2010 Request for Proposals in Water Research

Oklahoma Water Resources Research Institute

The OWRRI invites proposals for water research from any Oklahoma research university. The focus again this year is research in support of strategic water planning; however, proposals on any water-related topic are welcome.

Funding: Awards are typically $50,000. OWRRI's funding will be matched equally by the Oklahoma Water Resources Board. Therefore, the applicant needs to provide only a 1:2 match. For example, a research grant totaling $75,000 would be funded with $25,000 from OWRRI, $25,000 from OWRB, and $25,000 match. Indirect costs must be waived but are credited toward the match. Uncompensated investigator time may also be counted toward the match.

Timing: Grants will be awarded to support one-year projects. Longer projects must be divided into discrete one-year proposals with distinct deliverables. Projects will start March 1, 2010 and should be completed by February 28, 2011.

Deadline: Proposals must reach the OWRRI office on or before Sunday, October 25, 2009.

Water Research Topics for 2010

The topics listed on the next page were identified by the Water Research Advisory Board (WRAB) as priorities for funding. The WRAB is comprised of leaders from twenty-four government agencies and non-government organizations interested in water science and policy. OWRRI expects to fund three research projects that exhibit scientific merit (as judged by peer reviewers) and answer questions important to updating Oklahoma's Comprehensive Water Plan. For more information about Oklahoma's comprehensive water planning effort, see http://okwaterplan.info.

Seven research topics were judged by the WRAB as higher priority and seven as lower priority but still worth funding. Proposals need not address all aspects of a topic; any project that advances our knowledge toward the stated goal will be considered. These priorities are not intended to be exclusive, but serve as a guide to understanding the thinking of the WRAB about the research needs of Oklahoma. Researchers who are unsure if their intended project aligns with these topics should contact the OWRRI for clarification. **Proposals that do not match these priorities are also welcome and will be given full consideration.**

The WRAB will review proposals in January 2010 and recommend three for funding. Proposers may be invited to make a brief presentation of their proposal at that time. Notification of the successful proposals will be sent out soon thereafter.

For more information and application guidelines, visit http://environ.okstate.edu/owrri/project_funding.asp
or contact Mike Langston, Assistant Director, OWRRI
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Water Research Funding Priorities for 2010

Higher Priority Research Topics

- Develop/improve methods for estimating minimum in-stream (environmental) flows for Oklahoma streams
- Develop/improve methods for accurately estimating evapotranspiration using remote sensing data that are of practical value to local resource managers
- Develop and/or revise models that quantify alluvial ground–surface water interaction to improve their accuracy, applicability, and ease of use in Oklahoma
- Assess the economic value of current and potential future agricultural water conservation methods in Oklahoma
- Develop an improved model for estimating sediment yield in reservoirs
- Develop best-use practices for flowback water in horizontal drilling of unconventional (shale) oil and gas reservoirs
- Assess (e.g., location, frequency, volume) current wastewater reuse practices, opportunities for the expansion of current practices, and feasibility of adoption of new practices in municipal, agricultural, oil and gas, and other sectors

Lower Priority Research Topics

- Conduct an assessment of the risk of emerging contaminants (pharmaceuticals, pesticides, hormones, etc.) in wastewater treatment plant effluents to human health and the environment
- Develop methods for the control of invasive species transported through inter-basin transfer of water in Oklahoma
- Quantify the relative contribution to stream and lake eutrophication from the subsurface transport of nutrients in alluvial aquifers
- Develop and improve decision support models for evaluating alternative water supply infrastructure scenarios
- Develop bacteriological indicators for use in identifying sources of contamination in public water supplies and primary body contact waters
- Develop and test an optimization model that prioritizes upland flood control impoundments that could be modified to provide public water supply and irrigation water
- Quantify the economic value of recreation and tourism at lakes and streams in Oklahoma (other than Lake Tenkiller, which has already been assessed)

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