GRADUATE STUDENT RESEARCH FUNDING OPPORTUNITY

JOINTLY SPONSORED BY

THE NORTH CAROLINA WATER RESOURCES RESEARCH INSTITUTE AND THE NORTH CAROLINA SEA GRANT PROGRAM

Both WRRI and NCSG are inter institutional programs
of the University of North Carolina System

Issue Date: February 17, 2017

SUBMISSION DEADLINE
12:00 P.M. MAY 1, 2017

FOR QUESTIONS, PLEASE CONTACT:

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I.   OVERVIEW

This Request for Proposals (RFP) is for research and information transfer projects in the areas of coastal and freshwater resources as prioritized by NC Water Resources Research Institute (WRRI) and NC Sea Grant (NCSG) with input from their Advisory Committees, which comprise stakeholders from a range of sectors and professions working on freshwater and coastal resources throughout North Carolina.

WRRI and NCSG are providing competitive funding for graduate student research. We intend to fund up to five student proposals at $10,000 per proposal, pending federal appropriation of funds and quality of proposals.

WRRI is part of a national system of 54 institutes authorized by the Water Resources Research Act (WRRA) of 1984, and represents a federal/state partnership between the US Geological Survey (USGS) and state land-grant universities. WRRI is hosted by North Carolina State University but is an inter institutional program within the University of North Carolina (UNC) system. WRRI's work addresses a suite of topics related to freshwater resources.

NCSG, also headquartered at NC State University and a UNC system inter institutional program, is one of 33 programs within the National Sea Grant College Program, and represents a federal/state partnership between the National Oceanographic and Atmospheric Administration (NOAA) and the state. Sea Grant's work addresses a suite of topics related to coastal resources.

Proposals must include language that describes the significance and relevance of the project to North Carolina and the interests of both NC WRRI (wrri.ncsu.edu/mission) and NCSG (ncseagrant.ncsu.edu/about-us/our-vision).

II.   APPLICANT ELIGIBILITY

Only enrolled graduate students in good academic standing attending an accredited college or university (public or private) in North Carolina may apply. Students must have a faculty sponsor who will serve as the official awardee for the project. WRRI and NCSG are not able to contract directly with students. Post-doctoral fellows are not eligible for funding under this RFP. Undergraduate students may not apply directly for funding, but undergraduate participation in the proposed projects is encouraged.

Only one proposal per student is allowed. There is no limit to the number of students for whom a faculty member may serve as the sponsoring applicant.

III.   APPLICANT DIVERSITY

Recognizing that some students and faculty have historically been underserved and under-targeted with research opportunities, and that some students and faculty are underrepresented in the sciences, we strongly encourage submissions by and/or collaborative partnerships with one or more of the following:

- African American, Hispanic and Native American students and African American, Hispanic and Native American sponsoring faculty
- Historically Black Colleges and Universities (HBCUs)
- Minority Serving Institutions (MSIs)

IV.   PROPOSAL ELIGIBILITY

Proposed research must take place in the state of North Carolina. Furthermore, recognizing that some communities and geographical areas are underserved and often stand to gain significantly from meaningful applied research, we strongly encourage research projects that engage underserved communities, rural communities, communities of color, or low- or fixed-income communities.

Proposals may address research questions and methods in the fields of social science, education, communications, natural science, engineering, economics or policy, or a combination of these disciplines (as applied to the focus areas below). We encourage proposals that include meaningful public engagement, public participation, or collaboration with members of the communities where research is to take place.

Proposals must address a specific research question or address clear, need-based objectives (e.g. in the case of informational transfer projects) rather than simply characterize a community or situation.

Projects not eligible for funding under this call include those focused on monitoring-only activities, projects focused only on ocean waters, and projects on health effects involving human subjects. Research that addresses the link between environmental and human health as related to the focus areas below is acceptable (which may require IRB approval from the applicant's campus).

V.   PROJECT FUNDING AND DURATION

Projects should start between 7/15/17 and 9/1/17 and conclude by 2/28/18. Projects in good standing will have the option for a no-cost extension. Budgets are limited to $10,000 in grant funds. Indirect costs may not be charged. Matching funds, including in-kind contributions, are not required

but are encouraged. Work with your faculty sponsor and university office of sponsored research (or similar) for assistance with budget questions and allowable expenses.

VI.   RESEARCH FOCUS AREAS

Proposals must address one of the three focus areas below, address the interests of both NC WRRI and NCSG, and are encouraged to address the communities of concern identified above under the Proposal Eligibility section.

FOCUS AREA 1: HURRICANE MATTHEW RESPONSE AND RECOVERY

What challenges, risks or lingering effects do communities impacted by 2016 Hurricane Matthew still face regarding water and wastewater infrastructure, access to clean water, ecosystem services, environmental impacts and the associated economic and/or occupational impacts? What challenges exist regarding access to resources (e.g. funding, community assistance, etc.) to restore communities and ecosystems and/or reduce future risks? As related to the aforementioned categories of challenges, risks or lingering effects, what gaps or opportunities in data availability, resources, processes, community assistance or communication can be addressed that can mitigate impacts to hurricane-prone or hurricane-impacted communities; support community recovery; improve community resilience; and enhance planning for future storms?

FOCUS AREA 2: GROUNDWATER CONTAMINATION AND ON-SITE, INDIVIDUAL WATER INFRASTRUCTURE (DISCONNECTED WELLS AND SEPTIC SYSTEMS)

What improvements can be made to better communicate the risk and responsibility associated with the use and operation of private water infrastructure such as individual drinking water wells and septic systems? How can new and established risks, such as contamination of groundwater, be mitigated to ensure access to abundant, clean, safe water and prevent additional contamination through failing infrastructure? What are the gaps and opportunities related to improving availability, management and analysis of new and existing data and other information to address research questions related to testing, monitoring and mapping groundwater contamination, sources of contamination, locations of individual drinking water wells and septic systems, risks associated with use of this private infrastructure and responsibilities associated with owning and maintaining private infrastructure? Are there innovative approaches (such as regulations, funding mechanisms, or data management/data sharing practices) to address the questions above?

FOCUS AREA 3: COMMUNITY DEVELOPMENT AND WATERSHED MANAGEMENT

How can communities be meaningfully engaged in natural resource management through watershed planning, restoration, protection, retrofitting, redevelopment and stormwater management? What are opportunities to increase participation and impact of community

members in environmental protection activities and decision-making? How can local governments, nonprofits, academic communities, businesses and faith-based organizations build partnerships and relationships among each other and with local community leaders and members to enhance trust and communication to identify and achieve common goals for community and watershed vitality? How can stormwater management at the local and/or private level improve ownership and participation in watershed-level initiatives?

VII.   SUBMISSION PROCESS & DUE DATE

- **The deadline for submissions is 12:00 p.m., Monday, May 1, 2017.**
- **In fairness to other applicants, late submissions will not be accepted.**
- Proposals must be submitted to WRRI by e-mail to nicole_wilkinson@ncsu.edu.
- Please note formatting requirements below.
- All elements of the proposal must be combined into a single pdf document.
- The document file name should be formatted as "StudentLastName-Proposal-2017.pdf"
- You will receive an email confirmation of receipt of your proposal within 2 business days of submission. If, after 2 days, you have not received confirmation, call (919) 513-1216.
- Notification of awards will be made by June 9, 2017.

VIII.   PROPOSAL FORMAT

In fairness to all applicants, if we receive a proposal that does not adhere to the following format guidelines, especially font size, margins and section page limits, we will unfortunately have to disqualify that proposal from the competition. Please double-check the formatting of your proposal carefully before submitting.

Proposals must adhere to the following format:
- 1-inch margins all around
- Times New Roman 12-point font
- Strict page limits as listed below
- Page numbers, starting with the cover page as page 1

Proposals must contain all of, and only, the following seven elements:
1. Cover page
2. Project proposal
3. Budget
4. References cited
5. Letter of support from sponsoring faculty member
6. CVs
7. Data Management Plan

1. **Cover Page** (limited to 1 page)
   Cover pages must include the following elements:

- Proposal title
- Proposed start and end date. Projects should start between 7/15/17 and 9/1/17 and conclude by 2/28/18. Projects in good standing will have the option for a no-cost extension.
- Budget request (total amount only, no breakdown, keeping in mind the $10K/yr. limit)
- Name, academic rank or title, university and department/school, mailing address, phone number, and e-mail address for the faculty sponsor (Principal Investigator, (PI))
- Name, degree being pursued, university and department/school, mailing address, phone number, and e-mail address for the student researcher
- Name, academic rank or title, university and department/school, and e-mail address for other faculty co-PIs or co-student researchers
- University signatures if appropriate
- One to five keywords for the proposed project
- Statement that "The proposed project would _OR_ would not [pick one] involve funds going to a USGS collaborator." (This is only for WRRI administrative purposes and is not a factor in identifying the successful proposals.)

2. **Project Proposal** (limited to 4 pages)
   The body of the proposal should have the following sections:
   Description Describe your project and the RFP focus area it addresses. State specifically what you plan to accomplish in the proposed project in terms of goals, objectives, hypotheses to test, research questions to answer, or needs to be met through communication and information transfer.
   Methods, Tasks and Timeline Describe your technical approaches, engagement/partnership approaches and/or communication approaches; clearly define your tasks; provide a timeline to complete the tasks; list project milestones. Be specific and provide detail for reviewers to assess the feasibility and appropriateness of your approaches.
   Significance to North Carolina and Funding Programs Describe the significance and relevance of the project to NC and the interests of NC WRRI and NCSG.
   Other Sponsored Support For the overall project, identify other funding and/or leveraged resources if applicable.

3. **Budget and Budget Explanation** (limited to 2 pages)
   Provide a detailed budget for your project, and an explanation/justification of expenses. Funds may be used for any purpose related to the project. University overhead charges are not permitted. Examples of allowable expenses include, but are not limited to, salaries and wages; tuition and stipends; fringe benefits; supplies; travel; contracted services; communications and publications; and other project-relevant charges. Include description of any matching funds or in-kind contributions, if applicable.

4. **References Cited** (as needed, does not count towards page limit of body of proposal)
   Use a standard bibliographic format to list the references cited in your proposal.

5. **Letters of Support** (no page limit)

Students must include a letter of support from the main faculty PI serving as the official applicant. Other letters (optional) may be included from partnering organizations, agencies, community leadership, advisors, other faculty, etc.

6. **Curricula Vitae** (limited to 2 pages per CV)
CVs are required for the student researcher, lead faculty PI and co-PIs. CVs for undergraduate participants are not required. Faculty CVs must be in standard National Science Foundation (NSF) format (see the section on "biographical sketches" at http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpg_index.jsp). Student CVs may be in the NSF format or other appropriate format if sections of the NSF format do not apply to them. Student CVs are still limited to 2 pages regardless of which format is used.

7. **Data Management Plan** (limited to 2 pages)
Given that NOAA is NC Sea Grant's federal lead funding agency, and to comply with NOAA's data and publication sharing directive for grants and contacts, version 3.0 (for reference, see https://nosc.noaa.gov/EDMC/PD.DSP.php), each applicant must develop and submit with their proposal submission a data management plan (DMP). The DMP does not count toward the page limit above for the body of your proposal.

Please review the guidance document available at go.ncsu.edu/noaa-dmp or on the WRRI research funding page to assist you in preparing your plan. Plans will be included as part of the proposal evaluation process. Plans should be no more than 2 pages and should include: descriptions of the types of environmental data and information expected to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; methods for providing data access; approximate total volume of data to be collected; and prior experience in making such data accessible.

If your project is not expected to develop any environmental data, then your DMP may simply include the declaration: "This proposal is not expected to generate environmental data. Therefore, a Data Management Plan is not required."

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