IOWA WATER CENTER

2020 Request for Proposals

The Iowa Water Center (IWC), the Water Resources Research Institute for the State of Iowa as authorized by the Water Resources Research Act of 1964, seeks proposals for the annual 104(b) competitive grants program. This program consists of two opportunities for 2020: a targeted seed grant research competition and a graduate student supplemental research competition. Funding for selected projects will be available beginning March 1, 2020 (funding availability dependent upon congressional budget action) for a one-year period. Projects should address local or regional water research needs.

IWC is administered through a partnership between Iowa State University and the U.S. Geological Survey. As such, project activities and expenditures will be subject to federal requirements under Uniform Guidance (UG). To read more about UG, please visit: http://www.ospa.iastate.edu/omb-uniform-guidance.

Applicants are required to provide an intent to submit notice due November 8, 2019 5PM Central Time, with full proposals due November 25, 2019 by 5PM Central Time. Late proposals will not be accepted. A submission checklist is provided at the end of this document.

Targeted Seed Grant Research Competition
This program is intended to address the most pressing water research needs in the state of Iowa as determined by the agencies and organizations that comprise the IWC Advisory Board (http://www.water.iastate.edu/content/advisory-board). For 2020, the board has identified three areas in which we are soliciting proposals with funding available up to $15,000 per project:

- Novel, economical methods for E. coli testing and monitoring
- In-lake treatments for harmful algal blooms
- Per- and polyfluoroalkyl substances

Eligible applicants include faculty, staff, and graduate students at Iowa’s accredited colleges and universities. Priority will be given to proposals that engage early career faculty and/or graduate and undergraduate students.

IWC anticipates funding up to three targeted seed grants in 2020. Due to federal funding cycle constraints, all project funds must be expended by February 28, 2021. Final analysis and reporting can continue through May 7, 2021 upon agreement with IWC.

Proposals must be submitted by email to iowawatercenter@iastate.edu with the subject line:

2020 IWC Seed Research Competition - [Your Last Name]
**Graduate Student Supplemental Research Competition**

This program is designed to allow students to complete additional research objectives or products beyond the scope of their current water related funded project. Funding of up to $5,000 for one year is available to graduate students nearing completion of their program of study or those with well-established, active research projects. The readiness of the student to embark on additional research is subjective, and students should consult with their major professor before deciding to apply. The proposed budget must include funds for publication costs; students will be required to submit their research to peer-reviewed publications.

IWC anticipates funding up to three graduate student supplemental grants in 2020. Due to federal funding cycle constraints, **all project funds must be expended by February 28, 2021**. Final analysis and reporting can continue through May 7, 2021 upon agreement with IWC.

Proposals must be submitted by email to iowawatercenter@iastate.edu with the subject line:

2020 IWC Graduate Research Competition - [Your Last Name]

**Funding**

Funds from this program can be requested for student support, hourly wages, supplies, local travel, analytical costs and publication costs. Requesting federal funds for travel to conferences to present research is discouraged. Additional cost categories that are imperative for the project are allowed; applicants are encouraged to contact IWC with questions prior to submitting the proposal.

Investigators will be required to provide documentation of committed matching funds. The U.S. Geological Survey **requires a 2:1 nonfederal to federal funds match**. The sponsor will not pay indirect costs; researchers are encouraged to use forfeited indirect costs as a portion of the required match.

**Intent to Apply**

Applicants must notify IWC via email (iowawatercenter@iastate.edu) of proposal submission intention by **Friday, November 8, 2019 at 5PM Central Time**. The notice of intent should include a working title of the project, items 1-4 from the proposal guidelines (see p.4 of this RFP), and three to six names, including contact information, of potential reviewers. Reviewers should be qualified to evaluate the scientific merit of the study design and without conflict of interest to the applicant. Reviewers can be either within or outside the state or the applicant’s home institution, or an experienced water professional.

Questions regarding the RFP can be directed to Hanna Bates, Program Coordinator for the Iowa Water Center, hbates@iastate.edu or 515-294-5650.
Proposal Guidelines

Proposals must include the information listed below in the order presented and identified by the corresponding number. The body of the proposal (items 10 through 16) should not exceed 6 single-spaced pages in 12-point, Times New Roman font.

1. **Principal Investigator(s):** Provide name, academic rank, university, email address, and phone number of the principal investigators. Graduate students should list their adviser as a co-investigator.
2. **Focus Categories:** Choose a maximum of three from the list on page 6.
3. **Research Category:** Choose one from the list on page 6.
4. **Keywords:** Include keywords that are descriptive of the work.
5. **Duration of Project:** Estimated beginning date and end date for the project. *Funding must be spent by February 28, 2021 – all documentation for the project will have this end date, even if the project concludes at a later date.*
6. **Congressional District** of the university where the work is to be conducted.
7. **Abstract:** Provide a brief (one-page) description of the problem, methods, and objectives.
8. **Budget Breakdown:** Use the budget template on page 7.
9. **Budget Justification:** Use the justification template on page 8.
10. **Title**
11. **Statement of regional or State water problem:** Include an explanation of the need for the project, who wants it, and why.
12. **Statement of results or benefits:** Specify the type of information that is to be gained and how it will be used.
13. **Nature, scope, and objectives of the project,** including a timeline of activities.
14. **Methods, procedures, and facilities:** Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
15. **Related research:** Show by literature and communication citations the similarities and dissimilarities of the proposed project to completed or on-going work on the same topic.
16. **Training potential:** Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training in the project.
17. **Investigator’s qualifications:** Include resume(s) of the principal investigator(s). No resume shall exceed two pages or list more than 15 pertinent publications.
18. **Cost-share documentation:** Provide a letter from cost-share sources indicating that funds are approved for 2:1, non-federal to federal match required for this program. Cost share should include unrecovered indirect costs on both the federal and nonfederal portions of the budget.

**Deadline:** Please email the proposal as a Word file (no pdf files) to iowawatercenter@iastate.edu by close of business Monday, **November 25, 2019 5PM Central Time.**

Iowa State University applicants: this opportunity is considered internal; you do not need to submit a Goldsheet before applying.
**Evaluation Criteria for Funding**

Proposals will be reviewed for scientific merit by scientists not involved with this RFP. This information will be used by IWC staff and the IWC Advisory Board to rank proposals for quality and relevance.

Review criteria include:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Background (5 pts):</strong></td>
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<td>Is the problem clearly stated? Is this problem related to critical water problems of Iowa and north central states? Is hypothesis clearly stated?</td>
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<td><strong>2. Objectives (5 pts):</strong></td>
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<td>Are the objectives clearly defined? If objectives are met, will this study be a worthwhile technical or scientific contribution?</td>
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<td><strong>3. Review of literature (5 pts):</strong></td>
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<td>Is adequate evidence shown of awareness of significant present or previous work? Has critical review of literature related to the problem been overlooked?</td>
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<td><strong>4. Procedures and Strategies (5 pts):</strong></td>
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<td>Are the procedures, research plan, and major activities of the project adequately described for the stated objectives? Are the strong and weak points discussed?</td>
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<td><strong>5. Products (5 pts):</strong></td>
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<td>How relevant is the proposed research to address critical water problems of Iowa and north central states? Are the outcomes of the project clearly identified?</td>
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<td><strong>6. Qualifications (5 pts):</strong></td>
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<td>Is the principal investigator(s) qualified to perform the stated work?</td>
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<td><strong>7. Budget (5 pts):</strong></td>
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<td>Is the proposed budget reasonable? Does it show 2:1 (state:federal) match?</td>
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**Awarded Proposals Expectations**

Upon notification of award in late December, IWC staff will work with the principal investigator (PI) to make budget and narrative adjustments as recommended by the advisory board and in accordance with USGS requirements. IWC submits projects for federal approval in mid-January as part of its “base grant” package. Notice of funding is anticipated late February. If this timeline is delayed for any reason (most commonly due to congressional budget setting), IWC staff will communicate with the PI. IWC will make every effort to accommodate projects so that they are completed in the time allotted.

Once USGS releases FY20 funds to IWC, work can begin on the project. IWC staff will work with PIs and their home department/institution to set up the project account. IWC will periodically monitor funding on the project to ensure funds are spent in a timely manner. It is the responsibility of the PI to oversee appropriateness and allowability of project expenditures.

PIs will have the opportunity throughout the project period to be featured in photos, videos, and written content produced by IWC to promote their research.
PIs are required to submit a final report at the completion of the project. This brief report should include significant findings or accomplishments; awards, publications, and presentations; and the number of students involved in the project. Additionally, PIs will work with IWC staff to prepare a final technical report, published by IWC.

Finally, awardees are expected to give a poster or presentation at the Iowa Water Conference or equivalent local event (e.g., Prairie Lakes Conference, Iowa Groundwater Association meeting) at or near the conclusion of the project.
**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, & Policy LIP
- Management & 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

**Research Categories**
- Biological Sciences
- Climate and Hydrologic Processes
- Ecological Processes
- Engineering
- Ground-water Flow and Transport
- Social Sciences
- Water Quality
## Budget Breakdown

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Federal Funds requested</th>
<th>Non-Federal matching funds</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>1. Salaries and Wages</strong></td>
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<td>Principal Investigator/post doc/grad/undergrad</td>
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<tr>
<td>Principal Investigator/post doc/grad/undergrad</td>
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<tr>
<td><strong>Total Salaries and Wages</strong></td>
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<td><strong>2. Fringe Benefits</strong></td>
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<td>Principal Investigator/post doc/grad/undergrad</td>
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<td><strong>Total Fringe Benefits</strong></td>
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<td><strong>3. Supplies</strong></td>
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<td><strong>4. Equipment</strong></td>
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<td><strong>5. Services and Consultants</strong></td>
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<td><strong>6. Travel</strong></td>
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<td><strong>7. Other direct costs</strong></td>
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<td><strong>8. Total direct costs</strong></td>
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<tr>
<td>9a. Indirect costs on federal share</td>
<td>X</td>
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<tr>
<td>9b. Indirect costs on non-federal share</td>
<td>X</td>
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<tr>
<td><strong>10. Total estimated costs</strong></td>
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Budget Justification

1. Salaries and Wages: Provide estimated hours and the rate of compensation proposed for each individual (X hours @ $X). 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.

2. Fringe Benefits: Provide the overall fringe benefit rate applicable to each category of employee proposed in the project.

3. Supplies: Indicate separately the amounts proposed for office, laboratory, computing, and field supplies. Please be specific.

4. Equipment: Identify non-expendable personal property having a useful life of more than one year and an acquisition cost of more than $5,000 per unit. If fabrication of equipment is proposed, list parts and materials required for each and show costs separately from the other items.

5. Services or Consultants: Identify the specific tasks for which these services, consultants, or subcontracts would be used. Estimate amount of time required and the hourly or daily rate. Provide a detailed list (i.e. sample analysis: 1000 samples @ $8/sample.)

6. Travel: Provide purpose and estimated costs for all travel. Travel opportunities must be specific (i.e. travel to XYZ conference in XYZ location on XYZ dates) and costs must be itemized (e.g. airfare, lodging, parking, per diem).

7. 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.

8. Indirect Costs: No indirect costs are associated with these grants. Please use forfeited indirect costs as part of the required match.
Proposal Checklist

☐ Read RFP in totality
☐ Intent to submit a proposal must be submitted via email to iowawatercenter@iastate.edu by November 8, 2019.
☐ Complete proposal guidelines
☐ Complete budget with a 2:1 nonfederal to federal funds match
☐ Submit proposal as a Word Document by November 25, 2019 5PM Central Time to iowawatercenter@iastate.edu
  ○ Proposals must be submitted by email to iowawatercenter@iastate.edu with the subject line:
    ▪ 2020 IWC Seed Research Competition - [Your Last Name]; or
    ▪ 2020 IWC Graduate Research Competition – [Your Last Name]