Each year, the Tennessee Water Resources Research Center (TNWRRC) funds projects through the US Geological Survey’s 104B program as instituted by the Water Resources Research Act of 1984. The application requirements for fiscal year 2018 are contained in this document.

We are soliciting two different types of pre-proposals: (1) faculty research proposals, and (2) graduate student supplemental research grants. If selected for funding, you may be asked to provide additional information or make modifications to the proposal, based on comments from the TNWRRC Advisory Board members and the TNWRRC director.

Please contact TNWRRC if you have questions.

Dr. Thanos Papanicolaou, Director      Tim Gangaware, Associate Director
tpapanic@utk.edu              gangwrrc@utk.edu
865-974-7836                  865-974-4777
Tennessee Water Resources Research Center
Fiscal Year 2018 Request for Pre-Proposals

The following information and instructions apply to the application process for the FY2017 Tennessee Water Resources Research Center (TNWRRC) competitive water research grants awarded through the US Geological Survey’s 104B program. The project period for FY2018 is from March 1, 2018 through February 28, 2019.

TNWRRC’s obligation under this program is contingent upon availability of appropriated funds. However, this program is likely to be funded at the same level as FY 2017.

Pre-proposals are due by October 12, 2017. Email the completed pre-proposal to tpapanic@utk.edu and gangwrrc@utk.edu. The TNWRRC directors and its Advisory Board will review each pre-proposal. If selected for funding you will be required to address reviewer comments and/or provide additional project information.

I. Eligibility—the following may apply:
   • Faculty members or affiliates of any accredited college or university (public or private) in Tennessee.
   • Federal employees are NOT eligible as a principal investigator, but can participate as a co-investigator.
   • Full time graduate students in good academic standing attending an accredited college or university (public or private) in Tennessee.

II. RFP Priority Focus Areas—TNWRRC is interested in research projects that address the following focus areas:
   • Extreme Events (mega storms) and effects on Infrastructure;
   • Streambank erosion and protection;
   • Erosion control and preventive measures; monitoring BMP effectiveness (edge-of-field);
   • Surface water quality monitoring and sensor technology;
   • Groundwater remediation (natural attenuation);
   • Modeling efforts for sediment; and
   • Ecoflows/minimum flows.

The projects proposed should also further the US Geological Survey’s national mission and objectives. The broader national focus of the US Geological Survey includes:
   • Increasing knowledge of water quality and quantity;
   • Improving understanding of water availability;
   • Evaluating how climate, hydrology, and landscape changes influence water resources;
   • Creating and delivering decision-making tools that support water management; and
   • Improving the country’s response to water-related emergencies.
III. Types of Pre-proposals

We are soliciting two different types of project pre-proposals:

1. faculty research projects, and
2. graduate student supplemental research grants.

Student proposals should be supplementary to an already existing and funded faculty project. Student pre-proposals should be written by the student under the direction of a faculty advisor. This grant is intended to allow students to complete additional research objectives or products beyond the scope of the faculty-funded projects and to aide them in presenting or publishing their research results in peer-reviewed publications.

Funding requests for faculty research projects should be in the $5,000 - $25,000 range and student proposals are capped at $5,000.

IV. Matching Funds (Faculty research projects only)

- Each applicant must match each federal dollar provided with at least two dollars from non-federal sources. This means a request for federal funds of $25,000 through this program will require matching funds of at least $50,000, for a total project cost of at least $75,000.
- The matching funds shall be obligated during the performance period (March 1, 2018-February 28, 2019).
- Matching funds may include non-federal salaries, wages, and benefits, other sources of non-federal monies obligated specifically to the proposed project, and indirect costs (IDCs) on the non-federal portion of the budget, as well as non-recovered IDCs on the federal funding request; IDCs cannot be charged on tuition or equipment.
- All indirect costs (F&A) must be waived, but can be counted as match.

V. Pre-Proposal Format

In fairness to all applicants, all pre-proposals must adhere to the following format guidelines. Those that do not follow the guidelines will be disqualified from the competition. Please double check the formatting of your pre-proposal before submission.

- 1-inch margins all around
- Times New Roman 12 point font
- Strict page limits as listed below
- Page numbers, starting with Cover page as Page 1

Pre-proposals must contain all of, and only, the following elements:

- Cover Page (limited to one page)
- Objectives and technical approach (limited to two pages)
- Significance to Tennessee water resources (limited one page)
- References (as needed)
- Letters of support (optional if appropriate)
- CVs (limited to two pages per investigator)
Cover Page—must include the following elements:

- pre-proposal title
- proposed start/end date
- budget request (total amount only, no breakdown, federal and non-federal funds)
- name, academic rank or title, university and department/school, mailing address, phone number, and e-mail address for each principal investigator (PI)
- all of above (except mailing address and phone number) for each co-investigator
- one to five key words for the project.

Objectives and Technical Approach—Describe your project. State specifically what you plan to accomplish in the proposed project, in terms of goals, objectives, hypotheses to test, or research questions to answer, and how it will be done, i.e., technical approach, brief time line, major milestones, and leveraging of existing resources. Be specific and provide details so that reviewers can assess the feasibility and appropriateness of the technical approach.

Significance to Tennessee Water Resources—Explain the significance and relevance of the proposed project to one or more important water resource issue in Tennessee and/or the focus areas in the RFP. Explain who needs the project, why, and the benefits or outcomes.

References Cited—Use a standard bibliographic format to list references cited.

Letters of Support—Letters of support may be submitted from partnering organizations, agencies or potential users of the information the proposed project intends to produce.

Curricula Vitae—CVs are limited to two pages per investigator and must be in standard NSF format at following link:
http://www.nsf.gov/pubs/policydocs/pappguide/nsf15001/gpg_2.jsp#IIIC2f

Budget—Use the budget template found on page 5

Complete all elements of the application package and e-mail it as a single pdf file named “Lastname-preproposal2017.pdf” (where Lastname is PI’s last name). E-mail to tpapanic@utk.edu and gangwrrc@utk.edu no later than 5:00 pm ET on October 12, 2017. You will be notified regarding pre-proposal selection in November 2017.

VI. Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15, 2017</td>
<td>RFP issued</td>
</tr>
<tr>
<td>October 12, 2017</td>
<td>Faculty and student pre-proposals due</td>
</tr>
<tr>
<td>November 10, 2017</td>
<td>Faculty notified of pre-proposal outcome</td>
</tr>
<tr>
<td>November 17, 2017</td>
<td>Students notified of proposal outcome</td>
</tr>
<tr>
<td>December 21, 2017</td>
<td>Faculty Full proposals due</td>
</tr>
<tr>
<td>January 2018</td>
<td>Application package submitted to USGS for review</td>
</tr>
<tr>
<td>March 1, 2018</td>
<td>Projects begin</td>
</tr>
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</table>
## Budget Template

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Federal ($)</th>
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<tbody>
<tr>
<td><strong>Salaries and Wages</strong></td>
<td></td>
</tr>
<tr>
<td>PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Co-PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Student – (undergrad, MS or PhD, name)</td>
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</tr>
<tr>
<td><strong>Total Salaries and Wages</strong></td>
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</tr>
<tr>
<td><strong>Fringe Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Co-PI (name)</td>
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<tr>
<td>Student – (undergrad, MS or PhD, name)</td>
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</tr>
<tr>
<td><strong>Total Fringe Benefits</strong></td>
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</tr>
<tr>
<td><strong>Total Supplies</strong></td>
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</tr>
<tr>
<td><strong>Total Equipment</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Services or Consultants</strong></td>
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<tr>
<td><strong>Total Travel</strong></td>
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</tr>
<tr>
<td><strong>Total Other Direct Costs</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td>$</td>
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</tbody>
</table>