



P.O. Box 9680  
Mississippi State, MS 39762  
[www.wrri.msstate.edu](http://www.wrri.msstate.edu)

## MEMORANDUM

**TO:** Deans, Directors, and Department Heads  
Principal Investigators and Other Researchers  
Mississippi Water Resources Research Institute Advisory Council

**FROM:** George Hopper, Dean and Director

**SUBJECT:** RFP, 2009 Annual Competitive Grants Program

**DATE:** August 1, 2008

The Institute is issuing its request for proposals (RFP) for the research year beginning March 1, 2009. This year's RFP is being issued before we receive formal notification of funding from the U.S. Geological Survey headquarters; therefore, while we do not anticipate any significant changes to the program's terms, conditions, deadlines or availability of funds, awards will be contingent upon available funding. You will be notified immediately of any significant changes. The deadline for receiving the proposal is October 31, 2008. Please email one electronic proposal copy (WORD format) to Jessie Schmidt at [jschmidt@cfr.msstate.edu](mailto:jschmidt@cfr.msstate.edu) and send twenty-five (25) copies to the Institute office to be received by 5:00 p.m., October 31, 2008. The Institute's mailing address is Mississippi Water Resources Research Institute-FWRC, Box 9680, Mississippi State, MS 39762, and the physical and express mail address is 775 Stone Blvd., Mississippi State, MS 39762.

### **Scope of Work, research, other activities; cooperation and coordination:**

Proposals should include planning, conducting, or otherwise arranging for competent applied and peer reviewed research that fosters the research priorities shown on page 11 and also advance

- \* The entry of new research scientists, engineers, and technicians into water resources field.
- \* The dissemination of research results to water managers and the public.
- \* Close cooperation with other colleges and universities in the State that have demonstrated capabilities for research, information dissemination, and graduate training in order to develop a statewide program designed to resolve State and regional water and related land problems.

Source: 42 USC Sec. 10303(b), Chapter 109 – Water Resources Research, amended 2006 (Public Law 109-471) and signed into law on January 11, 2007 by President Bush.

**The MWRRRI will continue emphasizing documented cooperation with state, regional and local agencies in evaluating proposals.** As such, you are strongly encouraged to visit with these agencies to both identify priority project needs and to discuss their willingness to provide cost share for your proposal. Also, a written cooperator commitment to contribute non-federal funds is required if using third-party cost share. Two points of clarification: 1) you can not use federal funds or federal in-kind services to match these federal funds, and, 2) **3rd party in-kind contributions from state, regional or local agencies can be used for cost share.** The recipients will be required to fully and accurately document the cost share. Please contact us if you need assistance in identifying potential cooperators. Proposal format changes reflecting this new emphasis are bolded in the instructions.

**Like any other proposal, this program requires proposals to be complete and reviewed by your sponsored programs or contracts office when they are submitted.** Any proposal from faculty in any college or university in the state addressing Mississippi's water resource needs will be considered. Please remember that your proposal will be evaluated and scored by the Institute's Statewide Advisory Council and not a normal peer review panel. As such, in writing your proposal, please write to a general audience as Council members may not necessarily be experts in your particular field.

Multiple year proposals not exceeding two years will be considered, but it must be understood that **successful multiple year projects must reapply for funding annually.** The Advisory Council is not required to give any preference to continued funding of multi-year projects. In recent years, the total funding request for successful projects has been approximately \$45,000 (\$15,000 Federal and \$30,000 Non Federal). This figure is given as a guide, not a limit. Instructions and other relevant information concerning proposals are attached to this memorandum. Please share the materials with others who may be interested in having a project considered for funding.

For your information, a copy of the Project Proposal Grade Standards (Evaluation Form) is attached. The Statewide Advisory Committee, in their evaluation and ranking of the proposals, uses this form.

**INSTRUCTIONS FOR THE PREPARATION OF PROPOSALS FOR THE  
STATE WATER RESOURCES RESEARCH PROGRAM: FY 2009**

This year's RFP is being issued before we receive formal notification of funding from the U.S. Geological Survey (USGS) headquarters. While we do not anticipate any significant changes to the program's terms, conditions, deadlines or availability of funds, awards will be contingent upon available funding. You will be notified immediately of any significant changes. This provides guidance for preparing proposals for the Institute's annual U.S. Geological Survey research program. The 2009-2010 MWRRRI Research Program's timetable is:

October 31, 2008	Proposals due in the MWRRRI Office by 5:00 p.m.
November 21, 2008	WRRRI Advisory Council completes evaluation/grading
December 5, 2008	Applicants notified of results and any modifications needed
January 5, 2009	Revised final proposals returned to Institute if requested
January 12, 2009	Final program package submitted to USGS
March 1, 2009	Projects begin subject to funding
June 1, 2009	Recipients notified of the amount of legislative appropriations available to their project
July 1, 2009	If available, legislative appropriations distributed for WRRRI cost share requirements

The following special provisions are issued by the USGS to guide the MWRRRI in preparing the annual program package. They are included here for your information in developing your proposal and are subject to revisions by the USGS.

**Special Provisions**

1. Performance Period: The period of performance of the project will be March 1, 2009 through February 28, 2010. Short (1-2 pages) quarterly reports are required, and PIs will submit draft copies of interim/completion reports to WRRRI for peer review.
  
2. Participation Requirement
  - (a) Institutes may only consider project proposals from faculty members or affiliates at institutions of higher learning in the state.
  
  - (b) Institutes shall not submit proposals from any investigator who has not met reporting requirements for projects funded by a prior formula grant administered by the Department of the Interior.
  
3. Non-Federal Funds
  - (a) The non-federal portion must be \$2.00 for every \$1.00 federal. **NOTE: The Institute hopes that some legislative appropriations will be available. In the event they are not, or they are inadequate to cover the required cost share, you must rely on departmental assistance.**

**(b) Letter of commitment from state, regional or local agency to provide some amount of cost share for non-federal is required.**

4. Charges Allowable to Federal Funds

(a) Costs will be allowable in accordance with OMB Circular A-21, revised, "Cost Principles for Educational Institutions," on file in your university's contract office or available online at [www.whitehouse.gov/omb/circulars](http://www.whitehouse.gov/omb/circulars).

(b) The portion of benefits paid to individuals cannot exceed the proportion of their salaries paid from the grant.

(c) **Indirect costs may not be charged on the federal funds provided by the Department of Interior; however, they are chargeable to the total direct costs and should be shown in the non-federal column.** The Geological Survey will accept indirect cost rates approved by the cognizant agency in accordance with OMB Circular A-88.

Note: A copy of the approved rate agreement or other approving documentation must be attached to proposals from universities other than MSU.

5. Program Funds Management: Funds available to the Institute (both Federal and State appropriations) will be applied to projects as long as available. **In the event that State appropriations are not adequate to cover the non-federal share, other cost share contributions must be generated, thus the submitter's cognizant department/agency must be prepared to cover all cost share.**

6. Program Focus: Institutes must use research priorities for their region by the appropriate group of Institute Directors for guiding selection of at least one-half of their research project proposals.

7. Program Content Management: Projects begun with prior year funds may be continued with FY 2009 funds, provided that each is based on a revised proposal that incorporates a report on progress to date of the revision.

## PROPOSAL APPLICATION FORMAT INSTRUCTIONS

The application shall be prepared in accordance with the following instructions.

The proposal consists of the following 20 elements. The synopsis (first 11 elements) can not exceed 2 pages. Begin a new page with element 12 (Nature, scope, and objectives of the research).

1. **Title.** Concise but descriptive.
2. **Project Type.** Choose from the following: Research, Information Transfer, Information Management System, Education, or Other (please specify).
3. **Focus Categories.** List a maximum of three focus categories, with the most relevant focus category first. A list of focus categories is provided on page 12. Enter the abbreviations in capital letters separated by commas.
4. **Research Category.** Choose from the following selections the one category that most closely applies: Social Sciences, Ground-water Flow and Transport, Water Quality, Biological Sciences, Engineering, or Climate and Hydrologic Processes.
5. **Keywords.** List descriptor words, separated by commas. Select words from the attached list of keywords (see page 10).
6. **Start Date.** Enter the actual beginning date for the project on or after March 1, 2009.
7. **End Date.** Enter the estimated end date for the project on or after February 28, 2010.
8. **Budget Breakdown.**
  - Federal funds requested
  - Non-Federal (matching) funds pledged and **cooperator contribution.**

-Please include a separate budget and justification along with the cooperator contribution letter at the end of the proposal submission. See page 8 for an example of your budget format and include a budget justification for salaries (full-time and student), fringe benefits (full-time and student), tuition, travel, supplies (commodities), services (contractuals), equipment, and indirect costs.

Fiscal year 2009 Federal funds: \_\_\_\_\_ (\_\_\_\_\_) \_\_\_\_\_  
(Total) Direct

Non-Federal funds allocated: \_\_\_\_\_ (\_\_\_\_\_) (\_\_\_\_\_) (\_\_\_\_\_) \_\_\_\_\_  
(Total) Direct Indirect Cooperator  
Contribution

**9. Principal investigator(s).** Provide name, academic rank, university, email address and phone number of the principal investigators. **Cooperator (please attach an official letter of cooperation including a firm commitment to contribute whatever amount of non-federal funds they are willing to designate for the project).**

**10. Congressional District** of the university where the work is to be conducted.

**11. Abstract.** Provide a brief (one-page) description of the problem, methods, and objectives.

**Note:** Begin a new page with Item 12. Items 12-19 shall not exceed 10 single-spaced pages, 12 point font, exclusive of resumes.) You are responsible for verifying compliance with the page limit.

**12. Title.** Please use the same title as was entered previously in #1.

**13. Statement (2 paragraphs maximum) of regional or State critical water problem.**

Include an explanation of the need for the project research, who wants it, and why. Specify the priorities addressed.

**14. Statement (2 paragraphs maximum) of the results, benefits, and/or information**

expected to be gained during the performance period and by the end of the project, if of longer duration, and how they will be used. Discuss manner and amount parties will cooperate. The Institute is required to distribute the above material to other institutes who must certify that the proposal does not duplicate other known research activities.

**15. Nature, scope, and objectives of the project, including a timeline of activities.**

**16. Methods, procedures, and facilities.** Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.

**17. Related Research. (research projects only)** Show by literature and communication citations the similarities and differences of the proposed project to completed or on-going work on the same topic.

**18. Training potential.** Estimate the number and level of graduate and undergraduate students, by degree level and degree who are expected to receive training in the project.

**19. Investigator's qualifications.** Include resume(s) of the principal investigator(s). No resume shall exceed two pages or list more than 15 pertinent publications.

**20. Attach Budget Breakdown, Budget Justification, and Cooperator letter (see example for budget preparation on page 8).**

**Identify the Information Transfer Plan** (up to two pages). Indicate the plan for disseminating information on the results of the research and promoting their application. Each plan shall:

1. Define the subject matter and the problems to be addressed.
2. Identify the target audience.
3. Indicate the strategies to be employed; e.g. workshops, publications.
4. Identify the cooperators (e.g., Cooperative Extension service, external agencies).

**Budget.** Submit a detailed budget for each proposal, which includes the following line items. (Indicate the amount of cost sharing for each element):

**Cost category** - Allocate Federal and non-Federal costs.

**I. Direct Costs.**

- a. Direct costs are those costs which can be identified specifically with a particular research project, an instructional activity, or any other institutional activity, and which can be directly assigned to such activities relatively easily with a high degree of accuracy.
- b. Identifiable benefit to the research work rather than the nature of the goods and services involved are the determining factor in distinguishing direct from indirect costs of research agreements. Typical transactions chargeable to a research agreement as direct costs are the compensation of employees for performance of work under the research agreement, including related staff benefits and pension plan costs to the extent that such items are consistently treated by the educational institution as direct rather than indirect costs; the costs of materials consumed or expended in the performance of such work; and other items of expense incurred for the research agreement, including extraordinary utility consumption. The cost of materials supplied from stock or services rendered by specialized facilities or other institutional service operations may be included as direct costs of research agreements provided such items are consistently treated by the institution as direct rather than indirect costs and are charged under a recognized method of costing or pricing designed to recover only actual costs and conforming to generally accepted cost accounting practices consistently followed by the institution.

**II. Indirect costs (non-Federal share only).** Indirect costs are those that have been incurred for common or joint objectives and therefore cannot be identified specifically with a particular research project, an instructional activity, or any other institutional activity. At educational institutions such costs normally are classified under the following functional categories:

- a. General administration and general expenses;
- b. Research administration expenses;
- c. Operation and maintenance expenses;
- d. Library expenses; and
- e. Departmental administration expenses.

**Note: Indirect costs are allowed under the non-Federal cost category only.**

1. **Salaries and Wages.** Identify the individuals and categories of salaries and wages, estimated hours or percentage of time, and the rate of compensation proposed for each individual or category. (Tuition remission and other forms of compensation paid as or in lieu of wages to students performing necessary work are allowable provided that the tuition or other payments are reasonable compensation for the work performed and are conditioned explicitly upon the performance of necessary work.) If the rate of pay shown is higher than the current rate of pay, include an explanation.
2. **Fringe Benefits.** Propose rates/amounts in conformance with normal accounting procedures. Explain the costs and the basis of the rate computations. Indicate whether the rates are used for application purposes or whether they are fixed or provisional rates for billing purposes.
3. **Supplies.** Indicate separately the amounts estimated for office, laboratory, computing, and field supplies. Provide detail on any specific item which represents a significant portion of the proposed amount. If fabrication of equipment is proposed, list parts and materials required for each, and show costs separately from the other items. (Follow Mississippi's rules and regulations for equipment purchases but show here if the amount is over \$500 but under \$5,000.)
4. **Equipment.** Identify nonexpendable personal property having a useful life of more than 1 year and an acquisition cost of more than \$5,000 per unit.
5. **Services of consultants.** Identify the specific project numbers for which these services would be used. List the contemplated consultants (including sub recipients), the estimated amount of time required, and the quoted rate per day or hour. State whether the consultant's rate is the same as s/he has received for similar services under other Government awards.
6. **Travel.** All estimated costs should be itemized showing the number of trips required, type of trip (field, scientific meeting, or conference attendance), the destinations, the number of people traveling, the per diem and local reimbursement rates allowed by the applicant's organization, and any miscellaneous expenses for each trip. (Note: All travel is to be in accordance with the established travel policy of the applicant. A copy of the applicant's travel policy may be attached).

7. **Other direct costs.** Itemize the costs not included elsewhere; e.g., shipping, telemetry, computing, equipment-use charges, age dating, or other services. Provide breakdowns showing how the cost was estimated; e.g. computer time should show the type of computer, the estimated time of use, and the established rates.
8. **Total direct costs.** Total (1) through (7).
9. **Indirect costs.** Specify the indirect costs in the non-Federal column only based on the applicant's approved rate agreement. An amount equivalent to what the indirect costs would have been under the federal portion may also be included as match under the indirect cost in the non-federal portion.
10. **Total estimated costs.** Total (1) through (8) for Federal and (1) through (9) Non-Federal.

## Budget Form Example

Project Title:

Cost Category	Federal	Non-Federal	Total
<b>1. Salaries and Wages</b>	\$	\$	\$
- Principal Investigator			
- _____			
- _____			
- _____			
<b>Total Salaries and Wages</b>			
<b>2. Fringe Benefits</b>			
- full time employees			
- students			
- tuition			
<b>3. Supplies</b>			
<b>4. Equipment</b>			
<b>5. Services or Consultants</b>			
<b>6. Travel</b>			
<b>7. Other direct costs</b>			
<b>8. Total direct costs</b>			
<b>9a. Indirect costs on federal share</b>	XXXXXXXXXX		
<b>9b. Indirect costs on non-federal share</b>	XXXXXXXXXX		
<b>10. Total estimated costs</b>	\$	\$	\$
<b>Total Costs at Campus of the University on which the Institute or Center is located.</b>	\$	\$	\$
<b>Total Costs at other University Campus Name of University:</b>	\$	\$	\$

\* This form is provided as a worksheet only.

Finally, a breakdown of the budgeted funds shown in elements 5 and 6 should be on a separate page.

At the present time, the bottom line (10) must show at least \$2.00 non-federal for \$1.00 federal. The Institute hopes that some legislative appropriations will be available. In the event they are not, or they are inadequate to cover the required cost share, you must rely on department assistance.

If you are proposing a project of more than one-year duration, conclude with the statement:

Estimated Budget: Year 2            \$\_\_\_\_\_

**Negotiated indirect cost rate agreement.** Attach a copy of the approved negotiated indirect cost rate agreement if you are not at Mississippi State University.

## **ABSTRACT**

Project Title:

Principal Investigator's Name, Mailing Address, Telephone, Fax, E-Mail:

Focus Categories:

Keywords:

**Technical Abstract**

## KEY WORDS

**Water Quality** - particularly of surface waters, including methods of measurement, protection, and remediation.

**Wetlands** - their ecology, methods of construction, protection, and laws.

**Ecosystems** - specifically linking water-related parameters to the relationships of impacted organisms.

**Groundwater Contamination** - including prevention, monitoring, and remediation.

**Surface and Groundwater Management** - specifically interrelationships and optimizing water use.

**Contaminant Transport Mechanisms** - predicting rates of movement, final location, and concentrations at intermediate sites.

**Watershed Management** - applying present methods of water quality and quantity management to full watershed scale.

**Sedimentation** - prediction and control of both erosion and deposition, and their impacts.

**Water Quality Management** - including single operations, effects of management systems, socioeconomic factors, and laws.

**Water Resources Development** - improving water supplies to optimize use, recreation, and ecosystems.

## Mississippi Water Research Priorities

In the spring of 2008, the Institute's Advisory Council was asked to update and rank the research needed to help solve state water related problems. This was done to assure that the research funded through the Institute is that which is most critical to Mississippi.

**Water Quality** – particularly of surface waters, including methods of measurement, protection, and remediation

**Surface and Groundwater Management** – specifically interrelationships and optimizing water use

**Water Quality Management and Water Resources Development** – applying present methods of water quality and quantity management to full watershed scale

**Contaminant Transport Mechanisms** – predicting rates of movement, final location, and concentrations at intermediate site systems, socioeconomic factors, and laws

**Wetlands and Ecosystems** – their ecology, methods of construction, protection, and laws and specifically linking water-related parameters to the relationships and optimizing water use

**Groundwater Contamination** – including prevention, monitoring, and remediation.

Other issues that might be addressed include: **Coastal and marine issues** linking water associations through the state, and **institutional needs** that include capacity building and graduate student training

## FOCUS CATEGORIES

ACID DEPOSITION	ACD
AGRICULTURE	AG
CLIMATOLOGICAL PROCESSES	CP
CONSERVATION	COV
DROUGHT	DROU
ECOLOGY	ECL
ECONOMICS	ECON
EDUCATION	EDU
FLOODS	FL
GEOMORPHOLOGICAL PROCESSES	GEOMOR
GEOCHEMICAL PROCESSES	GEOCHE
GROUNDWATER	GW
HYDROGEOCHEMISTRY	HYDGEO
HYDROLOGY	HYDROL
INVASIVE SPECIES	INV
IRRIGATION	IG
LAW, INSTITUTIONS, AND POLICY	LIP
MANAGEMENT AND PLANNING	M&P
METHODS	MET
MODELS	MOD
NITRATE CONTAMINATION	NC
NON POINT POLLUTION	NPP
NUTRIENTS	NU
RADIOACTIVE SUBSTANCES	RAD
RECREATION	REC
SEDIMENTS	SED
SOLUTE TRANSPORT	ST
SURFACE WATER	SW
TOXIC SUBSTANCES	TS
TREATMENT	TRT
WASTEWATER	WW
WATER QUALITY	WQL
WATER QUANTITY	WQN
WATER SUPPLY	WS
WATER USE	WU
WETLANDS	WL

**Mississippi Water Resources Research Institute  
FY 2008 Water Research Competition**

Proposal Title/Author: \_\_\_\_\_

The MWRRI has strongly encouraged applicants to contact Mississippi's state, regional and local agencies to determine their support for potential proposals. In addition, to help leverage the MWRRI's State appropriation, proposals which include some amount of cost-share from state, regional or local agencies are given a priority in the evaluation process.

1. Letter of support/cooperation from a state, regional or local agency?
2. Contribution of Cost-Share from a state, regional or local agency?

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Proposal Review Criteria: Please provide a concise summary of the scientific merit of the proposed work, qualifications of the investigators, originality of approach, and probability of success.

Please use the following rating scale (one being the lowest, five being the highest) in ranking the proposal in the following areas:

	1	2	3	4	5
Statement of regional or State water problem	—	—	—	—	—
Statement of results or benefit	—	—	—	—	—
Nature, scope, objective, and timeline of project	—	—	—	—	—
Methods, procedures, and facilities	—	—	—	—	—
Related research	—	—	—	—	—
Training potential	—	—	—	—	—
Investigator's qualifications	—	—	—	—	—

Total points: \_\_\_\_

Reviewer name

Title:

Address:

Phone:

Email:

**NOTE:**

**Conflict of Interest:** Please do not review this proposal if you have an institutional or consulting affiliation with the submitting institution, applicants or collaborators, or will gain some benefit from the funding of the project, financial or otherwise.

Please do not review this proposal if you have collaborated on a research project or been a co-author with the submitting applicants and collaborators within the past four years.

We will ask you to leave the room when the review is conducted. This will ensure that we do not have any conflict of interest in the awarding of any submitted proposal.