10-14 April 2023.
- Dyer, P.M., Craddock, N.R., **Bouldin, J.L**. 2022. Nutrient Activity in Headwaters of the Buffalo River. SETAC North America 43<sup>rd</sup> Annual Meeting. Pittsburgh, PA. 13-17 November 2022.
- DeRoin, R.N., Bouldin, J.L. 2022. Assessing Ceriodaphnia dubia and Chironomus dilutus bioassays of the Middle White River subwatersheds, Arkansas, USA. SETAC North America 43<sup>rd</sup> Annual Meeting. Pittsburgh, PA. 13-17 November 2022.
- Lydy, V. R., R.I. Cooper, and J.L. Bouldin. Comparing the Toxicant Responses and Culturing Characteristics of Long-Term Laboratory-Reared and Field Populations. of *Ceriodaphnia dubia*. SETAC North America 43<sup>rd</sup> Annual Meeting. Pittsburgh, PA. 13-17 November 2022.
- Harris, J.L., Pieri, A.M., Matthews, M.W., Hodges, S.W. Bouldin, J.L., Christian, A.D. 2022. The History of Mussel Exploration in the Buffalo National River, AR. MidSouth-Ozark Prairie Regional SETAC Conference, Jonesboro, AR. 10-11 May 2022.
- Fox, L.A. DeRoin, R.N., Bouldin, J.L. 2022. Assessing Ceriodaphnia dubia bioassays of the Middle White River Subwatersheds, Arkansas. Create@State, Jonesboro, AR. 18-20 April 2022.

- Lydy, V. R., Cooper, R.I., **Bouldin, J.L**. 2022. Comparing the Toxicant Response of Long-Term Laboratory-Reared and Field Populations of *Ceriodaphnia dubia*. Create@State, Jonesboro, AR. 18-20 April 2022.
- DeRoin, R.N., Bouldin. J.L. 2022. Water Quality and Sediment Toxicity of Subwatersheds in the Middle White River in Arkansas. Create@State, Jonesboro, AR. 18-20 April 2022.
- Dyer, P., **Bouldin, J.L**. 2022. Nutrient Activities in Headwaters of the Buffalo River. Create@State, Jonesboro, AR. 18-20 April 2022.
- Singleton, B.L., Spence, A.L., **Bouldin, J.L.** 2022. Annual Changes in Turbidity from 2016-2021 from four tributaries of the Bayou DeView River in Northeastern Arkansas. Create@State, Jonesboro, AR. 18-20 April 2022.
- Fox, L.A. DeRoin, R.N., Bouldin, J.L. 2022. Ceriodaphnia dubia bioassays of Four Sub-watersheds in the Middle White River, Arkansas. Arkansas Soil & Water Education Conference (virtual). 26 Jan 2022.
- Lydy, V. R., Cooper, R.I., Bouldin, J.L. 2022. Comparisons Between Long-Term Laboratory-Reared and Field Populations of *Ceriodaphnia dubia*. Arkansas Soil & Water Education Conference (virtual). 26 Jan 2022.
- DeRoin, R.N., Bouldin. J.L. 2022. Water Quality and Sediment Toxicity of Four Tributaries in the Middle White River, Arkansas. Arkansas Soil & Water Education Conference (virtual). 26 Jan 2022.
- Dyer, P., Bouldin, J.L. 2022. Comparing Upstream/Downstream Water Quality in Select Buffalo River Tributaries. Arkansas Soil & Water Education Conference (virtual). 26 Jan 2022.
- Atwell, A. K., Bouldin, J.L. 2022. Impacts of agricultural intensity on total nutrients and sediment: a 3-year study of the Cache River Watershed, Arkansas. Arkansas Soil & Water Education Conference (virtual). 26 Jan 2022.
- Singleton, B.L., Spence, A.L., Bouldin, J.L. 2022. Analysis of turbidity over 5 years in tributaries of the Bayou DeView River in Northeastern Arkansas. Arkansas Soil & Water Education Conference (virtual). 26 Jan 2022.
- **Bouldin, J.L**., Brown, J.E., Rodman, A.R., Hodges, S.W. 2021. Effects of Park Closure on Water Quality in the Buffalo National River, AR. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.
- Kunz, J.L., Wang, N., Steevens, J.A., Pieri, A.M., Bouldin, J.L., Hodges, S.W. An Evaluation of Acute and Chronic Toxicity of Ammonia and Nitrate to a Native Freshwater Mussel (Arkansas Brokenray, *Lampsilis reeveiana*) from the Buffalo National River, AR. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.
- Atwell, A. K., Bouldin, J.L. 2021. Bioaccumulation of lead in three fish species of the Upper Cache River Watershed, Arkansas. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.
- DeRoin, R.N. **Bouldin. J.L.** 2021. Assessing Water Quality and Sediment Toxicity of the Middle White River Sub-watersheds, Arkansas, USA. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.
- Lydy, V. R., Cooper, R.I., Bouldin, J.L. 2021. Comparison between the Sensitivities of Long-Term Laboratory-Reared and Field Populations of *Ceriodaphnia dubia*. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.

- Pieri, A.M., Kuna, J.A., Harris, J.L., Rodman, A.R., Hodges, S.W., Bouldin, J.L. 2021. In-situ Mussel Study with Juvenile Arkansas Brokenray (*Lampsilis reeveiana*) in the Buffalo National River, AR. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.
- Singleton, B.L., Spence, A.L., Bouldin, J.L., 2021. Comparison of Water Quality Measurements of the Bayou DeView River and Tributaries in Northeastern Arkansas, USA. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.
- Atwell, A. K., Bouldin, J.L. 2021. The role of agricultural intensity on total nutrients and sediments within the Cache River Watershed, Arkansas. Ozark Prairie-MidSouth SETAC Regional meeting. 10-12 May 2021.
- Singleton, B.L., Spence, A.L., Bouldin, J.L., 2021. Annual Water Quality Trends of the Bayou DeView River and Selected tributaries. Ozark Prairie-MidSouth SETAC Regional meeting. 10-12 May 2021.
- Atwell, A. K., Bouldin, J.L., Fluker, B.L. 2021. Fishes of the Upper Cache River Watershed and the impacts of agriculture. Ozark Prairie-MidSouth SETAC Regional meeting. 10-12 May 2021.
- Lydy, V. R., Bouldin, J.L., Cooper, R.I. 2021. Comparison between the Sensitivities of Long-Term Laboratory-Reared and Field Populations of *Ceriodaphnia dubia*. Ozark Prairie-MidSouth SETAC Regional meeting. 10-12 May 2021.
- Pieri, A.M., Bouldin, J.L., Steevens, J.A., Kunz, J., Hodges, S., 2021. Assessing water and sediment toxicity in the Buffalo National River, AR to juvenile aquatic organisms. Ozark Prairie-MidSouth SETAC Regional meeting. 10-12 May 2021.
- DeRoin, R.N. Bouldin. J.L. 2021. Overview of the Water Quality of the Arkansas Middle White River's Subwatersheds. Ozark Prairie-MidSouth SETAC Regional meeting. 10-12 May 2021.
- Atwell, A. K., Bouldin, J.L. 2021. Total nutrients, sediment and agricultural intensity: A
  3- year study of the Cache River Watershed, Arkansas. Create@State. Jonesboro,
  Arkansas. 19-21 April 2021.
- DeRoin, R.N. Bouldin. J.L. 2021. Water Quality of Subwatersheds Located in the Middle White River in Arkansas, USA. Create@State. Jonesboro, Arkansas. 19-21 April 2021.
- Pieri, A.M., Harris, J.L., Fluker, B.L., Kuntz, J., Rodman, A., Hodges, S., Steevens, J.A., Bouldin, J.L. 2021. Assessing water and sediment toxicity in the Buffalo National River, AR to juvenile aquatic organisms. Ozark-Prairie/Mid-South SETAC Virtual Meeting. May 10-12, 2021
- Lydy, V. R., **Bouldin, J.L**., and Cooper, R.I. 2021. Comparing the Sensitivities between Native and Laboratory-Cultured Populations of *Ceriodaphnia dubia*. Create@State. Jonesboro, Arkansas. 19-21 April 2021.
- Singleton, B.L., **Bouldin, J.L.** 2021. Water quality at three sites along the Bayou DeView River, AR. Create@State. Jonesboro, Arkansas. 21 April 2021.
- Pieri, A.M., Harris, J.L., Fluker, B.L., Kuntz, J., Rodman, A., Hodges, S., Steevens, J.A.,
   Bouldin, J.L. 2021. Long-term monitoring of freshwater mussel assemblages (*Bivalvia: Unionidae*) in the Buffalo National River, AR. Freshwater Mollusk Conservation Society 2021 Virtual Symposium. 12-14 April 2021.
- Abugazleh, M.K., **Bouldin, J.L.**, Chester, J.M., Ali, H. 2021. Investigation the Toxicity of Catechol and Hydroquinone to Freshwater Organisms (*Pimephales promelas*,

*Ceriodaphnia dubia*) after Adsorption by Metal Oxides. Arkansas Soil & Water Education Conference (virtual). 27 Jan 2021.

- Craddock, N.R., **Bouldin, J.L.,** 2021. Pasture use effect on water quality of Subwatersheds of the Buffalo National River, Arkansas. Arkansas Soil & Water Education Conference (virtual). 27 Jan 2021.
- Singleton, B.L., **Bouldin, J.L.**, 2021. Riparian land use along two section of the Bayou DeView River, Arkansas. Arkansas Soil & Water Education Conference (virtual). 27 Jan 2021.
- Atwell, A.K., Bouldin, J.L. 2021. Seasonal contributions of lead and sediment in the Upper Cache River Watershed, Arkansas. Arkansas Soil & Water Education Conference (virtual). 27 Jan 2021.
- Pieri, A.M., Bouldin, J.L., Harris, J.L., Fluker, B.L., Kuntz, J., Steevens, J.A., Rodman, A., Hodges, S. 2021. Long-term monitoring of freshwater mussel beds (*Bivalvia: Unionidae*) in the Buffalo National River, AR. Arkansas Soil & Water Education Conference (virtual). 27 Jan 2021.
- Cooper, R.I., **Bouldin, J.L**. 2020. Effects of season and LED light on *Ceriodaphnia dubia* culture board survival, fecundity, and neonate reference toxicity test performance. SETAC SciCon2 (virtual). 15-19 Nov 2020.
- **Bouldin, J.L**., Cooper, R.I. 2020. Effect of LED light on reproduction and survival of *Ceriodaphnia dubia* exposed to TiO<sub>2</sub>. SETAC SciCon2 (virtual). 15-19 Nov 2020.
- Pieri, A.M., Harris, J.L., Fluker, B.L., Bouldin, J.L., Kuntz, J., Steevens, J.A., Rodman, A., Hodges, S. 2020. Evaluation of Elevated Nitrogen on Freshwater Mussel (Bivalvia: Unionidae) Recruitment in the Buffalo National River. SETAC SciCon2 (virtual). 15-19 Nov 2020.
- Craddock, N.R., **Bouldin, J.L.**, 2020. Effect of pasture land use on subwatersheds of the Buffalo National River, Arkansas. SETAC SciCon2 (virtual). 15-19 Nov 2020.
- Brown, J.E., **Bouldin, J.L**. 2020. COVID-19, Park Closures, Septic Systems and Water Quality in the Buffalo National River. SETAC SciCon2 (virtual). 15-19 Nov 2020.
- Atwell, A.K., Bouldin, J.L. 2020. Temporal variations of lead and sediment inputs in the agriculturally dominated Upper Cache River Watershed, Arkansas. SETAC SciCon2 (virtual). 15-19 Nov 2020.
- Chester, J.M., **Bouldin, J.L**. 2020. Assessment of water quality in the White River, Arkansas to determine human health risk. Create@State. 20-21 April 2020. Jonesboro, AR.
- Atwell, A.K., **Bouldin**, **J.L.** Variations of lead and sediment contributions in the Upper Cache River Watershed, Arkansas. Create@State. 20-21 April 2020. Jonesboro, AR.
- Alves Augusto, A., Fluker, B.L., Bouldin, J.L. 2020. Comparing water quality and fish assemblages in the Delta and Ozark Highland Ecoregions of the Strawberry River Watershed. Create@State. 20-21 April 2020. Jonesboro, AR.
- Craddock, N.R., **Bouldin, J.L.,** 2020. Effect of pasture land use on subwatersheds of the Buffalo National River, Arkansas. Create@State. 20-21 April 2020. Jonesboro, AR.

- Chester, J.M., **Bouldin, J.L**. 2020. Correlation of water quality data to fecal coliform data to assess human health risk in the White River, Arkansas. 9<sup>th</sup> SETAC Young Environmental Scientists Meeting, 9-11 March 2020, Waco, TX.
- Craddock, N.R., **Bouldin, J.L.**, 2020. Effect of pasture land use on subwatersheds of the Buffalo National River, Arkansas. 9<sup>th</sup> SETAC Young Environmental Scientists Meeting, 9-11 March 2020, Waco, TX.
- Alves Augusto, A., Fluker, B.L., Bouldin, J.L. 2020. Assessment of Water Quality and Fish Assemblages in the Strawberry River, Arkansas. 9<sup>th</sup> SETAC Young Environmental Scientists Meeting, 9-11 March 2020, Waco, TX.
- Atwell, A.K., Bouldin, J.L. 2020. Concentrations of lead and sediment inputs in the agriculturally dominated Upper Cache River Watershed, Arkansas. 9<sup>th</sup> SETAC Young Environmental Scientists Meeting, 9-11 March 2020, Waco, TX.
- Pieri, A.M., Harris, J.L., Fluker, B.L., Bouldin, J.L., Kuntz, J., Steevens, J.A., Rodman, A., Hodges, S. 2020. Evaluation of Elevated Nitrogen on Freshwater Mussel (Bivalvia: Unionidae) Recruitment and Population Trends in the Buffalo National River. 9<sup>th</sup> SETAC Young Environmental Scientists Meeting, 9-11 March 2020, Waco, TX.
- Singleton, B.L., **Bouldin, J.L.**, 2020. Water quality of select tributaries of the Bayou DeView River, Arkansas, and effects on riverine water quality. 9<sup>th</sup> SETAC Young Environmental Scientists Meeting, 9-11 March 2020, Waco, TX.
- Pieri, A.M., Harris, J.L., Fluker, B.L., Bouldin, J.L., Kuntz, J., Steevens, J.A., Rodman, A., Hodges, S. 2020. Evaluation of Elevated Nitrogen on Freshwater Mussel (Bivalvia: Unionidae) Recruitment and Population Trends in the Buffalo National River. Southern Division American Fisheries Society. 20-23 Feb 2020, Little Rock, AR.
- Alves Augusto, A., Fluker, B.L., Bouldin, J.L. 2020. Assessment of water quality and fish assemblages in the Strawberry River, Arkansas. Southern Division American Fisheries Society. 20-23 Feb 2020, Little Rock, AR.
- Atwell, A.K., Fluker, B.L., Bouldin, J.L. 2020. Effects of land use intensity on sediment inputs and fish communities in the agriculturally dominated Upper Cache River Watershed, Arkansas. Southern Division American Fisheries Society. 20-23 Feb 2020, Little Rock, AR.
- Singleton, B.L., **Bouldin, J.L.**, 2020. Water quality of select tributaries of the Bayou DeView River, Arkansas, and effects on riverine water quality. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.
- Craddock, N.R., Brown, J.B., **Bouldin, J.L.**, 2020. Effect of pasture land use on subwatersheds of the Buffalo National River, Arkansas. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.
- Chester, J.M., Gilmore, D., **Bouldin, J.L**. 2020. Correlation of water quality to fecal coliform data in the White River, Arkansas. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.
- Atwell, A.K., Fluker, B.L., Bouldin, J.L. 2020. Effects of land use intensity on sediment inputs and fish communities in the agriculturally dominated Upper Cache River Watershed, Arkansas. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.
- Alves Augusto, A., Fluker, B.L., **Bouldin, J.L**. 2020. Comparing water quality and fish assemblages in the Delta and Ozark Highland Ecoregions of the Strawberry River

Watershed. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.

- Pieri, A.M., Harris, J.L., Fluker, B.L., Bouldin, J.L., Kuntz, J., Steevens, J.A., Rodman, A., Hodges, S. 2020. Evaluation of Elevated Nitrogen on Freshwater Mussel (Bivalvia: Unionidae) Recruitment and Population Trends in the Buffalo National River. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.
- Davenport, K., Martin, E.R., **Bouldin, J.L.,** 2020. Freshwater Toxicity of Two Types of Whole Sunscreen Product. Arkansas Soil & Water Education Conference. 29 Jan 2020, Jonesboro, AR.
- Pieri, A.M., Harris, J.L., Fluker, B.L., Bouldin, J.L., Kuntz, J., Steevens, J.A., Rodman, A., Hodges, S. 2019. Evaluation of Elevated Nitrogen on Freshwater Mussel (Bivalvia: Unionidae) Recruitment and Population Trends in the Buffalo National River. Southeastern Fishes Council (SFC) Annual Meeting, 13-15 Nov 2019, Knoxville, TN.
- Cooper, R.I., Bouldin, J.L. 2019. Comparison of three LED light correlated color temperatures on *Ceriodaphnia dubia* survival, fecundity, and neonate reference toxicity test performance. 40<sup>th</sup> SETAC North America Annual Meeting, 3-7 Nov 2019, Toronto, ON.
- Bouldin, J.L., Cooper, R.I. 2019. LED light as an alternative to incandescent for *Ceriodaphnia dubia* culturing. 40<sup>th</sup> SETAC North America Annual Meeting, 3-7 Nov 2019, Toronto, ON.
- Atwell, A.K., Bouldin, J.L. 2019. Role of agricultural intensities on sediment inputs and fish communities in the Upper Cache River Watershed, Arkansas. 40<sup>th</sup> SETAC North America Annual Meeting, 3-7 Nov 2019, Toronto, ON.
- Alves Augusto, A., Bouldin, J.L. 2019. Tributary Input Effects on Water Quality and Fish Assemblages in the Strawberry River, Arkansas. 40<sup>th</sup> SETAC North America Annual Meeting, 3-7 Nov 2019, Toronto, ON.
- Chester, J.M., **Bouldin, J.L**. 2019. Correlating Water Quality Data to Assess Potential Risks to Human Health in the White River, AR. 40<sup>th</sup> SETAC North America Annual Meeting, 3-7 Nov 2019, Toronto, ON.
- Atwell, A.K., Bouldin, J.L. 2019. Seasonal variations in sediment and nutrient contributions to agriculturally dominated Upper Cache River Watershed, Arkansas. MidSouth-OP SETAC, St. Louis, MO, 18-19 May 2019.
- Atwell, A.K., Bouldin, J.L. 2019. Monitoring sediment contributions via turbidity and total suspended solids (TSS) in the Upper Cache River Watershed, Arkansas MidSouth-OP SETAC, St. Louis, MO, 18-19 May 2019.
- Alves Augusto, A., Bouldin, J.L. 2019. Effects of Tributaries Input on Water Quality in the Strawberry River, Arkansas. MidSouth-OP SETAC, St. Louis, MO, 18-19 May 2019.
- Chester, J.M., **Bouldin, J.L**. 2019. Correlating Water Quality Data and Fecal Coliform Counts to Land Use to Determine Potential Risk to Human Health. MidSouth-OP SETAC, St. Louis, MO, 18-19 May 2019.
- Spence, A.L., and **Bouldin, J.L**. 2019. Review of Physiochemical Water Quality Parameters in the Agriculturally Dominated Bayou DeView Watershed, Arkansas. MidSouth-OP SETAC, St. Louis, MO, 18-19 May 2019.

- Martin, E.R., Bouldin, J.L. 2019. Whole Effluent Toxicity (WET) Testing in Two Agricultural Ditch Systems Using *Pimephales promelas* and *Ceriodaphnia dubia*. MidSouth-OP SETAC, St. Louis, MO, 18-19 May 2019.
- Alves Augusto, A., Bouldin, J.L. 2019. Effects of Tributaries Input on Water Quality in the Strawberry River, Arkansas. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 28-29 April 2019.
- Atwell, A.K., and Bouldin, J.L. 2019. Water Quality in the Upper Cache River Watershed, Arkansas. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 28-29 April 2019.
- Chester, J.M., **Bouldin, J.L**. 2019. Effects of Tributaries Input on Water Quality in the Strawberry River, Arkansas. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 28-29 April 2019.
- Alves Augusto, A., **Bouldin, J.L**. 2019. Monitoring water quality in eight subwatersheds of the Strawberry River, Arkansas. Poster Presentation at the Create@AState Conference, Jonesboro, AR 15-17 April 2019.
- Atwell, A.K., and **Bouldin, J.L**. 2019. Evaluating nutrient and sediment contributions to the agriculturally dominated Upper Cache River Watershed, Arkansas. Poster Presentation at the Create@AState Conference, Jonesboro, AR 15-17 April 2019.
- Martin, E.R., Bouldin, J.L. 2019. Whole Effluent Toxicity (WET) Testing in Two Agricultural Ditch System using *Pimephales promelas* and *Ceriodaphnia dubia*. Poster Presentation at the 21<sup>st</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 30 January 2019.
- Davenport, K., Martin, E.R., Bouldin, J.L. 2019. Assessing the Biodiversity of Aquatic Macroinvertebrate Assemblages in Northeast Arkansas Agricultural Ditches. Poster Presentation at the 21<sup>st</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 30 January 2019.
- Atwell, A.K., and Bouldin, J.L. 2019. Evaluating nutrient and sediment contributions to the agriculturally dominated Upper Cache River Watershed, Arkansas. Poster Presentation at the 21<sup>st</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 30 January 2019.
- Spence, A.L., and Bouldin, J.L. 2019. Assessment of seasonal and agricultural impacts of water quality in Bayou DeView Watershed, Arkansas. Poster Presentation at the 21<sup>st</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 30 January 2019.
- Alves Augusto, A., Bouldin, J.L. 2019. Monitoring water quality in eight subwatersheds of the Strawberry River, Arkansas. Poster Presentation at the 21<sup>st</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 30 January 2019.
- Ruby, A.L., and Bouldin, J.L. 2018. Impacts of water quality parameters in an agriculturally dominated watershed: Bayou DeView, Arkansas. 39<sup>th</sup> SETAC North America Annual Meeting, 4-8 Nov 2018, Sacramento, CA.
- Alves Augusto, A., Sanchez Gonzalez, I., Bouldin, J.L. 2018. Monitoring Water Quality in Eight Subwatersheds of the Strawberry River. 39<sup>th</sup> SETAC North America Annual Meeting, 4-8 Nov 2018, Sacramento, CA.
- Cooper, R.I., Bouldin, J.L. 2018. Examination of seasonal differences in *Ceriodaphnia dubia* survival, fecundity, and neonate reference toxicity test performance for culture boards maintained with incandescent and LED lights. 39<sup>th</sup> SETAC North America Annual Meeting, 4-8 Nov 2018, Sacramento, CA.

- Atwell, A.K., and Bouldin, J.L. 2018. Assessing sedimentation of the Upper Cache River Watershed, Arkansas through proxy measurements. 39<sup>th</sup> SETAC North America Annual Meeting, 4-8 Nov 2018, Sacramento, CA.
- Martin, E.R., and **Bouldin, J.L**. 2018. Understanding the Impact of Vegetation on Water Quality and Biotic Diversity in Agricultural Ditches. 39<sup>th</sup> SETAC North America Annual Meeting, 4-8 Nov 2018, Sacramento, CA.
- Sanchez Gonzalez, I., Harris, J.L., Bouldin, J.L. 2018. Quantitative Freshwater Mussel Surveys in the Lower Strawberry, River, AR and its Tributaries, 1st Freshwater Mollusk Conservation Society International Meeting, Verbania, Italy, 16-20 September 2018.
- Sanchez Gonzalez, I., Harris, J.L., **Bouldin, J.L**. 2018. Quantitative Freshwater Mussel (bivalvia: unionida) Surveys in the Lower Strawberry River. Society of Freshwater Science, Detroit, MI. 20-24 May 2018.
- (*Invited keynote*) **Bouldin, J.L**. 2018. Freshwater Mussel Collections and Current Research at Arkansas State University. Ozark Prairie Regional SETAC. 13-15 May 2018.
- Sanchez Gonzalez, I., Harris, J.L., Bouldin, J.L. 2018. Freshwater Mussel Diversity and Abundance in the Strawberry River, AR. Ozark Prairie Regional SETAC. 13-15 May 2018.
- Bouldin, J.L., Kilmer, M.K., Rosado-Berrios, C.A., Lacy, M. 2018. Spatial Variance of Dissolved and Total Pb Within the Cache River Watershed, Arkansas. MidSouth SETAC, 3-4 May 2018, Memphis, TN.
- (*Invited*) **Bouldin, J.L**. 2018. What impacts our waterways? Point and nonpoint source contamination. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 1 May 2018.
- Golaway, A., Grippo, R.S., **Bouldin, J.L**. Analysis of the Acute Toxicity of Shark Defense Technologies Shark Repellent. MidSouth SETAC, 3-4 May 2018, Memphis, TN.
- Ruby, A.L., and Bouldin, J.L. 2018. Sediment and nutrient assessment in Bayou DeView, Arkansas: An agriculturally dominated watershed. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 30 April 2018.
- Martin, E.R., and **Bouldin, J.L**. 2018. Assessing Mitigative Properties of Vegetation in Northeast Arkansas Agricultural Ditches Using Biotic and Abiotic Measures. Create@AState conference, Jonesboro, AR 16-18 April 2018.
- Martin, E.R., and **Bouldin, J.L**. 2018. Assessing Mitigative Properties of Vegetation in Northeast Arkansas Agricultural Ditches Using Biotic and Abiotic Measures. Arkansas Academy of Science, Jonesboro, AR 6-7 April 2018.
- Ruby, A.L., and **Bouldin, J.L**. 2018. Monitoring water quality at sites in the Bayou DeView, AR. Create@AState conference, Jonesboro, AR 16-18 April 2018.
- Sanchez Gonzalez, I., Harris, J.L., **Bouldin, J.L**. 2018. Quantitative Freshwater Mussel (bivalvia: unionida) Surveys in the Lower Strawberry River. Create@AState conference, Jonesboro, AR. 16-18 April 2018.
- Ruby, A.L., and Bouldin, J.L. 2018. Monitoring water quality at sites in the Bayou DeView, AR. SETAC Young Environmental Scientists. Madison, WI. 25-29 March 2018.

- Atwell, A.K., and Bouldin, J.L. 2018. Monitoring Water Quality Through Physicochemical Assessments in the Upper Cache River Watershed, Arkansas. SETAC Young Environmental Scientists. Madison, WI. 25-29 March 2018.
- Martin, E.R., and Bouldin, J.L. 2018. Assessing Mitigative Properties of Vegetation in Northeast Arkansas Agricultural Ditches Using Biotic and Abiotic Measures. Poster Presentation at the 20<sup>th</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 31 January 2018.
- Atwell, A.K., and Bouldin, J.L. 2018. Monitoring Water Quality Through Physicochemical Assessments in the Upper Cache River Watershed, Arkansas. Poster Presentation at the 20<sup>th</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 31 January 2018.
- Sanchez Gonzalez, I., Harris, J.L., Bouldin, J.L. 2018. Abiotic and Biotic Factors of the Strawberry River and Its Tributaries. Poster Presentation at the 20<sup>th</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 31 January 2018.
- Ruby, A.L., and Bouldin, J.L. 2018. Monitoring Water Quality At Sites in the Bayou DeView, Arkansas. Poster Presentation at the 20<sup>th</sup> Annual Arkansas Soil & Water Education Conference, Jonesboro, AR 31 January 2018.
- (*Invited*) **Bouldin, J.L**. 2018. WET Testing. Northwest District of the Arkansas Waterworks & Water Environment Association. 10 January 2018.
- Bouldin, J.L., Kilmer, M.K., Rosado-Berrios, C.A., Lacy, M. 2017. Spatial Variance of Dissolved and Total Pb Within the Cache River Watershed, Arkansas. 38<sup>th</sup> SETAC North America Annual Meeting, 13-17 Nov 2017, Minneapolis, MN.
- Cooper, R.I., **Bouldin, J.L.** 2017. Effect of sample mass on percent recovery of a lowpolarity persistent organic pollutant fraction in chicken fat. 38<sup>th</sup> SETAC North America Annual Meeting, 13-17 Nov 2017, Minneapolis, MN.
- Sanchez Gonzalez, I., Harris, J.L., Bouldin, J.L. 2018. Abiotic and Biotic Factors of the Strawberry River and Its Tributaries. 38<sup>th</sup> SETAC North America Annual Meeting, 13-17 Nov 2017, Minneapolis, MN.
- (*Invited*) **Bouldin, J.L**. 2017. Little River Ditches Watershed Monitoring 14-400. Arkansas Natural Resource Conservation Nonpoint Source Annual Meeting. 27-28 Sept 2017, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. 2017. Bayou DeView Watershed Monitoring 16-800. Arkansas Natural Resource Conservation Nonpoint Source Annual Meeting. 27-28 Sept 2017, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. 2017. Strawberry River Watershed Monitoring 16-700. Arkansas Natural Resource Conservation Nonpoint Source Annual Meeting. 27-28 Sept 2017, Little Rock, AR.
- Bouldin, J.L., Cooper R.I. 2017. From the Field to the Spreadsheet; Laboratory Analyses and Quality Control. Soil and Water Conservation Society Symposium: Public-Private Conservation Partnerships Promote Conservation in Arkansas That Empowers environmental Stewardship among the Agricultural Community; Fostering Success and Overcoming Challenges. SWCS 72<sup>nd</sup> International Annual Conference. Madison, WI. 1 August 2017.
- Moland, M.A., **Bouldin, J.L.** 2017. Assessing Methods Used to Analyze Sediment of Agricultural Runoff in Arkansas Delta Ecoregion. Arkansas Water Resources Center. 23-24 July 2017.

- Sanchez Gonzalez, I., and **Bouldin, J.L**. 2017. Pathogen Interference on Whole Effluent toxicity Chronic Testing. MidSouth SETAC. Oxford, MS. 18-19 May 2017.
- Rosado-Berrios C.A., **Bouldin J.L.** 2017. Overview of the Cache River Watershed. MidSouth SETAC. Oxford, MS. 18-19 May 2017.
- Sanchez Gonzalez, I., and Bouldin, J.L. 2017. Abiotic and Biotic Characteristics of Water Quality in the Strawberry River, AR and its Tributaries. MidSouth SETAC. Oxford, MS. 18-19 May 2017.
- Moland, M.A., Bouldin, J.L. 2017. Assessing Methods Used to Analyze Sediment of Agricultrual Runoff in Arkansas Delta Ecoregion. MidSouth SETAC. Oxford, MS. 18-19 May 2017.
- (*Invited*) **Bouldin, J.L**. 2017. WET Testing, Endpoints and Statistics. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 1 May 2017.
- Sanchez Gonzalez, I., and Bouldin, J.L. 2017. Abiotic and Biotic Characteristics of Water Quality in the Strawberry River, AR and its Tributaries. Poster Presentation at the 19th Annual Arkansas Soil & Water Education Conference and Arkansas Irrigation Expo 2017, Jonesboro, AR 25 January 2017.
- Rosado-Berrios C.A., **Bouldin J.L.** 2017. Individual and combined toxicity of Acephate and Thiamethoxam. Poster Presentation at the 19th Annual Arkansas Soil & Water Education Conference and Arkansas Irrigation Expo 2017, Jonesboro, AR 25 January 2017.
- Moland, M.A., Bouldin, J.L. 2017. Comparison of Particle Sizes Found in Surface Runoff from Agricultural Fields. Poster Presentation at the 19th Annual Arkansas Soil & Water Education Conference and Arkansas Irrigation Expo 2017, Jonesboro, AR 25 January 2017.
- McCauley J.R., Usrey F., **Bouldin, J.L**. 2016. Cadmium accumulation in periphyton from an abandoned mining district in the Buffalo National River, Arkansas. SETAC North America World Congress, Orlando, FL. 6-10 November 2016.
- Rosado-Berrios C.A., **Bouldin J.L.** 2016. Individual and combined toxicity of Acephate and Thiamethoxam. SETAC North America World Congress, Orlando, FL. 6-10 November 2016.
- Moland, M.A., **Bouldin, J.L**. 2016. Evaluating methods used to analyze sediment in surface runoff during irrigation and precipitation events. SETAC North America World Congress, Orlando, FL. 6-10 November 2016.
- (*Invited*) **Bouldin**, J.L. 2016. Middle Cache River Watershed Monitoring 13-500. Arkansas Natural Resource Conservation Nonpoint Source Annual Meeting. 21-22 Sept 2016, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. 2016. Little River Ditches Watershed Monitoring 14-400. Arkansas Natural Resource Conservation Nonpoint Source Annual Meeting. 21-22 Sept 2016, Little Rock, AR.
- **Bouldin, J.L**. 2016. Protecting our freshwater resources through US EPA WET testing. MidSouth SETAC. Murfreesboro, TN. 16-17 June 2016.
- McCauley J.R., Usrey F., **Bouldin, J.L**. 2016. Bioaccumulation of Heavy Metals by Aquatic Organisms from Historic Mining Operations in Arkansas. MidSouth SETAC. Murfreesboro, TN. 16-17 June 2016.

- Chappell, S., Kilmer, M.K., Bouldin, J.L. 2016. Using Particle Size Analysis as a Predictive Screening Tool for Sediment-Bound Lead (Pb). MidSouth SETAC. Murfreesboro, TN. 16-17 June 2016.
- Kilmer, M.K., **Bouldin, J.L**. 2016. Lethal and Sub-lethal Lead Toxicity in the Cache River, Arkansas to *Ceriodaphnia dubia* and *Pimephales promelas*. MidSouth SETAC. Murfreesboro, TN. 16-17 June 2016.
- Rosado-Berrios C.A., **Bouldin J.L.** 2016. Toxicity and Detection of Insecticides in the Lower Cache River Watershed, AR. MidSouth SETAC. Murfreesboro, TN. 16-17 June 2016.
- Moland, M.A., **Bouldin, J.L**. 2016. Evaluating Methods used to Analyze Sediment in Surface Runoff during Irrigation and Precipitation Events. MidSouth SETAC. Murfreesboro, TN. 16-17 June 2016.
- (*Invited*) **Bouldin, J.L**. 2016. WET Testing. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 3 May 2016.
- McCauley J.R., Usrey F., Bouldin, J.L. 2016. Cadmium Bioaccumulation By Aquatic Organisms From Abandoned Lead And Zinc Mining Along The Buffalo National River. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 3 May 2016.
- Chappell, S., Kilmer, M.K., Bouldin, J.L. 2016. Use of particle size analysis of sediment as a screening tool for lead contamination of surface waters. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 3 May 2016.
- Chappell, S., Kilmer, M.K., Bouldin, J.L. 2016. Size matters: Using particle size analysis to predict sediment-bound lead (Pb) concentrations in the Cache River Watershed. Create@AState Research Symposium, Arkansas State University, 7 April 2016.
- Clark, B. Kilmer, M.K., **Bouldin, J.L.** 2016. Out with the old, in with the new: Lessons learned from analysis of culture records of *Ceriodaphnia dubia*. Create@AState Research Symposium, Arkansas State University, 7 April 2016.
- Kilmer, M.K., Bouldin, J.L. 2016. Water hardness and lead contamination in the Cache River: How much is too much? Create@AState Research Symposium, Arkansas State University, 6 April 2016.
- Brueggen-Boman, T.R., Bouldin, J.L. 2016. Water Quality Response to the Implementation on Best Management Practices in the Strawberry River Watershed, AR. Missouri Academy of Science 52nd Annual Meeting, Lincoln University Jefferson City, MO. 22-23 April 2016.
- Brueggen-Boman, T.R., Bouldin, J.L. 2016. Four Year Study Assessing the Impacts of the Implementation of Best Management Practices in the Upper Strawberry River Watershed, Arkansas, on Water Quality Indicators. American Fisheries Society, Arkansas Chapter. Fairfield Bay, AR. 10-12 Feb 2016.
- Justus, B.G., Burge, D.R.L., Cobb, J.M., Marsico, T.D., Bouldin, J.L. 2016. A Comparison of Macroinvertebrate and Diatom Metrics for Indicating Water-Quality Conditions in Connected Depression Wetlands in the Mississippi Alluvial Plain. American Fisheries Society, Arkansas Chapter. Fairfield Bay, AR. 10-12 Feb 2016.

- Kilmer, M.K., Bouldin, J.L. 2016. Lead Contamination in the Cache River Arkansas: Implications for Toxicity to Aquatic Organisms. American Fisheries Society, Arkansas Chapter. Fairfield Bay, AR. 10-12 Feb 2016.
- McCauley J.R., Usrey F., Bouldin J.L. 2016. Bioaccumulation of Cadmium in Invertebrates along the Buffalo National River due to Historic Lead and Zinc Mining Operations. American Fisheries Society, Arkansas Chapter. Fairfield Bay, AR. 10-12 Feb 2016.
- Rosado-Berrios C.A., **Bouldin J.L.** 2016. Assessment of Nutrients on the Lower Cache River Watershed, AR. Poster presentation at 18th annual Arkansas Soil and Water Education Conference, Jonesboro, AR. 27 Jan 2016.
- Moland, M.A., **Bouldin, J.L**. 2016. A Comparison of Total Suspended Solids Analytical Methodology. Poster Presentation at the 18th Annual Arkansas Soil & Water Education Conference and Arkansas Irrigation Expo 2016, Jonesboro, AR. 27 Jan 2016.
- **Bouldin, J.L**., Justus, B.G., Burge, D.R.L., Cobb, J.M., Marsico, T.D. 2015. Indicating Water-Quality Conditions in Connected Depressions Using Macroinvertebrate and Diatom Assemblages in the Mississippi Alluvial Plain. 36th SETAC North America Annual Meeting, Salt Lake City, UT. 1-5 November 2015.
- McCauley J.R., Usrey F., Bouldin J.L. 2015. Bioaccumulation of Cadmium in Invertebrates along the Buffalo National River due to Historic Lead and Zinc Mining Operations. 36th SETAC North America Annual Meeting, Salt Lake City, UT. 1-5 November 2015.
- Moland M.A., **Bouldin J.L**. 2015. A Comparison of Total Suspended Solids Analytical Methodology. 36th SETAC North America Annual Meeting, Salt Lake City, UT. 1-5 November 2015.
- Rosado-Berrios C.A., **Bouldin J.L**. 2015. Detection of Lead (Pb2+) in the Lower Cache River Watershed, Arkansas. 36th SETAC North America Annual Meeting, Salt Lake City, UT. 1-5 November 2015.
- Kilmer, M.K., Bouldin, J.L., 2015. Agricultural Land Usage and Detection of Lead in the Cache River Watershed. 36th SETAC North America Annual Meeting, Salt Lake City, UT. 1-5 November 2015.
- Chappell, S., Kilmer, M.K., **Bouldin, J.L**., 2015. Effects of Natural Sources on Nutrient Levels in Altered and Unaltered Streams. 36th SETAC North America Annual Meeting, Salt Lake City, UT. 1-5 November 2015.
- Cooper, R.I., Warby, R.A.F., Rougeau, B., Bouldin, J.L. 2015. Comparison of two green extraction methods, MSPD and QuEChERS, on low-polarity POPs in avian adipose tissue. 36th SETAC North America Annual Meeting, Salt Lake City, UT 1-5 November 2015.
- (*Invited*) **Bouldin, J.L**. 2015. Larkin Creek Phase II Project 11-1800. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 23-24 Sept 2015, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. 2015. Cache River Monitoring 11-6000. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 23-24 Sept 2015, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. 2015. Middle Cache River Monitoring 13-500. Milestones & Momentum; ANRC's. 23-24 Sept 2015, Little Rock, AR.

- Bouldin, J.L., Justus, B.G., Burge, D.R.L., Cobb, J.M., Marsico, T.D. 2015. Indicating Water-Quality Conditions in Connected Depressions Using Macroinvertebrate and Diatom Assemblages. Society of Freshwater Science, Milwaukee, WI. 17-21 May 2015.
- Vogt, S., Woodruff, T.M., and Bouldin, J.L. 2015. Outlet Larkin Creek Watershed, in Northeastern Arkansas, Improvements Measured through Water Quality Parameters and the BMP tool. MidSouth SETAC, Vicksburg, MS. 11-12 May 2015.
- McCauley, J.R., Usrey, F., **Bouldin, J.L**. 2015. Cadmium Bioaccumulation Along the Buffalo National River in Northern Arkansas Due to Historic Lead and Zinc Mining Operations. MidSouth SETAC, Vicksburg, MS. 11-12 May 2015.
- Rosado-Berrios C.A. and **Bouldin J.L**. 2015. Water Quality Assessment of the Lower Cache River Watershed, AR – a Three Year Study. MidSouth SETAC, Vicksburg, MS. 11-12 May 2015.
- Kilmer, M.K. and **Bouldin, J.L.** 2015. Linking Land Usage and Lead Detection in the Cache River. MidSouth SETAC, Vicksburg, MS. 11-12 May 2015.
- Chappell, S., Kilmer, M.K., Bouldin, J.L. 2015. Effects of Natural Sources on Nutrient Levels in Channelized and Natural Streams. MidSouth SETAC, Vicksburg, MS. 11-12 May 2015.
- **Bouldin, J.L**., Justus, B.G., Burge, D.R.L., Cobb, J.M., Marsico, T.D. 2015. Indicating Water-Quality Conditions in Connected Depressions Using Macroinvertebrate and Diatom Assemblages. MidSouth SETAC, Vicksburg, MS. 11-12 May 2015.
- Kennon, M.E. and Bouldin, J.L. 2015. Analysis of Cache River Watershed: Possible Sources for Impairments of Dissolved Lead, Copper, and Total Dissolved Solids. Arkansas Water Works and Water Environment Association annual meeting. Hot Springs, AR. 27 April 2015.
- Kilmer, M.K. and **Bouldin**, J.L. 2015. Linking Land Usage and Impairments in the Cache River Watershed. Arkansas Waterworks and Water Environment Association annual meeting. Hot Springs, AR. 27 April 2015.
- Kennon, M.E. and Bouldin, J.L. 2015. Aquatic Effects of a Localized Oil Spill on Lake Conway, AR and Its Tributaries. Arkansas Academy of Sciences, Arkadelphia, AR. 10 April 2015.
- Kilmer, M.K., Poe, N., Chappell, S. and Bouldin, J.L. 2015. Natural Sources of Nutrients in the Cache River, Arkansas. Arkansas Academy of Science, Henderson State University, Arkadelphia, AR. 10 April 2015.
- McCauley, J.R., Usrey, F., Bouldin, J.L. 2015. Cadmium Bioaccumulation Along the Buffalo National River in Northern Arkansas Due to Historic Lead and Zinc Mining Operations. Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 7 April 2015.
- Straitt, N., Reba, M., Dabney, S., Teague, T.G., Bouldin, J.L. 2015. Impact of Cover Crops have on Measured Edge-of-field Sediment and Nutrient Loading from Production-sized Cotton Fields in Mississippi and Craighead Counties, Arkansas. Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 7 April 2015.
- Kennon, M.E. and **Bouldin, J.L.** 2015. Analysis of Cache River Watershed: Possible Sources of the Dissolved Lead, Copper, and Total Dissolved Solids Impairments.

Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 7 April 2015.

- Chappell, S., Kilmer, M.K., **Bouldin, J.L.** 2015. Effects of Natural Sources on Nutrient Levels in Channelized and Natural Streams. Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 7 April 2015.
- Kilmer, M.K. and Bouldin, J.L. 2015. Looking for Lead in All the Wrong Places? Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 7 April 2015.
- McCauley, J.R. Usrey, F., **Bouldin, J.L**. 2015. Cadmium bioaccumulation along the Buffalo National River in Northern Arkansas. Arkansas Soil and Water Education Conference, Jonesboro, AR. 30 Jan 2015.
- Chappell, S., Kilmer, M.K., Bouldin, J.L. 2015. Effects of Natural Sources on Nutrient Levels in Channelized and Natural Streams: An Experiential Learning Fellowship (ELF) Project. Arkansas Soil and Water Education Conference, Jonesboro, AR. 30 Jan 2015.
- Kennon, M.E. and Bouldin, J.L. 2015. Analysis of Cache River Watershed: Possible Sources of Dissolved Lead, Copper, and Total Dissolved Solids. Arkansas Soil and Water Education Conference, Jonesboro, AR. 30 Jan 2015.
- Kilmer, M.K. and Bouldin, J.L. 2015. Looking for Lead (Pb) in the Cache River Watershed, Arkansas. Arkansas Soil and Water Education Conference, Jonesboro, AR. 30 Jan 2015.
- Rosado-Berrios C.A. and **Bouldin J.L**. 2015. Lower Cache River Watershed Water Quality Monitoring. Arkansas Soil & Water Conference, Jonesboro, AR. 30 Jan 2015.
- Vogt, S., Woodruff, T.M., and Bouldin, J.L. 2015. Determining Effectiveness of Conservation Practices Implemented in the Outlet Larkin Creek Watershed Using Water Quality Parameters and the BMP tool. Jonesboro, AR. Arkansas Soil and Water Education Conference 30 Jan 2015.
- **Bouldin, J.L**., Reba, M.L., Teague, T.G. 2014. Instream water quality monitoring in an agriculturally-dominated watershed in northeast Arkansas. Society of Environmental Toxicology and Chemistry, Vancouver, BC, 10-14 November 2014.
- **Bouldin, J.L**. 2014. Habitat Fragmentation and Feeding Adaptation An Educational Workshop. Society of Environmental Toxicology and Chemistry, Vancouver, BC, 10-14 November 2014.
- (*Invited*) Bouldin, J.L. 2014. Larkin Creek Phase II Project 11-1800. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 17-18 Sept 2014, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. 2014. Cache River Monitoring 11-6000. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 17-18 Sept 2014, Little Rock, AR.
- (*Invited*) **Bouldin, J.L**. Kilmer, M.K., Poe, N. 2014. Comparing Water Quality in Channelized and Natural Streams. Fall Faculty Conference. 13 August 2014.
- (*Invited*) **Bouldin, J.L**. 2014. Interpreting your WET test results. Arkansas Water Works and Water Environment Association annual meeting. 28 April 2014.
- Vogt, S, Woodruff, T, and **Bouldin, J.L**. 2014. Monitoring a Northeastern Arkansas Subwatershed, Larkin Creek, to Determine if a Sedimentation Pond Improved

Water Quality. Hot Springs, AR. Arkansas Water Works and Water Environmental Association Annual Meeting, 28 April 2014.

- Poe, N, Kilmer, M.K., **Bouldin, J.L**. 2014. Water Quality in a Multi-Use Sub-Watershed of the Cache River, Arkansas. Hot Springs, AR. Arkansas Water Works and Water Environmental Association Annual Meeting, 28 April 2014.
- Leigh, K, Buchanan, R.A., **Bouldin, J.L**. 2014. Pulmonary immune response to inhaled quantum dots. Nanotechnology for Health Care Conference Winthrop Rockefeller Institute, Petit Jean Mountain, AR. 2-4 April 2014.
- Poe, N, Kilmer, M.K., Bouldin, J.L. Comparing Water Quality of Streams in Agricultural and Non-Agricultural Areas: An Experiential Learning Fellowship (ELF) Project. 2014. Create @ StAte A Symposium of Research, Scholarship & Creativity, Jonesboro, Arkansas. 10 April 2014
- Kennon, M.E. and **Bouldin, J.L.** 2014. Aquatic Effects of a Localized Oil Spill on Lake Conway, AR and Its Tributaries. Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 10 April 2014.
- Kilmer, M.K., **Bouldin, J.L**. 2014. Water Quality Impairments of the Cache River, Arkansas: Who's to Blame? Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 10 April 2014.
- Straitt, N., Reba, M., Dabney, S., Teague, T.G., Bouldin, J.L. 2014. Impacts of Conservation Practices on Runoff From Production Sized Fields Using Edge-of-Field Monitoring, Create @ Astate: A Symposium of Research, Scholarship and Creativity, Jonesboro, AR, 10 April 2014.
- Poe, N., Kilmer, M.K., Word-Burkman, R., Bell, M., Bouldin, J.L. and Marsico, T. 2014. Comparing Water Quality in Channelized and Natural Streams, An Experiential Learning Fellowship (ELF) Project. 2014 Arkansas Soil and Water Conference, Jonesboro, Arkansas. 31 January 2014.
- Vogt, S, Woodruff, T, and Bouldin, J.L. 2014. Determining Effectiveness of the Best Management Practices for the Larkin Creek Watershed Using Water Quality Monitoring Parameters. Jonesboro, AR. Arkansas Soil and Water Conference 31 January 2014.
- Rosado-Berrios C.A. and **Bouldin J.L.** 2014. Comparing two years of Water Quality Monitoring in the Cache River Watershed, Arkansas. Arkansas Soil & Water Education Conference, Jonesboro, AR. 31 January 2014.
- Kennon, M.E. and Bouldin, J.L. 2014. Aquatic Effects of a Localized Oil Spill on Lake Conway, AR and Its Tributaries. Arkansas Soil and Water Education Conference, Jonesboro, AR, 31 January 2014.
- Straitt, N., Reba, M., Dabney, S., Teague, T.G., Bouldin, J.L. 2014. Impacts of Conservation Practices on Runoff From Production Sized Fields Using Edge-of-Field Monitoring, Arkansas Soil and Water Education Conference, Jonesboro, AR, 31 January 2014.
- Kilmer, M.K., **Bouldin, J.L**. 2014. Comparing Water Quality in Sub-Watersheds of the Cache River, Arkansas: August 2013-January 2014. Arkansas Soil and Water Education Conference, Jonesboro, AR, 31 January 2014.
- Straitt, N., Reba, M., Dabney, S., Teague, T.G., Bouldin, J.L. 2014. Impacts of Conservation Practices on Runoff From Production Sized Fields Using Edge-of-Field Monitoring, Beltwide Conference, New Orleans, LA, 5-7 Jan 2014.

Bouldin, J.L., Yanowitz, K.L., Grippo, A.A., Miller, C.A., Kennon, J.T. 2013. Enhancing environmental education in middle school classrooms by graduate students in the Arkansas Delta through an NSF GK12 Program. Society of Environmental Toxicology and Chemistry, Nashville, TN, 17-21 November 2013.

- Grippo, A.A., Fong, B.N., Kennon, J.T., Hall, J.M., Bouldin, J.L., Yanowitz, K., Engelken, B.D. Introducing partition coefficients to K-12 students: A fun teaching activity that can be modified for many grades. Society of Environmental Toxicology and Chemistry, Nashville, TN, 17-21 November 2013.
- Rosado-Berrios, C.A. and **Bouldin, J.L**. 2013. Comparing two years of Water Quality Monitoring in the Cache River Watershed, Arkansas. Society of Environmental Toxicology and Chemistry, Nashville, TN, 17-21 November 2013.
- Kennon, M.E. and Bouldin, J.L. 2013. Aquatic Effects of a Localized Oil Spill on Lake Conway, AR and Its Tributaries. Society of Environmental Toxicology and Chemistry, Nashville, TN, 17-21 November 2013.
- DeMali, H.M., Bouldin, J.L., Trauth, S. E., and Sikkel, P. C. 2013. How Six Ambystoma Species' Blood Metal Content, Blood Cell Morphology, Leukocyte Profiles and Parasite Loads are Affected by Metals in the Environment. Society of Environmental Toxicology and Chemistry, Nashville, TN, 17-21 November 2013.
- Poe, N., Kilmer, M.K., Word-Burkman, R., Bell, M., Bouldin, J.L. 2013. Comparing water quality in channelized and natural streams: An Experiential Learning Fellowship (ELF) project. Society of Environmental Toxicology and Chemistry, Nashville, TN, 17-21 November 2013.
- (*Invited*) **Bouldin, J.L.** 2013. Cache River Monitoring. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 18-19 Sept 2013, Little Rock, AR.
- (*Invited*) **Bouldin, J.L.** 2013. Larkin Creek Phase II. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 18-19 Sept 2013, Little Rock, AR.
- (*Invited*) **Bouldin, J.L.** 2013. Little River Ditches MRBI Monitoring. Milestones & Momentum; ANRC's Annual Nonpoint Source Pollution Meeting. 18-19 Sept 2013, Little Rock, AR.
- Chen, Y., Daniels, M., Reba, M., Sharpley, A., Bouldin, J.L., Teague, T.G., Henry, C., Daniel, P., Mays, N., Shrestha, S., Farrelly, J., Eggleton, M., Lochmann, S., Frame, D., Busch, D., Radatz, A., Cooley, E., Haggard, B., Hendrix, J., Miller., D. 2013. Effects of Agricultural Land Use, Climate Change, and Watershed Restoration on Water Quality and Biological Resources in the Mississippi River Basin: an Overview and Case Studies. Abstract of the 2013 American Fisheries Society Annual Meeting, September 8-12, Little Rock, AR, USA.
- Brueggen-Boman, T.R., Bouldin, J.L. 2013. Assessment of Water Quality and Stream Bank Stability following BMP Implementation on the Upper Strawberry River Watershed. Arkansas Water Resources Center Annual Conference, Fayetteville, AR. 14 May 2013.
- Kaur, H., Yarbrough, M, Kennedy, D., Bouldin, J.L., Gilmore, D. 2013. Detection of Shiga toxin-producing E. coli prevalence in beef cattle of Northeast Arkansas using cultural methods. Arkansas State University <u>Create@state.11</u> May 2013.

- Straitt, N., Reba, M., Dabney, S., Teague, T.G., Bouldin, J.L. 2013. Water Quality Sampling in Arkansas Edge-of-Field Monitoring; Sensors Configuration and Design. Arkansas State University <u>Create@state.11</u> May 2013.
- (*Invited*) **Bouldin, J.L.** 2013. The Cache River Bottomland Hardwood Forests -Indicators of Wetland Water Quality. University of Arkansas Geosciences Colloquium, Fayetteville, AR. 8 March 2013.
- (*Invited*) **Bouldin, J.L.** 2013. Bank stabilization on the Black River. Arkansas Rivers Association meeting, Jonesboro, AR. 20 Feb 2013.
- (*Invited*) **Bouldin, J.L.** and Reba, M.L. 2013. Edge of Field Monitoring for Water Quality and Quantity in Arkansas. Arkansas Soil & Water Education Conference, Jonesboro, AR. 31 Jan 2013.
- Reba, M., M. Daniels, M., Chen, Y., Sharpley, S., Teague, T., Bouldin, J. 2012. A network for monitoring agricultural water quantity and water quality in Arkansas, Eos, Transactions of the American Geophysical Union, Fall Meeting Supplement, Abstract H31G-1204.
- Freyaldenhoven, H.L. and **Bouldin, J.L**. 2012. Food Chain Transfer of Quantum Dots from Primary Producer to Secondary Consumer. Society of Environmental Toxicology and Chemistry, Long Beach, CA, 11-15 November 2012.
- Kennon J.T., Hall, J.M., Bouldin, J.L., Yanowitz, K., Engelken, B.D., Grippo, A.A. 2012. Introducing toxicity testing to mid- to high school level students: a fun teaching activity using Daphnia. Society of Environmental Toxicology and Chemistry, Long Beach, CA, 11-15 November 2012.
- Rosado-Berrios C.A. and **Bouldin J.L**. 2012. Water Quality Monitoring in the Cache River Watershed, Arkansas. Society of Environmental Toxicology and Chemistry, Long Beach, CA, 11-15 November 2012.
- **Bouldin, J.L**., Reba, M.L., Teague, T.G. Sediment and nutrient reduction initiatives in the Arkansas Delta Ecoregion, Society of Environmental Toxicology and Chemistry, Long Beach, CA, 11-15 November 2012.
- Brueggen-Boman, T.R., Bouldin, J.L. 2012. Four year study assessing the effectiveness of BMPS in three upper subwatersheds of the Strawberry River, AR, Fulton Co, USA. Society of Environmental Toxicology and Chemistry, Long Beach, CA, 11-15 November 2012.
- Brueggen, T.R., Bouldin, J.L. 2012. Long Term Data Collection in Three Creeks of the Upper Watershed of the Strawberry River, AR, Fulton Co, USA, to Assess Effectiveness of BMP Implementation. Ozark Summit, Springfield, MO, 12-14 June 2012.
- **Bouldin, J.L**., Wright R.E. 2012. Modeling to Predict Environmental Implications of Corn-Based Ethanol Production. Society of Freshwater Science, Louisville, KY, 20-24 May 2012.
- Brueggen, T.R., Bouldin, J.L. 2012. Compilation of Benthic Macroinvertebrate Collections in the Subwatersheds of the Strawberry River, AR, Prior to Agricultural BMP Implementation. Society of Freshwater Science, Louisville, KY, 20-24 May 2012.
- Brueggen, T.R., Bouldin, J.L. 2012. Investigation of water quality and aquatic habitat in response to Best Management Practice implementation. Arkansas Water Works and Water Environment Association Conference, Hot Springs, AR, April 29-May 2 2012.

- Gilmer, A.M., Rosado-Berrios, C.A., Bouldin, J.L. 2012. Establishing baseline nutrient and sediment input in the Lower Cache River Watershed, AR. The 96th Annual Meeting of the Arkansas Academy of Sciences, Southern Arkansas University, Magnolia, AR, 13-14 April 2012.
- Brueggen, T.R., Bouldin, J.L. 2012. Establishing baseline data in the subwatersheds of the Strawberry River, AR, prior to implementation of agricultural best management practices. The 96th Annual Meeting of the Arkansas Academy of Sciences, Southern Arkansas University, Magnolia, AR, 13-14 April 2012.
- **Bouldin, J.L**., Reba, M.L., Teague, T.G. 2012. Sediment and nutrient reduction initiatives in the Arkansas Delta Ecoregion, National NPS Workshop, Tulsa, OK. 14-17 Oct 2012.
- *(invited)* **Bouldin, J.L.**, Yanowitz, K.L., Miller, C.A., Grippo, A.A., Kennon, J.T. 2012. GK12 Graduate Fellows at Arkansas State University Enhance Science Curriculum in the Arkansas Delta. GK12 Annual Meeting, Washington DC, 16-18 March 2012.
- Reba, M.L., Bouldin, J.L., Teague, T.G., Choate, J.C. 2011. Reducing runoff and nutrient loss from agricultural land in the Lower Mississippi River Basin, Eos, Transactions of the American Geophysical Union, Fall Meeting Supplement, Abstract H41B-1021.
- Wright, R.E., Bingner, R.L., Griffin, T., Bouldin, J.L. 2011. AnnAGNPS Model simulation of sediment and nutrient loss on a Cross County, Arkansas Watershed. Arkansas Crop Protection Association Research Conference, Fayetteville, AR, 28-29 Nov 2011.
- **Bouldin, J.L**., Yu, S. 2011. Detection of morphological changes in *Pseudokirchneriella subcapitata* following exposure to Quantum Dots. Society of Environmental Toxicology and Chemistry, Boston, MA, 13-17 November 2011.
- Brueggen, T.R., Bouldin, J.L. 2011. Three years of continued data collection from three creeks in the upper subwatersheds of the Strawberry River, AR, Fulton Co, USA. Society of Environmental Toxicology and Chemistry, Boston, MA, 13-17 November 2011.
- Choate, J.C., **Bouldin**, J.L., Klasky, J.W.P. 2011. Earthworm behavior in soils with added amendments, various agronomic practices, and a bioenergy crop. Society of Environmental Toxicology and Chemistry, Boston, MA, 13-17 November 2011.
- Grippo A, JT Kennon, J.T., Hall, J.M., Engelken, B.D., Yanowitz, K., Bouldin, J.L. 2011. Creating STEM teachers for Arkansas' future by designing an environmental science outreach activity. Society of Environmental Toxicology and Chemistry, Boston, MA, 13-17 November 2011.
- Brueggen, T.R., **Bouldin, J.L.** 2011. Year three review of water quality monitoring on the Upper Strawberry River Project 07-1000. Arkansas Natural Resource Commission 2011 Task Force Meeting, Little Rock, AR, 21-22 September 2011.
- **Bouldin, J.L.,** Yanowitz, K.L., Miller, C.A., Grippo, A.A., Kennon, J.T. 2011. Enhanced environmental education in middle school classrooms by graduate students in the Arkansas Delta. North American Benthological Society annual meeting. Providence, RI. 22-26 May 2011.
- Warby, R.A.F., **Bouldin, J.L.** 2011. Monitoring of total petroleum hydrocarbons in water column, sediment and biological samples from Barataria Bay, LA. MidSouth

Society of Environmental Toxicology and Chemistry, Jonesboro, AR, 19-20 May 2011.

- Brueggen, T.R. and J.L. Bouldin. 2011. Comparison of three creeks, over two and half years of data collection, in the upper watershed of the Strawberry River, AR, Fulton Co, USA. MidSouth Society of Environmental Toxicology and Chemistry, Jonesboro, AR, 19-20 May 2011.
- Choate, J.C., **Bouldin**, **J.L.**, Klasky, J.W.P. Ecotoxicological assessment of soil amendments and bioenergy crops. MidSouth Society of Environmental Toxicology and Chemistry, Jonesboro, AR, 19-20 May 2011.
- **Bouldin, J.L.,** Yanowitz, K.L., Miller, C.A., Grippo, A.A., Kennon, J.T. 2011. Enhanced environmental education in middle school classrooms by graduate students in the Arkansas Delta. MidSouth Society of Environmental Toxicology and Chemistry, Jonesboro, AR, 19-20 May 2011.
- (*Invited*) **Bouldin, J.L.** 2011. Beyond Biomonitoring. Arkansas Water Works and Water Environmental Association Annual Conference. Hot Springs, AR, 2 May 2011.
- Cooper, R.I., **Bouldin, J.L.,** Warby, R.A.F. 2011. Water quality monitoring of a L'Anguille tributary prior to BMP implementation. Arkansas Waste Water & Water Environment Association. Hot Springs, AR. 2 May 2011.
- **Bouldin, J.L.**, Warby, R.A.F. 2011. Monitoring of total petroleum hydrocarbons in water column, sediment and biological samples from Barataria Bay, LA. SETAC Focused Topic Meeting Gulf Oil Spill. Pensacola, FL, 26-28 April 2011.
- Brueggen, T.R. and Bouldin, J.L. 2011. Assessment of three creeks in the upper watershed of the Strawberry River, AR, Fulton Co, USA. 95th Annual Meeting of the Arkansas Academy of Sciences, University of Arkansas-Monticello, AR, 8-9 April 2011.
- Carter, T. Yu, P., Teague, T.G., Bouldin, J.L. 2011. Water and sediment quality assessment of cotton production. 95th Annual Meeting of the Arkansas Academy of Sciences, University of Arkansas-Monticello, AR, 8-9 April 2011.
- **Bouldin, J.L.,** Grippo, A.A., Kennon, J.T., Miller, C.A., Risch, T., Hall, M. 2011. Land use, land cover, and biodiversity in the Mississippi Embayment. GK12 Annual Meeting, Washington DC. 11-13 March 2011.
- **Bouldin, J.L**., Yanowitz, K.L., Miller, C.A., Grippo, A.A., Kennon, J.T. 2011. Arkansas State University graduate student enhance communication skills and science education in the Arkansas Delta. GK12 Annual Meeting, Washington DC, 11-13 March 2011.
- **Bouldin, J.L.**, Yanowitz, K.L., Miller, C.A., Grippo, A.A., Kennon, J.T. 2010. Pedagogy by graduate students enhance communication skills and science education in the Arkansas Delta. Society of Environmental Toxicology and Chemistry. Portland, OR, 7-11 Nov 2010.
- Yu, P., Brueggen, T.R., Warby, R.A.F., Green, V.S., Bouldin, J.L. 2010. Assessment of water, sediment and soil quality of cotton production management practices. Society of Environmental Toxicology and Chemistry, Portland, OR, 7-11 Nov 2010.
- Brueggen, T.R., Bouldin, J.L. 2010. Biological and chemical assessment of three creeks in the upper watershed of the Strawberry River, AR, Fulton Co, USA. Society of Environmental Toxicology and Chemistry, Portland, OR, 7-11 Nov 2010.

- Vaughan, G.L., Bouldin, J.L., Warby, R.A.F. 2010. Monitoring the long term impacts of the British Petroleum oil spill in Barataria Bay and the Gulf of Mexico for Total Petroleum Hydrocarbons. Society of Environmental Toxicology and Chemistry. Portland, OR, 7-11 Nov 2010.
- Kennon, J. T., Miller, C.A., Hall, J. M., Bouldin, J.L., Lisko, K., White, A. 2010. Environmental Science, inquiry-based activities for the classroom. 2010 Arkansas Curriculum Conference, Arkansas Curriculum Conference Organizations, Little Rock, AR. 4 Nov 2010.
- Vaughan, G.L., Warby, R.A., Bouldin, J.L. 2010. Monitoring the long-term effects of the BP oil spill in Barataria Bay, LA and the Gulf of Mexico. Fall Conference of the AR Chapter of the Wildlife Society. Arkansas State University, Jonesboro, AR, 30 Sept 2010.
- Bouldin, J.L. and Warby, R.A. 2010. Water quality monitoring on Larkin Creek St. Francis County, AR. Arkansas Natural Resource Commission 2010 Task Force Meeting, Little Rock, AR, 21-23 September 2010.
- Brueggen, T.R., **Bouldin, J.L**. 2010. Year two review of water quality monitoring on the Upper Strawberry River Project 07-1000. Arkansas Natural Resource Commission 2010 Task Force Meeting, Little Rock, AR, 21-23 September 2010.
- (*Invited*) **Bouldin, J.L.** 2010. Arkansas a water-rich state. Rotary International. Paragould, AR, 8 Sept 2010.
- Carter, T., Yu, P., **Bouldin, J.L.** 2010. Water and sediment quality assessment of cotton production. 16<sup>th</sup> Annual Judd Hill Field Day, 2 Sept 2010.
- **Bouldin, J.L.,** Sawyer, J.A. 2010. Quantification of change in cellular morphology of *Pseudokirchneriella subcapitata* following Quantum dot exposure. Environmental Effects of Nanoparticles and Nanomaterials. Clemson, NC, 21-26 August 2010.
- **Bouldin, J.L.,** Wright, R.E. 2010. Water quality and quantity implications of biofuel crops. North American Benthological Society annual meeting. Santa Fe, NM, 7-11 June 2010.
- **Bouldin, J.L.,** Wright, R.E. 2010. Water sustainability in biomass production. MidSouth SETAC. Memphis, TN, 20-21 May 2010.
- Brueggen, T.R., J.L. Bouldin. 2010. Assessment of three headwater streams of the Strawberry River, Fulton CO, AR. MidSouth SETAC. Memphis, TN, 20-21 May 2010.
- Brueggen, T.R., Dowling, C.B., **Bouldin, J.L.** 2010. Water quality parameters to assess tributary contribution to the Spring River, AR. MidSouth SETAC. Memphis, TN, 20-21 May 2010.
- Klasky, J.W.P. and **Bouldin, J.L.** 2010. Organic waste materials: Water and soil quality resulting from application to biomass sorghum (*Sorghum bicolor* (L.) Moench) Mid South SETAC. Memphis, TN, 20-21 May 2010.
- (*Invited*) **Bouldin, J.L.** 2010. Water quality and quantity issues in bioenergy Crop production. Arkansas Water Works and Water Environmental Association Annual Conference. Hot Springs, AR, 4 May 2010.
- Klasky, J.W.P. and Bouldin, J.L. 2010. Comparison of water and soil quality from locally-available soil amendments to biomass sorghum (Sorghum bicolor (L.) Moench). Arkansas Water Works and Water Environmental Association Annual Conference. Hot Springs, AR, 3 May 2010.

- Brueggen, T.R., Bouldin, J.L. 2010. A comparison among three waterways in the upper watershed of the Strawberry River, Fulton CO, AR, with current best management practices implementation. The 44<sup>th</sup> Annual Joint Meeting of the North-Central and South-Central Geological Society of America Sections, Branson, MO, 11-13 April 2010.
- Brueggen, T.R., Dowling, C.B., **Bouldin, J.L.** 2010. Chemical analyses to determine tributary contribution to the Spring River, AR. The 94<sup>th</sup> Annual Meeting of the Arkansas Academy of Sciences, University of Little Rock, AR, 9-10 April 2010.
- Little, J., Sappington, D.R., Brueggen, T.R., Bouldin, J.L. 2010. Second year of a multiyear study of the effects of varying crop production treatments on water and sediment quality. The 94<sup>th</sup> Annual Meeting of the Arkansas Academy of Sciences, University of Little Rock, AR, 9-10 April 2010.
- (*Invited seminar*) **Bouldin, J.L.** 2010. Quantum Dot dietary uptake and transfer in aquatic organisms. Presented to the Waterways Experimental Station, US Army Corp of Engineers, Vicksburg, MS, 19 March 2010.
- Little, J, Sappington, D.R., Brueggen, T.R., Bouldin, J.L. 2010. Second year of a multiyear study of the effects of varying crop production treatments on water and sediment quality. The 30th Annual Undergraduate Research Conference, University of Memphis, Memphis, TN, 27 February 2010.
- Sappington, D.R., Brueggen, T.R., Bouldin, J.L., Green, V.S., Shumway, C., Teague, T.G.. 2010. Improving Water Quality with Better Management Practices in Midsouth Cotton. Presentation at the Beltwide Cotton Conference. Reference: 10673. New Orleans, LA, 7 Jan 2010.
- Sappington, D.R., Brueggen, T.R., Teague, T.G., **Bouldin, J.L**. 2009. Improving water quality with better management practices in Midsouth cotton. Presentation at the Arkansas Crop Protection Association Meeting. Fayetteville, AR, 30 Nov 2009.
- Bouldin, J.L., Sappington, D.R., Yanowitz, K.L., Grippo, A.A., Miller, C.A., Kennon, J.T. 2009. Enhancing middle school science education in the Arkansas rural schools by Environmental Sciences and Molecular Biosciences graduate students. Society of Environmental Toxicology and Chemistry Conference, New Orleans, LA, 19-23 Nov 2009.
- Brueggen, T.R., Sappington, D.R., Green, V.S., Teague, T.G., Bouldin, J.L. 2009. Use of best management practices to improve water and sediment quality in an effort toward sustainable cotton production. Society of Environmental Toxicology and Chemistry Conference, New Orleans, LA, 19-23 Nov 2009.
- Sengupta, A., Bouldin, J.L., Ingle, T.M, Leigh, K., Buchanan, R. A. 2009. Quantum Dots: Uptake, bioconcentration and bioaccumulation in standard aquatic test organisms. Society of Environmental Toxicology and Chemistry. New Orleans, LA, 19-23 Nov 2009.
- Klasky, J.W.P. and Bouldin, J.L. 2009. Comparison of water and soil quality from locally-available soil amendments to biomass sorghum (Sorghum bicolor L. Moench). Society of Environmental Toxicology and Chemistry. New Orleans, LA, 19-23 Nov 2009.
- Wright, R.E., Bouldin, J.L. 2009. AGNPS model identifies BMPs to reduce N loading in the Mississippi River Basin. Society of Environmental Toxicology and Chemistry. New Orleans, LA. 19-23 Nov 2009.

- Leigh, K.L., Ingle, T.M, Bouldin, J.L., Buchanan, R. A. 2009. Measurement of uptake and accumulation of seminconductor nanocrystals by *Pimephales promelas*. Society of Environmental Toxicology and Chemistry. New Orleans, LA, 19-23 Nov 2009.
- (*Invited*) **Bouldin, J.L**. and Brueggen, T.R. 2009. Strawberry River. Arkansas River Association Meeting, Jonesboro, AR, 15 Oct 2009.
- **Bouldin, J.L**., and Brueggen, T.R. 2009. Water quality monitoring on the Upper Strawberry River Project 07-1000. Arkansas Natural Resource Commission 2009 Task Force Meeting, Little Rock, AR, 15-17 Sept 2009.
- Little, J, Sappington, D., Brueggen, T.R. and **Bouldin, J.L**. 2009. Year two of a multiyear study on the effects of best management practices on water and sediment. 15<sup>th</sup> Annual Judd Hill Cotton Technology Field Day, Trumann, AR, 3 Sept 2009.
- (*Invited*) **Bouldin, J.L.** 2009. Bioenergy Research at ASU: Water quality and quantity issues. Academy of Certified Hazardous Materials Managers, West Memphis, AR, 4 Aug 2009.
- **Bouldin, J.L**., Ingle, T.M., SenGupta, A., Buchanan, R.A. 2009. Aqueous toxicity, uptake and transfer of QDots in freshwater algae and Ceriodaphnia dubia. The International Conference on the Environmental Implications and Applications of Nanotechnology. Amherst, MA, 9-11 June 2009.
- SenGupta, A., Bouldin, J.L., Ingle, T.M., Buchanan, R.A. 2009. Uptake and distribution of Quantum Dots in *Artemia franciscana* and *Pimephales promelas* and a comparative study of dietary vs. aqueous uptake in *Pimephales promelas*. The International Conference on the Environmental Implications and Applications of Nanotechnology. Amherst, MA, 9-11 June 2009.
- **Bouldin, J.L**., Mundali, I.M. 2009. Measured effects of single and binary pesticide mixtures in laboratory bioassays. North American Benthological Society annual meeting. Grand Rapids, MI, 17-22 May 2009.
- **Bouldin, J.L**., Yanowitz, K.L., Miller, C.A., Grippo, A.A., Kennon J.T., Hall, J.M. 2009. GK12: Environmental sciences and molecular biosciences in the Natural State. GK12 Annual Meeting, Washington DC, 28 March 2009.
- **Bouldin, J.L**., Wilkie, J. 2009. Using GIS technology to evaluate potential park land. Arkansas Recreation & Park Association/ Arkansas Therapeutic Recreation Society Annual Meeting. Paragould, AR, 10 Feb 2009.
- Williams, J.C., Kammler, B.S., Gray, K., Polk, A., Shelton, J.T., Layton, A., Bouldin, J., Dowling, C., Christian A.D., Green, S. 2009. Assessing the impacts of humans on the Tyronza River: An agriculturally dominated watershed. Advancing the Science of Limnology and Oceanography Aquatic Sciences Meeting. Nice, France, 24-30 Jan 2009.
- Brueggen, T.R., Ogendi, G.M., Bouldin, J.L., Green, V.S., Teague, T.G. 2009. Striving toward sustainable cotton production and improved water quality. Cotton Engineering-Systems Conference, Beltwide Cotton Conferences, National Cotton Council of America, Memphis, TN. San Antonio, TX, 5-8 Jan 2009.
- Woodruff, T., Bouldin, J.L., Green, S. 2008. Soil enzyme activity in response to management practices in a forested ecosystem. SETAC North America National Meeting. Tampa, FL, 16-20 Nov 2008.

- Wright, R.E., Bouldin, J.L. 2008. Using BMPs to reduce environmental consequences of corn-based ethanol production. SETAC North America National Meeting. Tampa, FL, 16-20 Nov 2008.
- Mundali, I.M., **Bouldin, J.L**. 2008. Determination of acute toxicity endpoints of atrazine and lambda cyhalothrin exposed to *Ceriodaphnia dubia* and *Pimephales promelas*. Society of Environmental Toxicology and Chemistry. Tampa, FL, 16-20 Nov 2008.
- Ogendi, G. M., Green, V. S, **Bouldin, J.L**., and Trujillo, E. 2008. Effects of residue burning on soil carbon and soil biological activity in a wheat-soybean doublecropping system. Society of Environmental Toxicology and Chemistry. Tampa, FL, 16-20 Nov 2008.
- Gopalan, M.B., Bouldin, J.L., Farris, J.L. 2008. Biomonitoring in the edge of field drainage ditches to assess farm-scale impacts and environmental performance of integrated cotton farm practices. SETAC North America National Meeting. Tampa, FL, 16-20 Nov 2008.
- **Bouldin, J.L**., Conrad, J.M., Inlander, E.M., Gallipeau, C.G., Wilkie, J. 2008. Identification of priority conservation areas using GIS and habitat assessments. SETAC North America National Meeting. Tampa, FL, 16-20 Nov 2008.
- Sengupta, A., Bouldin, J.L., Ingle, T.M, Buchanan, R. A. 2008. Uptake and distribution of Quantum Dots in *Artemia franciscana* and *Pimephales promelas* and a comparative study of dietary vs aqueous uptake in *Pimephales promelas*. Society of Environmental Toxicology and Chemistry. Tampa, FL, 16-20 Nov 2008.
- Bouldin, J.L., Ingle, T.M., SenGupta, A., Alexander, R., Hannigan, R.E., Buchanan, R.A. 2008. Aqueous toxicity and food chain transfer of quantum dots<sup>™</sup> in freshwater algae and *Ceriodaphnia dubia*. Proceedings of the 3<sup>rd</sup> Annual BioNanoTox Research Conference. Little Rock, AR, 23-24 Oct 2008.
- SenGupta, A., Bouldin, J.L., Ingle, T.M., Buchanan, R.A. 2008. Uptake and distribution of Quantum Dots in *Artemia franciscana* and *Pimephales promelas* and a comparative study of dietary vs aqueous uptake in *Pimephales promelas*. Proceedings of the 3<sup>rd</sup> Annual BioNanoTox Research Conference. Little Rock, AR, 23-24 Oct 2008.
- Ogendi, G.M., Green, S.V., **Bouldin, J.L**., Trujillo, E. 2008. Biological activity in a wheat-soybean double-cropping system. Soil Science Society of America Annual Conference. Houston, TX, 5-9 Oct 2008.
- Kammler, B.S., Gray, K., Layton, A., Polk, A., Shelton, J., Williams, J., Bouldin, J.L., Dowling, C., Green, V.S., Christian, A.D. 2008. Assessing the impact of humans on the Tyronza River: An agriculturally dominated watershed. Southwest Regional ACS Meeting. Little Rock, AR, 1-4 Oct 2008.
- (Invited) Bouldin, J.L. 2008. WET testing methodology for wastewater treatment managers. Arkansas Water Environment Association Specialty Conference. Heber Springs, AR, 25-26 Sept 2008.
- **Bouldin, J.L**., Gilbert, E., Guha, G.S., Stewart, P.A., Stroud, H., Christian, A.D. 2008. A community survey and study of mosquito abatement for Jonesboro, AR. SENCER Summer Institute. Santa Clara, CA, 8-11 August 2008.
- (Invited) Bouldin, J.L. 2008. Identification of priority conservation areas in Craighead County, AR for the Jonesboro Parks and Recreation Commission. Jonesboro Parks Commission and City Council, 25 July 2008.

- Bouldin, J.L., Ingle, T.M., SenGupta, A., Alexander, R., Hannigan, R.E., Buchanan, R.A. 2008. Aqueous toxicity and food chain transfer of fluorescent nanocrystals in freshwater algae and *Ceriodaphnia dubia*. North American Benthological Society annual meeting. Salt Lake City, UT, 25-30 May 2008.
- Mundali, I.M., Bouldin, J.L., Seagraves, S.E., Green, V.S., Farris, J.L. 2008. Acute toxicity of atrazine and lambda-cyhalothrin to aquatic organisms and hydroponic uptake by *Juncus effusus* and *Ludwigia peploides*. National Environmental Studies and Science Summit, Arkansas State University, 22-26 May 2008.
- Woodruff, T.M., Green, V.S., Bouldin, J.L., Angima, S.A. 2008. Determination of Soil Enzyme Activity in Response to Management Practices in a Forested Ecosystem. MidSouth Society of Environmental Toxicology and Chemistry. Vicksburg, MS, 14-16 May 2008.
- Wright, R.E., Bouldin, J.L. 2008. Farm level environmental implications of corn-based ethanol production. MidSouth Society of Environmental Toxicology and Chemistry. Vicksburg, MS, 14-16 May 2008.
- Bouldin, J.L., Ingle, T.M., SenGupta, A., Alexander, R., Hannigan, R.E., Buchanan, R.A. 2008. Food chain transfer and aqueous toxicity of Quantum Dots. MidSouth Society of Environmental Toxicology & Chemistry annual meeting. Vicksburg, MS, 14-16 May 2008.
- Mundali, I.M., Bouldin, J.L., Seagraves, S.E., Green, V.S., Farris, J.L. 2008. Aqueous toxicity of lambda cyhalothrin and atrazine to aquatic organisms and hydroponic uptake by *Juncus effusus* and Ludwigia peploides. Society of Environmental Toxicology & Chemistry annual meeting, Vicksburg, MS, 14-16, May, 2008.
- (*Invited*) **Bouldin, J.L**. Water resources: local and global issues. Arkansas Water Works and Water Environmental Association Annual Conference. Hot Springs, AR, 29 April 2008.
- Ingle, T.M., **Bouldin, J.L.**, Buchanan, R.A. 2008. Nanoparticles and our Environment. Arkansas Water Works and Water Environmental Association Annual Conference. Hot Springs, AR, 28 April 2008.
- Mundali, I.M., Bouldin, J.L., Seagraves, S.E., Green, V.S., Farris, J.L. 2008. Uptake of lambda cyhalothrin and atrazine by aquatic macrophytes in a laboratory hydroponic exposure. Geological Society of America South-Central Section -42nd Annual Meeting, Hot Springs, AR, 30 March-1 April 2008.
- Bouldin, J. L., Ingle, T.M., Cox, L.O., Buchanan, R.A., Hannigan, R.E. 2007. Toxicological Effects of Nanoparticles as Measured with Standard Laboratory Biomonitoring. Society of Environmental Toxicology and Chemistry. Milwaukee, WI, 11-15 Nov 2007.
- **Bouldin, J.L.,** Wren, P.S., Green, V.S., Baker, W.H. 2007. Laboratory Simulation to determine Potential Toxicity of a Polyacrylamide. Society of Environmental Toxicology and Chemistry. Milwaukee, WI, 11-15 Nov 2007.
- Mundali, I.M, Bouldin, J.L., Seagraves, S.E., Green, V.S., Farris, J.L. 2007. Uptake of lambda cyhalothrin and atrazine by aquatic macrophytes in a laboratory hydroponic exposure. Society of Environmental Toxicology and Chemistry abstracts, p. 275. Milwaukee, WI, 11-15 Nov 2007.
- Gopalan, M. B., **Bouldin,** J.L., Farris, J.L. 2007. Use of Aqueous Biomonitoring of Field Drainage Ditches as a Tool to Assess the Environmental Performance of

Integrated Farm Practices. Society of Environmental Toxicology and Chemistry. Milwaukee, WI, 11-15 Nov 2007.

- **Bouldin, J.L**., Green, V.S., Horn, B.S., Baker, W.H., Woodruff, T.M. 2007. Groundwater Quality and use at Judd Hill Plantation. Judd Hill Field Day, 30 Aug 2007.
- **Bouldin, J.L**., Green, V.S., Wren, P.S., Krauth, D.M., Baker, W.H. 2007. Laboratory validation of Polyacrylamide Soil Additive to Reduce Agricultural-Associated Contamination. Judd Hill Field Day. 30 Aug 2007.
- (*Invited*) **Bouldin, J.L**. 2007. Water Resource Protection. Academy of Certified Hazardous Materials Managers, West Memphis, AR, 8 May 2007.
- (Invited) Bouldin, J.L. 2007. Water Issues. Jonesboro Exchange Club, 30 March 2007.
- **Bouldin, J.L**., Ingle, T.M., Cox, L.O., Buchanan, R.A., Hannigan, R.E. 2007. Use of Standard Laboratory Biomonitoring to Measure Toxicological Effects of Nanoparticles. North American Benthological Society. Charlotte, NC.
- Ingle T, Alexander, R., Hannigan R, Buchanan R and **Bouldin, J.L**., 2007. Detection, Measurement and Toxicology of Semiconductor Nanocrystals in *Ceriodaphnia dubia*. Proceedings of NSTI Nanotechnology, Santa Clara, CA.
- (*Invited*) **Bouldin, J.L**. 2007. Water Quality Local and Global Issues. MidSouth Society of Environmental Toxicology and Chemistry. Nashville, TN. 24 May 2007.
- Mundali, I.M., Bouldin, J.L., Seagraves, S.E., Green, V.S., Farris, J.L. 2007. Uptake of Lambda-cyhalothrin and Atrazine by Aquatic Macrophytes in a Laboratory Hydroponic Exposure. MidSouth Society of Environmental Toxicology and Chemistry. Nashville, TN. 23 May 2007.
- Bouldin, J.L., Ingle, T.M., Cox, L.O., Buchanan, R.A., Hannigan, R.E. 2007. Use of Standard Laboratory Biomonitoring to Measure Toxicological Effects of Nanoparticles. MidSouth Society of Environmental Toxicology and Chemistry. Nashville, TN. 23 May 2007.
- Krauth, D.M., Bouldin, J.L., Green, V.S., Baker, W.H., Wren, P.S. 2007. Field Use of a Polyacrylamide to Reduce Agricultural Associated Contamination. National Conference of Undergraduate Research, Dominican University of California, San Rafael, CA, 13 April 2007.
- Krauth, D.M., Bouldin, J.L., Green, V.S., Baker, W.H., Wren, P.S. 2007. Comparison of Field Use and Laboratory Simulation of Polyacrylamide to Reduce Agricultural Associated Contamination. New England Science Symposium, Harvard Medical School, Boston, MA, 2 March 2007.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2007. Macrophyte uptake of atrazine and lambda-cyhalothrin in hydroponic laboratory exposures. Annual Arkansas Soil and Water Education Conference. Jonesboro, AR.
- Gopalan, M. B., Bouldin, J.L., Farris, J.L. 2006. Use of Biomonitoring at Farm-scale to Formulate and Assess the Impacts of Improved Cotton Farming Practices upon Reduction of Ecological Risk. An International Perspective on Environmental and Water Resources. New Delhi, India, 19 December 2006.
- **Bouldin, J.L.,** Ingle, T.M., Cox, L.O., Stirrat, J.M., Buchanan, R.A., Hannigan, R.A., 2006. Toxicological Effects of Nanoparticles as Measured With Standard Laboratory Biomonitoring. Society of Environmental Toxicology and Chemistry. Montreal, Canada.

- Gopalan, M.B., Farris, J.L., **Bouldin, J.L**. 2006. Assessing ecological risk of improved management practices at a farm-scale using laboratory biomonitoring. Society of Environmental Toxicology and Chemistry. Montreal, Canada.
- Krauth, D.M., **Bouldin, J.L**., Green, V.S., Baker, W.H., Wren, P.S. 2006. Comparison of Field Use and Laboratory Simulation of Polyacrylamide to Reduce Agricultural Associated Contamination. Society for the Advancement of Chicano and Native Americans in Science Annual Meeting. Tampa, FL.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Stephens, W.W., Cooper, C.M. 2006. Evaluated fate and effects of atrazine and lambda-cyhalothrin in vegetated and unvegetated microcosms. North American Benthological Society annual meeting. Anchorage, AK.
- Ingle, T., Alexander, R., Bouldin, J., Farris, J., Buchanan, R. Absorption of semiconductor nanocrystals by the aquatic invertebrate *Ceriodaphnia dubia*. 2006. MidSouth Society of Environmental Toxicology and Chemistry, Jonesboro, AR.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Stephens, W.W., Cooper, C.M. 2006. Microcosm evaluation of the fate and effects of atrazine and lambdacyhalothrin in unvegetated and vegetated monocultures. MidSouth Society of Environmental Toxicology and Chemistry, Jonesboro, AR.
- Gopalan, M.B., Farris, J.L., **Bouldin, J.L.** 2006. Use of biomonitoring at farm-scale to assess the impact of farm practices on reduction of ecological risk. MidSouth Society of Environmental Toxicology and Chemistry, Jonesboro, AR.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2005. Atrazine and lambda-cyhalothrin uptake in aquatic macrophytes during hydroponic laboratory exposures. Society of Environmental Toxicology and Chemistry. Baltimore, MD.
- Buchanan, R., Bouldin, J., Cramer, C., Dolan, M., Farris, J., Hannigan, R., Sirvatsan, M. 2005. Nanotechnology: Environmental toxicology, detection and diagnostic design. Arkansas EPSCoR Meeting, Little Rock, AR.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2005. Hydroponic uptake of atrazine and lambda-cyhalothrin in aquatic macrophytes. North American Benthological Society annual meeting. New Orleans, LA.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2005. Macrophyte uptake of atrazine and lambda-cyhalothrin in hydroponic laboratory exposures. MidSouth Society of Environmental Toxicology and Chemistry. Carbondale, IL.
- Hudson, T.C., Farris, J.L., Bouldin, J.L., Stephens, W.W., Armstead, M.Y. 2005.Impact and recovery of a coal slurry spill in Appalachian streams. MidSouth Society of Environmental Toxicology and Chemistry. Carbondale, IL.
- Hudson, T.C., Farris, J.L., Bouldin, J.L., Stephens, W.W., Armstead, M.Y. 2005. Evaluation of a spilled coal slurry for impact and recovery in Appalachian streams. Arkansas Water Works & Water Environment Association. Hot Springs, AR.
- Bouldin, J.L., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2005. Evaluating toxicity of diazinon in agricultural associated runoff through constructed wetlands. 6<sup>th</sup> Annual Arkansas Soil and Water Education Conference. Jonesboro, AR.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2004. Laboratory biomonitoring and *in situ* biomarkers for the evaluation of diazinon toxicity in

constructed wetlands. 4<sup>th</sup> World Congress, Society of Environmental Toxicology and Chemistry. Portland, OR.

- Stephens, W.W., Moore, M.T., Farris, J.L., Bouldin, J.L., Cooper, C.M. Accounting for regional specific attributes in the bioassessment of wadeable agricultural drainage systems from the deltas of Arkansas and Mississippi. 4<sup>th</sup> World Congress, Society of Environmental Toxicology and Chemistry. Portland, OR.
- **Bouldin, J.L.,** Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2004. Evaluating toxicity of diazinon in agricultural associated runoff through constructed wetlands North American Benthological Society annual meeting. Vancouver, BC.
- **Bouldin, J.L**., Bickford, N.A., Stroud, B., Guha, G. 2004. Irrigation options for best management practices benefit/cost analysis, resource conservation, and ecological benefits. MidSouth Regional Society of Environmental Toxicology and Chemistry Society annual meeting. Oxford, MS.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2004. Evaluation of diazinon toxicity in constructed wetlands with *in-situ* sublethal biomarkers and laboratory biomonitoring. MidSouth Regional Society of Environmental Toxicology and Chemistry Society annual meeting. Oxford, MS.
- Phillips, G.C., Farris, J.L., Shumway, C.R., Bouldin, J.L. 2004. The Confluence of Agricultural Production and Environmental Impacts in the Mid-South Region: Need for Coordinated Research Programs. MidSouth Regional Society of Environmental Toxicology and Chemistry Society annual meeting. Oxford, MS.
- Stephens, W.W., Moore, M.T., Farris, J.L., Bouldin, J.L., Cooper, C.M. 2004. Considerations for assessments of wadeable drainage systems in the agriculturally dominated deltas of Arkansas and Mississippi. MidSouth Regional Society of Environmental Toxicology and Chemistry Society.
- **Bouldin, J.L**., Bickford, N.A., Stroud, B., Guha, G. 2004. Tailwater recovery systems for irrigation benefit/cost analysis and water resource conservation technique in Northeast Arkansas. Arkansas Geographical Society spring meeting. Jonesboro, AR.
- **Bouldin, J.L**., Bickford, N.A., Stroud, B., Guha, G. 2004. Tailwater recovery systems for irrigation as water resource conservation technique in Northeast Arkansas. Arkansas Academy of Science 88<sup>th</sup> Annual meeting. Jonesboro, AR.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Cooper, C.M. 2004. Vegetative and structural characteristics of agricultural drainages in the Mississippi Delta landscape. 5<sup>th</sup> Annual Arkansas Soil and Water Education Conference. Jonesboro, AR.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Cooper, C.M. 2003. Vegetative and structural characteristics of agricultural drainages in the Mississippi Delta landscape. Platform session. Society of Environmental Toxicology and Chemistry. Austin, TX.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Cooper, C.M. 2003. Vegetative and structural characteristics of agricultural drainages in the Mississippi Delta landscape. Society of Environmental Toxicology and Chemistry. Austin, TX.
- Harriott, N., Farris, J.L., Bouldin, J.L., Abanda, P.A. 2003. Soil Type and Vegetation Influence on Pesticide Retention in Wetland Ditches. Society for the Advancement of Chicano and Native Americans in Science Annual Meeting. Albuquerque, NM.

- **Bouldin, J.L.,** Farris, J.L., Moore, M.T., Cooper, C.M. 2003. Physical and vegetative characteristics of agricultural drainages in the Mississippi Delta landscape. MidSouth Regional Society of Environmental Toxicology and Chemistry Society annual meeting. Nashville, TN.
- **Bouldin, J.L**., Farris, J.L., Moore, M.T., Cooper, C.M. 2003. Physical and vegetative characteristics of agricultural drainages in the Mississippi Delta landscape. North American Benthological Society annual meeting. Athens, GA.
- McCallum, M.L., Trauth, S.E., Klotz, T.L., Stephens, W., Bouldin, J., Wheeler, B.A., Gillespie, K., Feldman, D. 2003. A three-year study on wood frog deaths in the Arkansas Ozarks. 87<sup>th</sup> Annual Meeting of the Arkansas Academy of Science. Fayetteville, AR.
- **Bouldin, J.L**., Farris, J.L., Milam, C.D. 2002. Application of instream biomonitoring to a watershed assessment in Northwest Arkansas. Society of Environmental Toxicology and Chemistry. Salt Lake City, UT.
- Bouldin J.L., Farris, J.L., Moore, M.T., Smith, S. Jr, Hendley, P., Milam, C.D., Cooper, C.M. 2002. Evaluating fate and effects of atrazine and lambda-cyhalothrin in vegetated and unvegetated ditch mesocosms. Society of Environmental Toxicology and Chemistry. Salt Lake City, UT.
- Milam, C.D., Sheuerman, P., Farris, J.L., McBride, A., **Bouldin, J.L**. 2002. Characterization of sediment associated microbial enzyme activity from agricultural drainage systems. Society of Environmental Toxicology and Chemistry. Salt Lake City, UT.
- **Bouldin, J.L**., Milam, C.D., Farris, J.L. 2002. Application of instream biomonitoring to a watershed assessment in Northwest Arkansas. Arkansas Environmental Federation. Hot Springs, AR.
- **Bouldin, J.L**., Milam, C.D., Farris, J.L. 2002. Utilization of Asian clam (*Corbicula fluminea*) as part of a watershed assessment. Arkansas Watershed Advisory Group, Little Rock, AR.
- **Bouldin, J.L**., Milam, C.D., Farris, J.L. 2002. Application of instream biomonitoring to a watershed assessment in Northwest Arkansas. Arkansas Water Works & Water Environment Association. Hot Springs, AR.
- **Bouldin, J.L**., Milam, C.D., Farris, J.L. 2002. Application of instream biomonitoring to a watershed assessment in Northwest Arkansas. MidSouth Regional Society of Environmental Toxicology and Chemistry. Vicksburg, MS.
- Bouldin, J.L., Milam, C.D., Farris, J.L, Moore, M.T., Smith, S. Jr., Cooper, C.M. 2002. Effects of esfenvalerate on aquatic and sediment dwelling organisms in agricultural ditch mesocosms. 4<sup>th</sup> Annual Arkansas Soil and Water Education Conference. Jonesboro, AR.
- **Bouldin, J.L**., Milam, C.D., Farris, J.L, Moore, M.T., Smith, S. Jr., Cooper, C.M. 2001. Effects of esfenvalerate on aquatic and sediment dwelling organisms in agricultural ditch mesocosms. Society of Environmental Toxicology and Chemistry. Baltimore, MD.
- Milam, C.D., Bouldin, J.L., Schulz, R.L., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2001. Methyl parathion effects to aquatic organisms following a simulated storm event in constructed wetland mesocosms. Society of Environmental Toxicology and Chemistry. Baltimore, MD.

- Schulz, R.L., Bennett, E.R., Milam, C.D., Bouldin, J.L., Farris, J.L., Smith, S. Jr., Cooper, C.M. 2001. Methyl-parathion effects on macroinvertebrates in vegetated and unvegetated wetland mesocosms. Society of Environmental Toxicology and Chemistry. Baltimore, MD.
- **Bouldin, J.L**., Milam, C.D., Farris, J.L, Moore, M.T., Smith, S. Jr., Cooper, C.M. 2001. Function of agricultural ditches in minimizing non-point pollution. Arkansas Water Works & Water Environment Association. Hot Springs, AR.
- Bouldin, J.L., Milam, C.D., Farris, J.L, Moore, M.T., Smith, S. Jr., Cooper, C.M. 2001. Evaluating toxicity of Asana XL (esfenvalerate) amendments in agricultural ditch mesocosms. MidSouth Regional Society of Environmental Toxicology and Chemistry. Jonesboro, AR.
- Milam, C.D., Bouldin, J.L., Schulz, R.L., Farris, J.L., Moore, M.T., Smith, S. Jr., Cooper, C.M. 2001. Evaluating toxicity of methyl parathion application in constructed wetland mesocosms. North American Benthological Society annual meeting. Lacrosse, WI.
- Bouldin, J.L., Milam, C.D., Farris, J.L, Moore, M.T., Smith, S. Jr., Cooper, C.M. 2001. Evaluating toxicity of Asana XL (esfenvalerate) amendments in agricultural ditch mesocosms. North American Benthological Society annual meeting. Lacrosse, WI.

### CONSULTING

Macroinvertebrate Biological Assessment (Pre-dam Removal) of 2.4km section of West Fork White River, Fayetteville, AR. Spring and Fall 2021. City of Fayetteville in collaboration with Watershed Conservation Resource Center.

Macroinvertebrate Biological Assessment of Little Sugar Creek in Bentonville Park (Post-restoration) Fall 2020. Watershed Conservation Resource Center, Fayetteville, AR. Investigation of fecal contamination of runoff. Spring 2019 - Fall 2020.

Oxford vs. Reeks legal consulting for R. Bryant Marshall.

Macroinvertebrate Biological Assessment of Little Sugar Creek in Bentonville Park - Fall 2018 & Spring 2019. Watershed Conservation Resource Center, Fayetteville, AR Bioassessment for Niokaska Creek at Sweetbriar Park. Watershed Conservation Resource Center, City of Fayetteville, AR. 2013.

Sediment Bioaccumulation and Uptake Study in *Corbicula fluminea*. US Army Corp of Engineers, Vicksburg, MS. 2007 - 2014.

Bayou Macon Mollusk Survey, McGee, Arkansas. HNTB Corporation, Kansas City, MO. 2004.

Mussel and Water Conditions on Fort Chaffee Military Training Center, Arkansas. Engineering-Environmental Management, Inc. (E<sup>2</sup>M). 2004.

Mussel and Water Conditions on Fort Chaffee Military Training Center. Parson's Engineering Science Inc. 2002-2003.

Mussel and Water Conditions on Robinson Maneuver Training Center, Arkansas. Parson's Engineering Science Inc. 2002-2003.

Organism collection (*Corbicula fluminea*) for Ridolfi, Inc. Seattle, WA. 2001, 2003. Biomonitoring utilizing *Corbicula fluminea* for City of Rogers, AR Urban Watershed Management Plan. 2001-2002. Fish community assessment of the Tug Fork River, Kentucky, post coal sludge impact for Potesta and Associates, Inc. Fish electroshocking (backpack and boat), identification, and age/growth analyses. 2001-2004.

#### **CURRENT MENTORSHIP**

Ph.D. Environmental Sciences Graduate Program, Arkansas State University –
Karimot Shobowale – advisor
Brittany Singleton – advisor
Lynda Miller – advisor
Jonathan Stanley – advisor
M.S. Environmental Sciences Graduate Program, Arkansas State University –
Patrick Dyer – advisor
Jae Chester – advisor
Nadine Straitt – graduate committee
M.S. Biology, Arkansas State University –
Rainee DeRoin - advisor
Nicholas Craddock – advisor
Todd Bright – graduate committee
J. Phillip Stewart – graduate committee
M.A. Department of Biological Sciences

M.S. College of Agriculture, Arkansas State University -

### **GRADUATES / PAST ADVISEES**

*Ph.D. Environmental Sciences Graduate Program, Arkansas State University* – **Amelia Atwell** – 2022 – Assessment of Water Quality, Fish Diversity, and Lead (Pb) in the Agriculturally Dominated Upper Cache River Watershed, Arkansas.

**Carlos Rosado-Berrios** – 2018 – Water Quality Assessment of the Lower Cache and the Bayou DeView Rivers, Arkansas: An Assessment of Nutrients, Sediment, Lead, and Acute Toxicity of Acephate and Thiamethoxam.

**Mary K. Kilmer** – 2017 – Water Quality of the Cache River Watershed Arkansas: contributions of Agricultural Activity in Sub-watersheds to Nutrient, Sediment and Lead (Pb) Contamination and Potential Toxicity Implications to Aquatic Organisms.

**Rodney E. Wright** – 2015 – Economic and Environmental Modeling of an Agricultural Watershed in the Mississippi Delta: Crop Selection Using an LP Model and Water Quality Impacts of Bioenergy Crops Using the AnnAGNPS Model.

**Teresa Ruth Brueggen-Boman** – 2012 – Effect of Implementing Best Management Practices on Water and Habitat Quality in the Upper Strawberry River Watershed, Fulton County, Arkansas, USA.

M.S. Environmental Sciences Graduate Program, Arkansas State University –

**Victoria Lydy** – 2022 – Comparing the Toxicant Responses and Culturing Characteristics of Long-Term Laboratory-Reared and Field Populations of *Ceriodaphnia dubia*.

Andressa Alves Augusto – 2020 – Tributary Effects on Water Quality and Fish Assemblages in the Strawberry River, Arkansas.

Amber Ruby – 2020 – Water Quality and Amphibian Ecoimmunology Assessment in the Bayou DeView Watershed, Arkansas.

**Emma R. Martin** – 2019 - Understanding the Impact of Vegetation on Water Quality and Biodiversity in Northeast Arkansas Agricultural Ditches

**Marla A. Moland** – 2017 - Assessment of Sediment Runoff Analysis Methods in the Arkansas Delta Ecoregion – MS Practicum

**Jacob R. McCauley** – 2017 - Evaluation of Cadmium Bioaccumulation of Periphyton and Aquatic Invertebrates within Tributaries of the Buffalo National River.

**Molly Kennon-Lacy** – 2016 – Water Quality Monitoring at impaired sites on the Cache River, AR, USA

**Carlos Rosado-Berrios** – 2015 – Water Quality Assessment of the Lower Cache River Watershed

**Mary K. Kilmer** – 2015 - Water Quality of the Cache River Arkansas: Impairments and Implications for Toxicity.

**Sarah K. Vogt** – 2015 – Agricultural Conservation Practice Effectiveness: Impacts Measured in the Outlet Larkin Creek Watershed in Northeastern Arkansas.

**Jennifer M. Cobb** – 2013 – Macroinvertebrates as bioindictors of water quality in the wetlands of the Cache River Watershed, AR.

**Teresa Ruth Brueggen** – 2010 – Assessment of Water and Sediment Quality Following Implementation of Best Management Practices (BMPs) in the Upper Strawberry River Watershed, Fulton CO, AR, USA

Anindita SenGupta – 2009 – Quantum Dots: Uptake, bioconcentration, bioaccumulation and gene response profiles in aquatic test organisms.

**George Mokua Ogendi** – co-advisor – 2009 – Sediment and runoff toxicity on *Pimephales promelas, Ceriodaphnia dubia* and *Chironomus tentans* 

**Rodney E. Wright** – 2008 – Environmental and Economic Implications of the Biofuel Provisions of "*The Energy Independence and Security Act of 2007*" on Mississippi Delta Farms

**Irene Mundali** –2008– Determination of Acute Toxicity Endpoints and Hydroponic Uptake of Lambda-Cyhalothrin and Atrazine by Aquatic Macrophytes *M.S. Department of Biological Sciences–* 

**Rainee DeRoin**–2023–Characterizing Effects of Non-Point Runoff on Subwatersheds of the Middle White River in Arkansas.

**Anna Marie Pieri** – 2022 – Evaluating the Potential Effect of Nitrogen and Toxicological Responses of Juvenile Freshwater Mussels (Bivalvia: Unionidae) in the Buffalo National River.

**Irene Sanchez-Gonzalez** – 2018 – Water Quality and Freshwater Mussel Assemblages in the Strawberry River Watershed, Arkansas.

**Heather M. DeMali** – 2014 – The Effects of Parasites, Metals and Environmental Conditions on Spotted Salamander (Ambystoma maculatum) Populations Breeding in Northern Arkansas

**John Wesley Phillip Klasky** – 2010 – Comparison of Water and Soil Quality from Locally-Available Soil Amendments to Biomass Sorghum *(Sorghum bicolor (L.) Moench)* 

M.S. Molecular Biosciences Graduate Program

**Kenton Leigh** – 2016 – Characterizing the Effects of Accumulated Nanoparticles on Living Organisms

M.A. Department of Biological Sciences

**Ukobong Epke** – 2018 – Assessing Water Quality of St. Francis and Little River Watersheds in the Arkansas Delta Ecoregion **Peng Yu** – 2011 – Assessment of Water and Sediment Quality in Cotton Production Management Systems and Agricultural Runoff Change in the Context of Climate Change M.S. Department of Chemistry & Physics – Tracy Woodruff – 2009 – The Use of Soil Enzyme Activities and Active Carbon as Indicators of Soil Quality in Response to Management Practices Graduate committees: Ph.D. Molecular Biosciences Graduate Program, Arkansas State University -Muhsin Aydin – graduate committee – graduated 2014 Cesar A. Nopo-Olazabal – graduate committee – graduated 2013 Taylor Ingle – graduate committee – graduated 2012 M.S. Environmental Sciences Graduate Program Robert R. Clark - graduate committee - graduated 2021 David R.L. Burge – graduate committee – graduated 2014 Meghan Foard – graduate committee – graduated 2014 Harneet Kaur – graduate committee – graduated 2013 Deborah Leslie - graduate committee - graduated 2008 Jaimie Conrad – graduate committee – graduated 2008 Sheryl Greenway – graduate committee – graduated 2006 M.S. College of Agriculture – Joshua Byrd - graduate committee - graduated 2019 Rakesh Awale - graduate committee - graduated 2010 Jane M. Khatenjeachando - graduate committee - graduated 2010 Brad Horn – graduate committee – graduated 2008 Monica Acre - graduate committee - graduated 2007 Joshua Dunn – graduate committee – graduated 2007 M.S. Department of Biological Sciences Bryan Reiley – graduate committee – graduated 2012 Amanda White – graduate committee – graduated 2011 Sarah Webb – graduate committee – graduated 2010 John Konvolina – graduate committee – graduated 2016 M.A. Department of Chemistry & Physics – Chenoa Summers - graduate committee - graduated 2014 M.S. Department of Chemistry & Physics – Jerome Stegall – graduate committee – graduated 2008 Felicia Jackson - graduate committee - graduated 2007 Undergraduate Honors Kinley Davenport – honors advisor – "Sunscreen Toxicity of Freshwater Organisms Ceriodaphnia dubia and Pimephales promelas" - graduated 2010 Stephanie Whitmore – honors committee – graduated 2008 M.S. Biology, University of Central Arkansas – Ram Pandey – graduated 2010 *Ronald E. McNair undergraduate scholar* Alisha Gilmer – graduated 2012 Summer Internship Undergraduates – Claire Roarty, 2014

REU (RISE) Summer Internship Undergraduates –

Harriott, Nichelle, 2003 Bernadette Guerra, 2004 David Krauth, 2006 Eliana Trujillo, 2007 Amber Hunt, 2007 Teresa Brueggen, 2008 Jacob Little, 2009 Tiffany Carter, 2010

NSFGEO (ARISE) Summer Internship Undergraduates – 2008: Keisha Gray, Barbara Kammler, Ashleigh Layton, Amias Polk, James Shelton, Jeremy Williams 2009: Jerry Tharp, Aaron Weaver, James Evan Davidson, Chven Mitchell, Molly Brown, Bloom Harris, Keisha Gray, Keisha Person, Paul Hogan, Kristopher White

#### Mentee awards:

<u>Patrick Dyer.</u> January 2023. 1<sup>st</sup> place MS Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Rainee DeRoin.</u> January 2023. 2<sup>nd</sup> place MS Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Karimot Shobowale</u>. January 2023. 3<sup>rd</sup> place PhD Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Victoria Lydy.</u> 1<sup>st</sup> place MS Platform Presentation. SETAC North America 43<sup>rd</sup> Annual Meeting. Pittsburgh, PA. 13-17 November 2022.

<u>Amelia Atwell.</u> 1<sup>st</sup> place PhD Poster Presentation. SETAC North America 42<sup>nd</sup> Annual meeting (SciCon4 virtual). 14-18 Nov 2021.

<u>Lily Ann Fox.</u> January 2022. 1<sup>st</sup> place Undergraduate Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Victoria Lydy</u>. January 2022. 2<sup>nd</sup> place MS Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Rainee DeRoin.</u> January 2022. 3<sup>rd</sup> place MS Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Amelia Atwell.</u> January 2022. 1<sup>st</sup> place PhD Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

Brittany Singleton. January 2022. 3<sup>rd</sup> place PhD Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Anna Pieri</u>. January 2021. 1<sup>st</sup> place MS Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Nicholas Craddock</u>. January 2021. 3<sup>rd</sup> place MS Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

Brittany Singleton. January 2021. 1<sup>st</sup> place PhD Student Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Amelia Atwell</u>. January 2021. 2<sup>nd</sup> place PhD Student Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Amelia Atwell</u>. November 2020. 1<sup>st</sup> in the Best Student Presentation Award competition Foster Sonny Mayer PhD Poster category. SciCon2 SETAC virtual conference.

<u>Amelia Atwell</u>. February 2020. Honorable mention Platform Presentation. Southern Division American Fisheries Society.

Andressa Alves Augusto. March 2020. 1st place Poster Presentation Young Environmental Scientist conference. Waco, TX. Kinley Davenport. January 2020. 2nd place Undergraduate Student Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR. Andressa Alves Augusto. January 2020. 3<sup>rd</sup> place Masters Student Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR. Amelia Atwell. January 2020. 2<sup>nd</sup> place PhD Student Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR. Brittany Singleton. 3rd place PhD Student Poster Presentation. Arkansas Soil and Water Education Conference, Jonesboro, AR. Amelia Atwell. May 2019. 1<sup>st</sup> Place MidSouth Student Platform Presentation. Ozark Prairie and Mid-South SETAC Joint Regional Meeting, St. Louis, MO. Andressa Alves Augusto. May 2019. 1<sup>st</sup> Place MidSouth Student Poster Presentation. Ozark Prairie and Mid-South SETAC Joint Regional Meeting, St. Louis, MO. Amelia Atwell. April 2019. 1st Place Student Poster Presentation. Arkansas Water Works and Water Environmental Association Conference, Hot Springs, AR. Justine Chester. April 2019. 2<sup>nd</sup> Place Student Poster Presentation. Arkansas Water Works and Water Environmental Association Conference, Hot Springs, AR. Andressa Alves Augusto. April 2019. 3rd Place Student Poster Presentation. Arkansas Water Works and Water Environmental Association Conference. Hot Springs, AR. Emma Martin. February 2019. Arkansas Chapter A-State American Fisheries Society Subunit 2018 Outstanding Member. Arkansas State AFS Meeting, Hot Springs, AR Amelia Atwell. January 2019. 1st Place Ph.D. Student Poster Presentation Arkansas Soil and Water Education Conference, Jonesboro, AR. Amber Ruby-Spence. January 2019. 2<sup>nd</sup> Place Ph.D. Student Poster Presentation Arkansas Soil and Water Education Conference, Jonesboro, AR. Emma Martin. Aug 2018 – May 2019. Randy Thurman Environmental Scholarship Arkansas Environmental Federation. Hot Springs, AR. Emma Martin. May 2018. 1<sup>st</sup> place student presentation, Arkansas Wastewater and Waterworks Association, Hot Springs, AR. Amber Ruby-Spence. May 2018. 1<sup>st</sup> place student presentation, Arkansas Wastewater and Waterworks Association, Hot Springs, AR. Emma Martin. January 2018. 1<sup>st</sup> Place in Poster Competition at Arkansas Soil and Water Conference, Jonesboro, AR. Irene Sanchez Gonzalez. January 2017. 2<sup>nd</sup> place graduate student presentation, Arkansas Soil & Water Education Conference, Jonesboro, AR. Shelby Chappell. May 2016. 1st place student presentation, Arkansas Wastewater and Waterworks Association, Hot Springs, AR. Jacob McCauley. May 2016. 2<sup>nd</sup> place student presentation, Arkansas Wastewater and Waterworks Association, Hot Springs, AR. Sarah Vogt. June 2015. 1<sup>st</sup> place graduate student presentation, MidSouth Society of Environmental Toxicology & Chemistry, Vicksburg, MS.

<u>Kilmer, Mary K</u>. June 2015. 2<sup>nd</sup> place graduate student presentation, MidSouth Society of Environmental Toxicology & Chemistry, Vicksburg, MS.

<u>Rosado-Berrios, Carlos A.</u> June 2015. Honorable mention graduate student presentation, MidSouth Society of Environmental Toxicology & Chemistry, Vicksburg, MS. <u>Chappell, Shelby</u>. June 2015. Honorable mention undergraduate student presentation, MidSouth Society of Environmental Toxicology & Chemistry, Vicksburg, MS.

<u>Kilmer, Mary K</u>. April 2015. 1<sup>st</sup> place student presentation, Arkansas Wastewater and Waterworks Association, Hot Springs, AR.

Kennon, Molly. April 2015. 2<sup>nd</sup> place student presentation, Arkansas Wastewater and Waterworks Association. Hot Springs, AR.

<u>Kilmer, Mary K</u>. April 2015. Best biology oral presentation, Arkansas Academy of Sciences, Arkadelphia, AR.

<u>Kilmer, Mary K</u>. April 2015. 1<sup>st</sup> place graduate oral presentation. Environmental Science/Agriculture category. Create @ StAte A Symposium of Research, Scholarship & Creativity, Jonesboro, AR.

<u>Chappell, Shelby</u>. April 2015. 1<sup>st</sup> place undergraduate oral presentation. Environment and Life Science category. Create @ StAte A Symposium of Research, Scholarship & Creativity, Jonesboro, AR.

<u>Vogt, Sarah</u>. Jan 2015. 1<sup>st</sup> place poster presentation, M.S. category. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>McCauley</u>, Jacob. Jan 2015. 2<sup>nd</sup> place poster presentation, M.S. category. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Chappell, Shelby</u>. Jan 2015. 1<sup>st</sup> place poster presentation, Undergraduate category. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Kilmer, Mary K</u>. Jan 2015. 1<sup>st</sup> place poster presentation, Ph.D. category. Arkansas Soil and Water Education Conference, Jonesboro, AR.

<u>Poe, Nicole</u>. April 2014. Create @ StAte A Symposium of Research, Scholarship & Creativity, Jonesboro, AR.

Winner: 1<sup>st</sup> Place Winner for Science, Technology, Engineering & Mathematics Winner: Best Overall Oral Presentation in Biological Sciences

<u>Kilmer, Mary K</u>. April 2014. 1st place graduate oral presentation. Agriculture and Environmental Science category. Create @ StAte A Symposium of Research, Scholarship & Creativity, Jonesboro, AR. Winner – Best Overall Graduate Oral

Presentation

<u>Poe, Nicole</u>. Jan 2014. 1<sup>st</sup> prize in master's level competition (as an undergraduate). Arkansas Soil and Water Conference, Jonesboro, AR.

# TEACHING

ENVR 6303 - Aquatic Ecotoxicology

BIOL 3023 - Principles of Ecology

BIOL 3023 - Principles of Ecology Honors

\*ESCI 6303 - Global Water Issues (cross listed as AGRI 6303)

BIOL 4391 - Special Problems in Biology

Past team teaching activities -

ESCI 6131/7131 - Environmental Sciences Core III Curriculum

ESCI 6931 - Wetland Delineation (cross listed as AGRI 6931)

ESCI 6132 - Wetland Evaluation (cross listed as AGRI 6382)

ENVR 6003 - Aquatic Ecotoxicology

ESCI 7121 - Phytoremediation

AGRI 4223 - Agriculture and the Environment

ESCI 6133/7133 - Environmental Sciences Core I Curriculum

ESCI 6133/7133 - Environmental Sciences core II Curriculum

MBS 7123 - Molecular Biosciences Topical Seminar (Ecotoxicology) \*new class development

#### **Developmental Courses, Outreach and Workshops Taught**

STEM Leadership Camp outreach presentation, Freshwater mussels. 28 June 2023. Girls in STEM outreach presentation, Freshwater mussels.15 June 2023.

- How to Become Employed in Environmental Toxicology and Chemistry: Resumes, Interviewing, Networking. Society of Environmental Toxicology & Chemistry 43<sup>rd</sup> Annual Meeting. Pittsburgh, PA. Norberg-King, T., **Bouldin, J.L.**, Conners, K. 13Nov 2022.
- How to Become Employed in Environmental Toxicology and Chemistry: Resumes, Interviewing, Networking. Society of Environmental Toxicology & Chemistry Annual Meeting (SciCon2). Norberg-King, T., **Bouldin, J.L.**, Conners, K., 13 Nov 2020.
- How to Become Employed in Environmental Toxicology and Chemistry: Resumes, Interviewing, Networking. Society of Environmental Toxicology & Chemistry Annual Meeting (SciCon2). Norberg-King, T., **Bouldin, J.L.**, Conners, K., Schlekat, T. 13 Nov 2020.
- Fox Meadows 6<sup>th</sup> grade Ms. Krystal Phillips. One fish two fish protecting our waters. Class presentations, hands-on activities and demonstrations for 6 class periods. 16-17 Sept 2019
- Girls in STEM Summer Program. Aquatic Toxicology and Biodiversity workshops. Arkansas Museum of Science, 25 June 2019.
- Girls in STEM Summer Program. Aquatic Toxicology and Biodiversity workshops. Arkansas Museum of Science, 7 July 2018.
- STEM Leadership Conference for Girls. Aquatic Toxicology workshop. East Arkansas Community College, Forrest City, AR. Given by the ASU Delta STEM Education Center. 8 Dec 2016.
- STEM Leadership Conference for Girls. Aquatic Toxicology workshop. ASU West Memphis, West Memphis, AR. Given by the ASU Delta STEM Education Center. 20 Nov 2015.
- UofA Nonpoint Source Pollution Seminar, Arkansas State University, Jonesboro, AR 15 Oct 2015.
- Verizon STEM Leadership Conference. Aquatic Toxicology workshop. Arkansas State University, Jonesboro, AR, 10 July 2015.
- STEM Leadership Conference for Girls. Aquatic Toxicology workshop. East Arkansas Community College, Forrest City, AR. Given by the ASU Delta STEM Education Center. 25 April 2015.
- STEM Leadership Conference for Girls. Aquatic Toxicology workshop. Arkansas State University, Jonesboro, AR. Given by the ASU Delta STEM Education Center. 11 April 2015.
- Job Skills Workshop A Practical Approach to Finding Employment and Career Opportunities in Environmental Toxicology and Chemistry. Society of Environmental Toxicology & Chemistry Annual Meeting. Norberg-King, T., Bouldin, J.L., Gillespie, W.B. Vancouver, BC 10 Nov 2014

- Job Skills Workshop A Practical Approach to Finding Employment and Career Opportunities in Environmental Toxicology and Chemistry. Society of Environmental Toxicology & Chemistry Annual Meeting. Norberg-King, T., Bouldin, J.L., Gillespie, W.B. Boston, MA, 12 Nov 2011
- WET Testing Workshop taught at the District Meeting Lab Specialty Class for the Northwest District of the AR Water Works and Water Environment Association. Eureka Springs, AR, 20 Oct 2010.
- Workshop for area teachers Quantum Dots and aquatic test organisms. 26-27 July, 26 Sept 2010.
- WET Testing Workshop for Waste Water Treatment and Water Managers, ASU Ecotoxicology Research Facility. 15-18 May 2007; 18-19 October 2007; 28-29 February 2008; 27 August 2008; 29-30 June 2010.
- Sciences Coaches Academy, ASU. Ecotoxicology Research Facility, Water Quality, Water Issues, and Aqueous Toxicity Techniques. 5 Nov 2009.
- *(Invited)* Understanding the Ecology of Ecotoxicology in Benthic Research Applications: Applying the Ecology of Ecotoxicology to Benthic Research. **Bouldin, J.L.**, Kashian, D.R., Clements, W.H. North American Benthological Society annual meeting. Grand Rapids, MI. 17 May 2009.
- Science Doing & Dialogue SD-2 (Jonesboro Public School No Child Left Behind Grant) Water Quality, Water Issues, Aqueous Toxicity Techniques. March - May 2007; October - December, 2007. April – June 2008.
- Midge Identification Workshop, ASU, Professional and student participation. 14 participants. 14 March 2008.

Wetland Delineation, Arkansas State University, May 2006.

Teaching the Teachers, MidSouth SETAC, University of Mississippi, May 2004.

### DEVELOPMENTAL COURSES ATTENDED

Nutrient Criteria Development Mini-Workshop, ADEQ, Little Rock, AR. 14 March 2012 Ecology & Economics of Restoration Scaling – Workshop SETAC, Tampa, FL. Nov 15, 2008.

Nanoparticles and Nanotoxicology, MidSouth Society of Environmental Toxicology & Chemistry, Vicksburg, MS. May 14, 2008.

Nanomaterials: Environmental Implications and Applications - Workshop SETAC, Milwaukee, WI. Nov 11, 2007

Noncancer & Cancer Risk Assessment – Workshop MidSouth SETAC, Nashville, TN. May 22, 2007

Constructed Wetlands - Workshop MidSouth SETAC, ASU. May 24, 2006

Sources of GIS Information on the Web and Working with ArcView 9.0 – Arkansas State University, 2005

A Toolbox of Techniques to Generate Data for Ecological Risk Assessment:

Characteristics, Cost and Case Studies - Workshop SETAC, 2004

Evaluating Causes of Biological Impairment - Workshop NABS, 2004

Assessing Ecological Risk at the Watershed Scale: Principles, Tools, and Considerations - Workshop SETAC, 2003

Frog Embryo Teratogenesis Assay-Xenopus (Fetax) - Workshop ASU, 2003 Managing Multiple Priorities, 2003

Biotic Ligand Model for Aquatic Toxicity - Workshop MidSouth SETAC, 2002

Total Maximum Daily Loads (TMDLs) - Workshop MidSouth SETAC, 2002 Quantification of Aquatic Exposure Potential: Runoff Studies using Simulated Rainfall as Research and Regulatory Tools – Workshop SETAC, 2001 Whole Effluent Toxicity – Workshop SETAC, 2000 Advanced Management Program – Arkansas State University, 1998

## SERVICE

#### Science Advisory Councils:

Mississippi River Embayment Regional Ground Water Study, 2006 – 2010 City of Jonesboro, AR Urban Forestry Assessment, 2007 – 2012

AR Rivers Association, 2008 – 2015.

#### **Department & University Service:**

Provost search committee member – Spring/Summer 2019. Aquatic Toxicologist/Environmental Sciences search committee member – Fall 2018-

Summer 2019.

Department of Biological Sciences – Chair of Aquatic Ecologist search committee – 2013-2014.

ASU Earth Day Events (Chair) – 2008 – present

College Grievance Committee (Chair) – 2011–2021

EVS Program Committee – 2010 – 2021

ASU Wellness Council – 2011 – 2000

Department of Biological Sciences Department Chair search committee – 2009 – 2011 College of Engineering Search Committee – Civil Engineer, 2009

Graduate Program Committee – Department of Biological Sciences, 2006 – 2014

Arkansas Soil and Water Education Conference Committee – 2008 – 2022

Girls of Promise outreach to middle school girls – workshop on water issues, 2006, 2007, 2012

ASU Petting Zoo - 2006, 2007, 2008

College of Engineering Search Committee - Civil Engineer, 2005, 2008

Mentor - (NSF grant-' Research Experience for Undergraduates') Mentor 2006, 2007, 2008, 2009, 2010

Collaborative research (NSF grant-' Research Experience for Undergraduates') with student from Morgan State University, Baltimore, MD. 2003

### Local/state/regional/national Service:

Co-chair of technical session: Adapting Techniques and Approach of Standard Toxicity Test Methods to Atypical Ambient, Effluent, and Other Sample Types. SETAC SciCon4 virtual meeting 18 Nov 2021.

Panel discussion: Multiple Stressors. SETAC SciCon4 virtual meeting 16 Nov 2021. Co-chair of technical session Whole Effluent Toxicity (WET): Applications of and Developments in WET and Ambient Testing at SETAC SciCon2 virtual meeting 17 Nov 2020.

Arkansas Conservation Partnership – represent A-State in a multiagency partnership, 2019-present

SETAC North America planning committee – chair of student activities – 2020. Arkansas Nutrient Reduction Strategy Committee (2017-2020)

Board of Directors - Society of Environmental Toxicology and Chemistry North America (SETAC NA), 2015-2018.

Executive Board of Directors - Society of Environmental Toxicology and Chemistry North America (SETAC NA), 2016-2017.

Editorial Board – Bulletin of Environmental Toxicology & Chemistry, 2012-present SETAC North America planning and abstract review committees – 2009, 2014.

Institutional Biosafety Committee member – Clopton Clinic Hematology and Oncology June 2009 – 2011.

AR Department of Environmental Quality Wastewater Licensing Board, 2007 – 2014 Chair, workgroup for wastewater licensing test review

SETAC North America Student Activities Committee, 2002-2014

Women in Technology and Science (WITS) outreach to elementary age girls-workshop on aquatic toxicology, 2002, 2003, 2005

Girls of Promise – outreach workshop on aquatic resources and toxicology, 2007, 2008, 2012

Science Fair - Jennifer Hannah (Nettleton, AR Middle School), 2007, 2008, 2009

Science Fair – Lillie Pitts (Jonesboro AR Jr. High School), 2009, 2010

Science Fair – Caitlin Farris (Nettleton, AR High School), 2002

### PROFESSIONAL ORGANIZATIONS AND AFFILIATIONS

Society of Environmental Toxicology and Chemistry (SETAC) 2000 – present Student activities committee – 2002 - 2014

SETAC Mid-South Chapter, 2001 – present

President, 2006

Treasurer, 2002–2005

Secretary-Treasurer, 2001, 2002

Regional Chapter Board, 2010 – 2011; 2018 - present

SETAC Mid-South Student Chapter 2001-2004

Treasurer, 2001-2004

Society of Freshwater Science (formally: North American Benthological Society), 2001present

American Association for the Advancement of Sciences, 2004–2007

American Society of Clinical Pathologists

American Association of Blood Banks

American Society for Clinical Laboratory Science

Arkansas Society for Clinical Laboratory Science-Board of Directors, 1986–1987

# **ACTIVITIES: CONFERENCES/COMMITTEES/BOARDS**

SETAC North America Board of Directors, 2015-2018.
SETAC North America Executive Board, 2016-2017.
Soil and Water Conservation Society 72<sup>nd</sup> International Annual Conference, Madison, WI. 30 July – 2 August 2017.
Fayetteville Shale Symposium, Fort Smith, AR. 20-12 March 2012
National Science Foundation Workshop, Little Rock, AR, 2011
Society of Environmental Toxicology and Chemistry Annual Meeting, 2000-2022
MidSouth Society of Environmental Toxicology and Chemistry, 2001-2008, 2011, 2015-2019.
Environmental Effects of Nanoparticles and Nanomaterials, 2010

Society of Freshwater Science (formerly North American Benthological Society) Annual Meeting, 2001, 2003-2013, 2015. Arkansas Water Works & Water Environment Association, 2001, 2002, 2005 - 2022 Arkansas Soil and Water Education Conference, 1999, 2000, 2002-2004, 2006 - 2018 USDA ARS - It's Your Water! Conference, St. Louis, MO. 2 March 2010 Environmental Studies and Sciences Summit, 2007, 2008 Arkansas Water Conference, 2006 Arkansas Water Resources Center Annual Conference, 2001-2003, 2005, 2007, 2014 Arkansas Academy of Science 88th Annual meeting, 2004, 2012 Arkansas Geographical Society spring meeting, 2004 National Science Foundation Workshop, 2004 NSF GK-12 PI Workshop, 2009 - 2012 Arkansas Environmental Federation Conference, 2000, 2001, 2002 Society of Environmental Toxicology and Chemistry Student Activities Committee, 2002-2014. Planning Committee for Environmental Studies and Sciences Summit, 2008 Planning Committee for MidSouth SETAC Regional meeting. 2006-2007 Arkansas Soil & Water Education Conference steering committee. 2007-present Western Greene County Fire District Board and Chair, 1995-present

## REFERENCES

Available upon request.

### CERTIFICATIONS

CPR /First Aid, American Heart Association

AED (automatic external defibrillation), American Heart Association Medical Technologist, American Society of Clinical Pathologist (MT, ASCP) Specialist in Blood Banking (SBB), American Association of Blood Banks