In 2013, the AWRC introduced an electronic newsletter to share information about current projects, events, faculty and students. “We created the electronic newsletter as an outlet to share information with our stakeholders,” said Tara Johnson, graduate assistant at the Arkansas Water Resources Center. “We have a lot going on at the AWRC and needed a way to disseminate that information in a concise, easy to read format.”

If you’d like more information, or if you’d like to receive the e-newsletter, please contact our graduate assistant, Tara Johnson, at tijohnso@email.uark.edu.

In 2013, five projects were funded by the Arkansas Water Resources Center. These projects supported the research of six faculty and also one post-doctoral researcher while providing research experience for numerous graduate and undergraduate students.

“At the end of every year we like to look back and see what we have accomplished,” said Brian Haggard, director of the Arkansas Water Resources Center.

Current projects focus on: the sources of nitrosamine precursors in drinking water treatment, how climate change may influence algal biomass and total organic carbon in water supply reservoirs, and also how quenching sediment oxygen demand may improve water quality, among others.

“We look forward to continuing to fund research that addresses our state’s water resource issues and enhances our understanding in 2014,” said Haggard.

In addition to funding the 104B projects, the AWRC also sponsored symposiums, held a conference, held a three-day Ecological Design Workshop and Charette, and hired two new staff members.
The Arkansas Water Resources Center funded five projects selected through external peer review by the Technical Advisory Committee in 2013, including:

**Fecal Source Characterization in Select 303(d) listed Streams in the Illinois River Watershed with Elevated Levels of Escherichia coli**, Dr. Kristen Gibson, Food Science Department, University of Arkansas

**Economics of On-farm Reservoirs across the Arkansas Delta Region: A Conjunctive Management Approach to preserving Groundwater and Water Quality**, Dr. Kent Kavacs, Agricultural Economics and Agribusiness Department, University of Arkansas

**Assessing Sources of Nitrosamine Precursors in Drinking Water Treatment Plants**, Drs. Wen Zhang and Julian Fairey, Civil Engineering Department, University of Arkansas

**Improving Surface Water Quality by Reducing Sediment Oxygen Demand and Removing Nutrients**, Dr. Scott Osborn, Agricultural and Biological Engineering Department, University of Arkansas

The funded research addresses our congressional authorized mission, as well as promotes the national mission and objectives of the U.S. Geological Survey focused on providing water quality and quantity information, understanding water availability, addressing the influence of climate on water resources, and responding to water-related emerging needs.

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**Eco Logical Design Workshop in the Ozarks**

The best ecological designs are usually the product of collaborative, multidisciplinary teams. Engineers, landscape architects, other designers and planners, ecologists, and other scientists each make important contributions, but draw on different perspectives, speak different languages, and evaluate success by different criteria.

Students, landscape architects, engineers, water quality specialists, ecologists, and other interested individuals spent three days learning, brainstorming and designing together May 15-17, 2013 at the Ecological Design in the Ozarks workshop and charrette.

A charrette is a short-term, intensive design process. Typically, a charrette will involve collaborative design work by small multidisciplinary groups, who then present their work to the full group to generate further discussion and innovation. They focused on a multipurpose future for Lake Frances, exploring solutions to improve water quality, supply, and use. Lake Frances is located on the Illinois River, at the Oklahoma-Arkansas border, in the contentious Illinois River watershed. The Illinois River has been the focus of stakeholder issues and lawsuits between the states and other entities for many years.

The State of Arkansas monitors water quality upstream from Lake Frances and the State of Oklahoma monitors downstream. Lake Frances is a water-quality transformer and the purpose of the Ecological Design in the Ozarks event was to brainstorm and design proposals for the future of Lake Frances.

Design teams were mixed groups of students and professionals with a variety of backgrounds and expertise. Each team developed their own integrated proposal for Lake Frances, which included enhanced recreational opportunities.

Phosphorus mitigation was a general focus across the teams, and remedy strategies included multi-purpose wetlands as well as chemical (alum) treatment.

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**2013 Annual Conference**

Approximately 120 researchers, students and stakeholders attended the conference. More than 25 posters and projects were presented during three sessions.

“We look forward to this conference each year and can’t wait for 2014’s conference,” said Haggard.

The 2014 conference theme is Watersheds, Water Words and Wicked Problems.
The Arkansas Water Resources Center has hired a new project manager, Erin Scott, to oversee current projects with governmental and non-governmental organizations.

“I couldn’t be more excited about this opportunity. I love exploring water resource issues and the position puts me right in the middle of it,” said Erin Scott.

Scott’s primary responsibility will be to manage every aspect of the Arkansas Water Resources Center’s current projects from database organization to report preparation.

“The project manager is an integral part of the Arkansas Water Resources Center team. Erin’s role keeps us organized, on-task and informed about all of our projects. We are excited to welcome her into this position,” said Brian Haggard, director of the Arkansas Water Resources Center.

The Arkansas Water Resources Center has started a partnership with the University of Arkansas’ Department of Agricultural Education, Communications and Technology (AECT) to assess and improve communications initiatives. Leslie Edgar, an associate professor in the AECT department and a graduate student, Tara Johnson, are working on the project.

“I couldn’t be more excited to be working with the Arkansas Water Resources Center to assess and improve their communications plan,” said Tara Johnson.

The AWRC and the Cooperative Extension Service have funded a year-long assistantship for Johnson during which she will be conducting research for her master’s thesis and providing communications expertise.

“This opportunity could not have come at a more perfect time in my graduate career! I am so thankful for the opportunity to be funded and doing research that excites me and challenges me,” said Johnson.