2016–2017 TWRI Graduate Student Research Programs
Request for Pre-Proposals

The Texas Water Resources Institute (TWRI) is happy to announce its call for pre-proposals for students conducting water resources research. TWRI has funds available for graduate students at Texas universities through two programs, the TWRI Mills Scholarship Program (available to Texas A&M College Station and Galveston only) and the U.S. Geological Survey Graduate Research Program (available to all Texas universities).

TWRI anticipates funding 6 to 8 graduate research projects of up to $5,000 each in the area of water resources and hydrology that have the potential to help Texas solve future water problems. We expect the funds will become available to graduate students in spring 2016. Additionally, those students selected for the Mills Scholarship will also be eligible for an out-of-state tuition waiver.

**Eligibility:**
- Applications from graduate students doing water resources-related research in Texas are encouraged. This program can support either ongoing or new studies.
- Proposals should be developed by the graduate student applying for the project in collaboration with his or her faculty advisor. Priority will be given to students of junior faculty.
- Graduate students who previously received a TWRI USGS competitive grant or a Mills Scholarship are not eligible for that same grant program but can be selected for the program not previously received. (Example: If student has received a Mills scholarship, they are still eligible for a USGS scholarship, and vice versa.) Please note in the pre-proposal if you have previously received funds from one of these programs.

**TWRI Research Priorities:**
Proposed research can deal with a wide range of water resources topics. But, priority will be given to research addressing the science, technology, policy or socio-economics of:
- Implementation of State Water Plan Water Management Strategies including agricultural and urban water conservation, development of new surface and groundwater sources, desalination, reuse and aquifer storage and recovery
- Addressing major water quality impairments in Texas including bacteria, dissolved oxygen and mercury
- Impacts of endangered species listings on water management in the state
- Oil and gas industry water use, reuse and reclamation or disposal of produced water
- Impacts of climate variability and drought on water resources and adaptation measures

**Timeline:**
Start dates for those selected for the Mills Scholarship may begin as early as the spring 2016 semester. Those selected for the USGS grant will begin March 1, 2016. The project timeline for each is one year.
**Budget:**
The TWRI Mills Scholarship Program funds are strictly for tuition and fees, while the USGS Program allows for a categorical budget, if needed, including tuition. If you have a specific budgetary need one way or the other, please note that in your application and we will take that into consideration when determining the program fit.

Other budgetary notes:
- A maximum of **$5,000** may be requested.
- A 2:1 match is required for USGS and recommended for Mills. A letter of commitment from your graduate committee chair is not needed at the pre-proposal phase, but if selected, a signed commitment letter will be required.
- The 2:1 match can include: salaries and fringe benefits of faculty advisors and graduate students funded by non-federal dollars; in-kind services; equipment or lab use; supplies furnished by student's department; and graduate teaching or research assistantships. Matching funds can also contain indirect costs and unrecovered indirect costs as match. Indirect costs used for match **cannot** be applied to tuition and equipment costs.
- Indirect costs may not be charged as part of the requested funds.
- If the student is unable to complete their project as proposed and approved, the funds will be returned to TWRI and will be allocated to another student.

**Reporting Requirements:**
Students will be required to submit a progress/final report at the end of their funding cycle. The progress/final report may include the student’s thesis or dissertation or a summary of it, a manuscript suitable for publication as a TWRI technical report, or a journal article. In addition, those receiving funds must work with the TWRI communications team to publicize their results in the form of photo(s) and a story. Acknowledgement must be given to TWRI’s program in any resulting publications for efforts partially funded by these funds.

**Evaluation and Ranking Criteria:**
- **40 Points** Are TWRI Research Priorities being addressed in the proposed research? Will it help better manage Texas water resources and/or solve future water problems?
- **30 Points** Does the proposal have scientific merit? Will it advance science? Is it innovative?
- **10 Points** Does the work proposed seem doable? Can the research be accomplished?
- **10 Points** Does the proposal contribute 2:1 matching funds?
- **5 Points** Are junior faculty involved in the proposal?
- **5 Points** Does the proposal adhere to the requirements set forth in the RFP?
Pre-Proposal Application Form
2016–2017 TWRI Graduate Student Research Programs

Please complete all parts of this Pre-Proposal Application Form to be considered for the Texas Water Resources Institute (TWRI) Graduate Student Research Programs. Pre-proposals should be at least 11 point Times New Roman font and 1 inch margins. This information is due to TWRI by November 16, 2015.

The completed Pre-Proposal Application Form must be e-mailed as an electronic document (Microsoft Word) to Danielle Kalisek at dmkalisek@tamu.edu. The application package is limited to 3 pages and must include items 1 through 9 below. Application information beyond the 3-page limit will not be considered in the review process.

**Basic Information:**
Which program are you applying for?

___ Mills Scholarship Program (Texas A&M or Galveston student requesting tuition only)
___ USGS Research Program (any Texas university requesting categorical funds and/or tuition)
___ Both the Mills & USGS Programs

1. Title of pre-proposal.
2. Student name, contact information (address, email and phone number), university, department, degree being pursued as well as degree starting year and expected year of graduation.
3. Faculty advisor or committee chair name, contact information (address, email and phone number), university and department.
4. Would these funds be initiating new research or supporting ongoing research? If ongoing, please briefly explain where you are at in the research and project timeline.
5. Abstract: Please provide 200 words or less about your proposed research problem, methods and objectives and describe how your research will address the research priorities.
6. Description of the student’s proposed research, emphasizing how it will address water resources-related concerns (particularly how, if possible, it will benefit Texas), including:
   a. *Statement of Critical Regional or State Water Problem.* Describe how your research will address RFP research priorities and explain the need for the project, who wants it and why.
   b. *Nature, Scope and Objectives of the Research, including a timeline of activities.* This is the major emphasis of your proposal
   c. *Methods, procedures and facilities.* Provide sufficient information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
   d. *Statement of expected results or benefits.* Specify the type of information that is to be gained and how it will be used.
7. Budget (NOTE: for the TWRI Mills Scholarship, funds are strictly for tuition and fees. USGS funds can go toward tuition as well as salaries, fringe, supplies, travel and other costs. Indirect costs are not allowed.)
   a. Please indicate your specific funding needs:
      i. ___ Tuition support is needed
      ii. ___ Other costs (salary, fringe, travel, other) is needed
      iii. ___ Either source of funds would be applicable to my project.

   b. Proposed use of funds, not to exceed $5,000 requested.

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   c. Matching funds of 2:1 are required for USGS and encouraged for Mills. Please list the amount and source(s) of your matching funds.

8. Academic qualifications of the student: current degree plan/grades, unofficial transcript or list of courses taken and grades. *Note: This item is not included in the three page limit.*

9. Intended career path the student anticipates pursuing.