Iowa Water Center – Iowa Nutrient Research 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, and the Iowa Nutrient Research Center seek proposals for a joint funding grant competition.

The Iowa Water Center is a federally funded organization, part of the National Institutes of Water Resources. Located on the Iowa State University campus, it is one of 54 institutes located throughout the United States and U.S territories. The purpose of the Iowa Water Center is to identify water-related research needs, provide outreach and education opportunities, and disseminate information about Iowa's water resources to the public to form better policies and everyday practices. 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.

The Iowa Nutrient Research Center was established by the Iowa Board of Regents in response to legislation passed by the Iowa Legislature in 2013. The center pursues science-based approaches to areas that include evaluating the performance of current and emerging nutrient management practices and providing recommendations on implementing the practices and developing new practices.

Applicants are required to provide an intent to submit notice due October 23, 2020 by 5PM Central Time, with full proposals due October 30, 2020 5PM Central Time.

Questions can be directed towards the Program Contact:

Hanna Bates
Acting Assistant Director
Email: hbates@iastate.edu
Phone: 515-294-5650 *Please leave voicemail message and the call will be returned*.

Research Focus

Nutrient Management and Social Wellbeing for Iowa Communities

Clean and abundant water is important to natural resource protection, preservation of land and aquatic habitats, and agricultural productivity. Water is a critical source for life, but often communities are made vulnerable by water impairments impacting health and social wellbeing. Potable water is vulnerable to the presence of excess nutrients, which in turn, can have disproportionate impacts on selected communities across Iowa. The research focus for this call is to address social justice and equity issues surrounding populations who are impacted by nutrient issues. By seeking to understand downstream impacts as well as further understanding social wellbeing in relation to nutrient issues, this RFP seeks to address the wellbeing of all members of society within the larger agro-ecosystem of the Mississippi River Basin.

Potential Topics include:

- Assessment of nutrient impacts on tourism/recreation
- Water quality impacts on rural communities and water utility associations
- Management and monitoring strategies by downstream communities

- Assessment of community and watershed coalition activities to address nutrient management issues

Studies impacting human health (i.e. physical human subjects) do not quality for this RFP.

Eligible applicants include faculty, staff, and graduate students **at the Regent Institutions in Iowa only** (Iowa State University, the University of Iowa, the University of Northern Iowa). Priority will be given to proposals that engage early career faculty and/or graduate and undergraduate students.

IWC-INRC anticipates funding for one project for the 2020-2021 year. Proposals may start as early as December 2020. Due to the federal funding cycle, projects must be completed by December 31, 2021.

Proposals must be submitted by email to iowawatercenter@iastate.edu with the subject line:
2020 IWC-INRC Research Competition – [Your Last Name]

Funding

Funding for up to $40,000 is available for each project. 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. Matching funds are not required for this grant competition.

Intent to Apply

Applicants must notify IWC via email (iowawatercenter@iastate.edu) of proposal submission intention by **October 23, 2020 at 5PM Central Time**. The notice of intent should include a working title of the project and items 1-4 from the proposal guidelines. Reviewers for this grant opportunity will be selected by the IWC and INRC. Reviewers will evaluate proposals following the provided criteria outlined in this RFP.

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 December 30, 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. Data Management Plan: This brief 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.

Deadline: Please email the proposal as a Word file (**no** pdf files) to iowawatercenter@iastate.edu, by close of business **October 30, 2020 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:

1. Scientific and technical merit (20%)
2. Applicability to the research, education, and training needs identified by the advisory board (20%)
3. Competence of the PI for carrying out the proposed study efficiently and effectively (15%)
4. Appropriateness of submitted budget to the proposed study (15%)
5. Student educational opportunities arising from the proposed study (10%)
6. Potential for technology transfer via workshops, tech reports, journal articles, theses, etc. (10%)
7. Feasibility of completing the work in the proposed timeframe (5%)
8. Quality of proposal: grammar, structure, readability (5%)

Awarded Proposals Expectations

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

Once funds are released, 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.

Publications as a result of this funding opportunity must acknowledge both the Iowa Water Center and the Iowa Nutrient Research Center.

PIs will have the opportunity throughout the project period to be featured in photos, videos, and written content produced by IWC and INRC 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

Cost Category	Federal Funds requested	Non-Federal matching funds	Total
1. Salaries and Wages			
Principal Investigator/post doc/grad/undergrad			
Principal Investigator/post doc/grad/undergrad			
Principal Investigator/post doc/grad/undergrad			
Total Salaries and Wages			
2. Fringe Benefits			
Principal Investigator/post doc/grad/undergrad			
Principal Investigator/post doc/grad/undergrad			
Principal Investigator/post doc/grad/undergrad			
Total Fringe Benefits			
3. Supplies			
4. Equipment			
5. Services and Consultants			
6. Travel			
7. Other direct costs			
8. Total direct costs			
9a. Indirect costs on federal share	XXXXXXX		
9b. Indirect costs on non-federal share	XXXXXXX		
10. Total estimated costs			

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 apply submitted via email to iowawatercenter@iastate.edu by October 23rd by 5PM Central Time.
- ☐ Complete proposal guidelines
- ☐ Submit proposal as a Word Document by October 30, 2020 5PM Central Time to iowawatercenter@iastate.edu
    - Proposals must be submitted by email to iowawatercenter@iastate.edu with the subject line:
        - 2021 IWC-INRC Grant Competition - [Your Last Name]