INDIANA WATER RESOURCES RESEARCH CENTER
2019 REQUEST FOR 104B PROPOSALS

Indiana Water Resources Research 104B Grant Program
Funding Cycle: March 1, 2019 – February 28, 2020
Submission Deadline: Tuesday, November 13, 2018 at 5PM (Eastern)
Project Title and List of Reviewers due: Monday, November 5, 2018

PROGRAM DESCRIPTION

The Indiana Water Resources Research Center (*IWWRC*) invites faculty from ***Indiana's colleges and universities*** to submit water related proposals for possible funding. The Indiana grant program is supported via an annual grant from the U.S. Department of Interior, U.S. Geological Survey, as part of the federal Water Resources Research Act of 1984 (Program 104B). This program provides a base of support for Indiana's water resource research needs. **Note: we have not received official notification for the levels of federal support in the 2019 program. As a result, the loss of the entire program, reductions in funding levels, and funding delays are possible**.

PROJECT AREAS

The IWRRC program supports research in all areas of water research including: biology, microbiology, ecology, hydrology, civil engineering, irrigation, geology, wildlife management, social sciences, improvements in water use efficiency, and aquatic chemistry.

PROPOSAL DETAILS

For FY2019, the IWRRC is entertaining three categories of proposals:

- Single PI proposals not to exceed $15,000; and
- Collaborative, interdisciplinary team proposals not to exceed $30,000. These larger proposals should integrate social and physical dimensions.
- Graduate student conference presentation grants - this program is designed to allow graduate students to attend a national conference to present results from their water-related dissertation. Funding of up to $2,000 for one year is available to graduate students who will graduate in 2019 or 2020. A letter of support from a major professor is required, and the major professor will need to provide the required 2:1 (non-federal to federal) match. These proposals will be competitively reviewed in an internal review process using the same criteria as research proposals. The IWRRC anticipates funding for approximately three graduate student conference presentation grants in 2019. Anticipate a start date no earlier than April 15, 2019.

Research proposals will be **competitively reviewed** using an external peer review process. The reviewers will use the following criteria in assigning a final rank:

1) Technical merit, proposal quality, and feasibility (65%);
2) Applicability to Indiana's needs (15%);
3) Involvement of graduate students in research (5%); and
4) Capability of the PI(s) (15%).

Highly valued projects will also include activities to disseminate information and results to the public. We anticipate funding 2-4 projects this year, depending on the level of monetary requests. Funded PIs will be asked to contribute towards a fact sheet detailing their study findings, give a presentation during an IWRRC sponsored webinar, and participate in the annual Indiana Water Resources Association Symposium.

The IWRRC grant application should have a March 1, 2019 start date (see below), 12 month duration. As has been the case over our history, a non-federal match of 2:1 (non-federal to federal) is required. Indirect costs are not allowed on the federal cost category (Public Law 101-397, Water Research Institutes Authorization). However, the indirect costs may be used to provide part of the non-federal match. **The awards are administered through IWRRC and are contingent upon Congressional approval of FY2019 funds for the National Institutes for Water Research program. Note, if your proposal is funded, the IWRRC expects to be acknowledged in publications and presentations of the supported work. We also require that you notify us of any publications that can be attributed to the support from IWRRC.**

If you received research funding from IWRRC in 2018, we ask you not to apply for research funding this year (2019) so we can share this limited funding throughout the state.

PROPOSAL FORMAT GUIDELINES

The proposal must contain the information outlined below (Attachment 1) which includes an executive summary, the proposal, and additional documentation. Please submit the full proposal in the order outlined in Attachment 1.

SEND TO

Title and Reviewers: For research proposals, please send your project title and a list of names and email addresses for four reviewers within your field of expertise to Dr. Linda Prokopy (***lprokopy@purdue.edu***) no later than 5:00PM on Monday, November 5, 2018.

Proposal: Please send an electronic copy of the completed proposal (MS-Word document only, not in PDF format) to Dr. Linda Prokopy (***lprokopy@purdue.edu***) no later than 5:00PM on Tuesday, November 13, 2018. (Indicate the PI's NAME- **IWRRC 2018 proposal** in the header.) **We will respond with an email once we receive your submission**. If you do not receive a confirmation email within 24 hours of your submission, please contact Dr. Prokopy (email or phone) to let her know.

PROPOSAL and BUDGET QUESTIONS

Proposal questions may be addressed to IWRRC Director, Dr. Linda Prokopy, 765.496.2221, lprokopy@purdue.edu or Managing Director, Laura Esman, 765.496.3135, lesman@purdue.edu.

ATTACHMENT 1

Executive Summary: *Items a-i must fit on no more than one page, unnumbered, with 1-inch margins all around. Do not include letters as part of heading for each section (Use 12 pt font and one inch margin and 2 pages total):*

a. Title
b. Focus categories (Attachment 2; maximum of three focus categories)
c. Keywords
d. Project duration (include start and end date)
e. Funding requested
f. Matching funds pledge
g. Principal Investigator(s) Name and affiliation (full contact information for the lead PI)
h. Congressional District
i. Abstract (300 words)
j. Statement of critical regional or state water problem
k. Statement of results/benefits

Main Body of Proposal: *The proposal must fit on no more than 5 pages including references, figures and graphs*

a. Title. Please use the same title as above.
b. Statement of critical regional or state water problem. Include explanation of the need for the project, who wants it, and why.
c. Statement of results or benefits. Specify the type of information that is to be gained, and how it will be used.
d. Nature, scope, and objectives of the project. Include a brief timeline of activities.
e. Methods, procedures, and facilities. Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
f. Related research.
g. Training potential. Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training in the project.
h. Expected deliverables. Include information dissemination plan.
i. If you have received IWRRC funds in the past, how have you leveraged the projects/funds that were supported by IWRRC and what were your accomplishments?
j. References cited.

Additional Documents

1. CV of all investigators (NSF format not to exceed 2 pages/PI)
2. Budget Summary (attachment 3)
3. Budget Justification (attachment 4)
4. Data Management Plan (attachment 5)
5. Documentation of institutional approval of the proposal.
6. Matching fund commitment letter signed by authorized institutional official
7. Names and email addresses for four reviewers within your field of expertise.

FISCAL GUIDELINES. As in years past, the proposal budgets must reflect a $2 non-federal match for each federal dollar requested. Please contact your college pre-award details but the match may include actual contributions, in-kind contributions and overhead costs. (Indirect costs may not be charged on the *federal* funding request in this program, although the match may include the indirect costs forgiven on the federal dollars.)

ATTACHMENT 2

Focus Categories	Abbreviations
ACID DEPOSITION	ACD
AGRICULTURE	AG
CLIMATOLOGICAL PROCESSES	CP
CONSERVATION	COV
DROUGHT	DROU
ECOLOGY	ECL
ECONOMICS	ECON
EDUCATION	EDU
FLOODS	FL
GEOMORPOLOGICAL PROCESSES	GEOMOR
GEOCHEMICAL PROCESSES	GEOCHE
GROUNDWATER	GW
HYDROGEOCHEMISTRY	HYDGEO
HYDROLOGY	HYDROL
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

ATTACHMENT 3

BUDGET SUMMARY

Project Title:

Cost Category	**Federal**	**Non-Federal**	**Total**
Salaries and Wages -Principal Investigator(s) -Graduate Student(s) -Undergraduate Student(s) -Others Total Salaries and Wages	$ $	$ $	$ $
Fringe Benefits -Principal Investigator(s) -Graduate Student(s) -Undergraduate Student(s) -Others Total Fringe Benefits			
Tuition -Graduate Student(s) -Undergraduate Student(s) Total Tuition			
Supplies			
Equipment			
Services or Consultants			
Travel			

Other direct costs			
Total direct costs	$	$	$
Indirect costs on federal share	XXX	$	$
Indirect costs on non-federal share	XXX	$	$
Total estimated costs	$	$	$
Total costs at Purdue University (campus on which the IWRRC is located.)	$	$	$
Total costs at other university campus Name of University:	$	$	$

ATTACHMENT 4

BUDGET JUSTIFICATION

Project Title:

Salaries and Wages for PIs. Provide personnel, title/position, estimated hours and the rate of compensation proposed for each individual.
Salaries and Wages for Graduate Students. Provide personnel, title/position, estimated hours and the rate of compensation proposed for each individual. (Other forms of compensation paid as or in lieu of wages to students performing necessary work are allowable provided that the other payments are reasonable compensation for the work performed and are conditioned explicitly upon the performance of necessary work. Also, note that tuition has its own category below and that health insurance, if provided, is to be included under fringe benefits.)
Salaries and Wages for Undergraduate Students. Provide personnel, title/position, estimated hours and the rate of compensation proposed for each individual. (Other forms of compensation paid as or in lieu of wages to students performing necessary work are allowable provided that the other payments are reasonable compensation for the work performed and are conditioned explicitly upon the performance of necessary work. Also, note that tuition has its own category below and that health insurance, if provided, is to be included under fringe benefits.)
Fringe Benefits for PIs. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project. Note: include health insurance here, if applicable.
Fringe Benefits for Graduate Students. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project. Note: include health insurance here, if applicable.
Fringe Benefits for Undergraduate Students. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project. Note: include health insurance here, if applicable.
Fringe Benefits for Others. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project. Note: include health insurance here, if applicable.
Tuition for Graduate Students.
Tuition for Undergraduate Students. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project. Note: include health insurance here, if applicable.

Supplies. Indicate separately the amounts proposed for office, laboratory, computing, and field supplies. Provide a breakdown of the supplies in each category.
Equipment. Identify non-expendable personal property having a useful life of more than one year and an acquisition cost of more than $5,000/unit. If fabrication of equipment proposed, list parts and materials required for each, and show costs separately from the other items. A detailed breakdown is required.
Services or Consultants. Identify the specific tasks for which these services, consultants, or subcontracts would be used. Provide a detailed breakdown of the services or consultants to include personnel, time, salary, supplies, travel, etc.
Travel. Provide purpose and estimated costs for all travel. A breakdown should be provided to include location, number of personnel, number of days, per diem rate, lodging rate, mileage and mileage rate, airfare (whatever is applicable).
Other Direct Costs. Itemize costs not included elsewhere, including publication costs. Costs for services and consultants should be included and justified under "Services or Consultants" (above). Please provide a breakdown for costs listed under this category.
Indirect Costs. Provide negotiated indirect ("Facilities and Administration") cost rate.

ATTACHMENT 5

DATA MANAGEMENT PLAN

DATA MANAGEMENT PLAN GUIDELINES
US GEOLOGICAL SURVEY
FY2019 REQUEST FOR APPLICATIONS – 104B

Proposals submitted to USGS must include a **supplementary document of no more than two pages** labeled "Data Management Plan" (DMP). This supplementary document should describe how the proposal will conform to USGS policy on the dissemination and sharing of research results and associated data. A valid DMP may include only the statement that no detailed plan is needed (e.g. “No data are expected to be produced from this project”), as long as the statement is accompanied by a clear justification. This supplementary document may include:

- the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
- the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
- policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- provisions for re-use, re-distribution, and the production of derivatives; and
- plans for archiving data, samples, and other research products, and for preservation of free public access to them.

Additional guidance on data management plans is available from the USGS Data Management web site here: http://www.usgs.gov/datamanagement/plan/dmplans.php