



Image caption: Brad Austin, postdoctoral research associate, conducts a sediment experiment using cores collected from a lake. Austin works under the guidance of Center director, Brian Haggard.

Introduction to the Arkansas Bulletin of Water Research (*reprint*)

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Introduction

There is a lot of research being done in Arkansas that can provide valuable information to water stakeholders throughout the State. The research itself can come with a multitude of challenges, and sometimes what to do with that information can be even more difficult. But, sharing research results with the public is tantamount to the research itself.

The Arkansas Bulletin of Water Research was developed to provide an outlet for researchers to communicate project findings that might not be published in national or international journals, yet is extremely important to stakeholders in Arkansas. Further, this bulletin is designed to allow research to be disseminated in an easily searchable and aesthetically engaging way. The contents of this bulletin can be used to guide management decisions about water resources in Arkansas and the region.

Articles in this bulletin will inform the reader not only in the context of the research details, but especially in why such research is important to Arkansas. How can the research be used to address water problems for Arkansas? Can the research results be broadened to address water issues important in the region, and even the country?

Who Should Submit Articles?

The submission of papers to this bulletin is appropriate for topics related to water resources by anyone conducting water research or investigations in Arkansas. This includes but is not limited to university and student researchers, consulting firms, watershed groups, and other agencies.

Review Procedures

Papers will be reviewed by the editors of the Bulletin. The editors might send papers out for external reviews as needed; external reviews may become standard procedure for all papers in the future. The editors and or external reviewers will determine if the paper should be published with minor revisions, revised and resubmitted, or rejected. The editors will provide a written review with comments. The author will be expected to address comments in the paper and in a response to reviewer comments.

What Should the Paper Include?

The aim of this bulletin is to communicate applied research findings that people of various specialties can understand. Therefore, papers should be written in a relatively casual way, like a conversation with the reader.

“The most important rule: write for the busy reader who is easily distracted.” This statement comes from a great reference on scientific writing,

Griffies, S.M., W.A. Perrie, and G. Hull. *Elements of Style for Writing Scientific Journal Articles*. 2013. Elsevier.

Another nice reference on scientific writing is,

Mackay, R.J. *Writing Readable Papers: How to Tell a Good Story*. Reprinted from the *Bulletin of the North American Benthological Society* 12(3):381-388; 1995.

Papers should be less than 2,500 words from the introduction through the conclusions and recommendations (not counting title, abstract, key points, references, or figure and table captions). Refer to the website arkansas-water-center.uark.edu to see style and formatting guidelines. The following sections should be included in submitted papers.

Title

Short Title

A title of 90 characters or less (including spaces).

Author Information

Include author first and last name, affiliation, and department of affiliation (if applicable). Also, identify the corresponding author if there is more than one author.

Abstract

In 250 words or less, summarize the report. Include the basic problem, why it's important to Arkansas, what's the research question, what's the objective(s) of the research, brief description of methods, specific results, and conclusions or recommendations to water managers.

Key Points

Include 3 to 5 bulleted statements of 25 words or less that concisely describe the overall importance, applicability, or impacts of the research.

Introduction

This is where you really get to capture the reader's attention and set up the story you're about to tell. The introduction should start fairly broadly by describing the general topic and problem. References to the literature should be used to describe what's already known about the topic, but also to show what the knowledge gap is that your research will address.

As you convey the basic facts and importance of the topic, the introduction should start to narrow focus to a more specific problem, location, or mechanism. This should then lead to specific objectives and hypotheses. This is also a great

time to emphasize to the reader how the research can be applied by others...what's the big impact? How might this work be used by water resource specialists in Arkansas and perhaps around the region and country?

The introduction should be 3 to 5 paragraphs, each of 3 to 5 sentences.

Methods

The methods should provide adequate detail about the project such that someone else could repeat it. Include information about the study design, location or site description, sampling procedure, data collection, laboratory analyses, and statistical analyses.

Results and Discussion

What were the major or important findings that help to answer your research question? Be sure to include tables, figures, and statistical results. How do you interpret these findings, and how do they fit or not fit into the existing body of knowledge?

Conclusions

What do you want the reader to take away? What are your recommendations to water resource specialists? What are the benefits to Arkansas; also the region and the country, if applicable? This is the section where you should emphasize how your research can be applied by others to address pressing water problems in Arkansas.

Acknowledgements

This section allows you to recognize funding support and other assistance. It's also a place to include any disclaimers on behalf of your funding support if applicable.

References

Advice to Authors

Some scientists are great communicators, and some scientists struggle with how to convey information to the public. The goal of this bulletin is to provide information that's easy for people to understand who are from a range of disciplines. The writing should be interesting and conversational, and complex jargon should be left out.

This bulletin is designed to be a valuable resource to water specialists who have to make some tough decisions on how to address our most pressing water resource problems. It will also provide valuable reference material for current and future researchers focused on water issues in Arkansas. As you are writing the paper, frequently ask yourself, “how can results of this work help stakeholders in Arkansas.”