

Arkansas Water Resources Center

2021

Annual Summary

2021 HIGHLIGHTS

7
publications



10
students
supported



5
research
projects
funded by us



approximately
\$410,000
in external
funding



460
eNewsletter
subscribers



922
Facebook
followers



over
3,400
ScholarWorks
downloads



27,600
analytes
measured



Digital
outreach to
stay connected
during COVID



We have helped local, state, and federal agencies address our water challenges for 56 years.

We succeed in this effort through robust research and water quality monitoring, education and training outreach, and information transfer to stakeholders throughout the State and region.

Photo credit: Floating the Buffalo River, June 2021, by Lillie Haddock.



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2021 104(b) FUNDED PROJECTS

We funded five research projects, including three faculty proposals, one project that supplemented graduate student research, and one in-house research study.

Development of a diffusive gradients in thin-films passive sampler for drinking water disinfection by-products, Samuel Hodges & Dr. Julian Fairey, Dept. of Civil Engineering, University of Arkansas

Demonstration of Photocatalytic Net for In Situ Harmful Algal Bloom Mitigation, Drs. Wen Zhang & Lauren Greenlee, Dept. of Civil Engineering, University of Arkansas, Dept. of Chemical Engineering, University of Arkansas

Elucidating the Fate and Implication of SARS-CoV-2 in Domestic Wastewater, Dr. Wen Zhang, Dept. of Civil Engineering, University of Arkansas

Why and When does Microcystin Exceed Recreational Guidelines at Lake Fayetteville?, Dr. Brian E. Haggard, Dr. Bradley J. Austin, and Erin Grantz, Arkansas Water Resources Center, University of Arkansas

Quantifying bypass flow in terra rosa soils: implications for groundwater and stream contamination, Drs. Sheela Katuwal, Amanda J. Ashworth, Phillip Owens, & Kristofor R. Brye, Dept. of Poultry Science, University of Arkansas, USDA-ARS-Poultry Production and Product Safety Research Unit, USDA-ARS Dale Bumpers Small Farms Research Center, Dept. of Crop, Soil, and Environmental Sciences, University of Arkansas



STUDENT TRAINING



Hourly Student Research Assistants

We supported two undergraduate students from the University of Arkansas as summer research assistants. Kyrie Potter and Spencer Briggs, Biological and Agricultural Engineering majors, gained valuable experience working in the AWRC's water quality lab and assisting with field work. We also employ and train undergraduate assistants in our lab each semester.

Honors Engineering Research

AWRC Director Brian Haggard mentored three undergraduate students from the University of Arkansas Biological and Agricultural Engineering Department on their honors thesis research. The students explored research questions around water quality and quantity that are of interest to the citizens of Arkansas and beyond.