2018-2020 U.S. Geological Survey State Water Resources Research Institutes Grant Program, Hawai'i and American Samoa

Overview:

This request for proposals is to initiate the University of Hawai'i Water Resources Research Center's 2018-2020 participation in the U.S. Geological Survey State Water Resources Research Institutes Program for Hawai'i and American Samoa as authorized by the federal Water Resources Research Act of 1964. We invite proposals for research and information transfer projects in physical, geological, natural and social sciences related to water resources. We anticipate that approximately $165,000 will be available to fund a number of projects with half dedicated to projects focused on issues directly impacting American Samoa. However, as of now, the funding itself and the amount remains uncertain subject to Congressional approval.

Eligible Applicants: Faculty members or affiliates at institutions of higher education in the State of Hawai'i or the US Affiliated State of American Samoa. Successful proposals must identify required matching funds of two dollars for each federal dollar (Hawai'i only). Questions about meeting or documenting this match should be directed to Kevin Nishimura, WRRC, University of Hawaii, at kpnishim@hawaii.edu.

Project duration is for 2 years. Funding for each year is pending project performance and availability of funds. As such, investigators must articulate experimental designs in which clearly identified deliverables are to be produced by the end of each funding year. The following types of grants will be considered:

a) Small grants for faculty of higher education institutes (recently hired or junior faculty provided additional consideration): The objective of these grants is to assist principal investigators in collecting preliminary data for submission of a large proposal to federal agencies or other funding sources. It is expected that the research resulting from small grants will produce peer-reviewed publications. The maximum support for each grant is approximately $20,000 annually. Smaller proof-of-concept grants will be also considered under this category.

b) Exploratory grants: The objective is to support small groups of undergraduate or graduate students working on water and environmental sustainability group projects for the Hawaiian Islands and American Samoa. Funds are to be used for data collection, preparation of posters, and purchase of supplies relevant to the project. Only faculty are eligible to apply, serve as PI, and as such are responsible to meet all reporting requirements. Products expected from these grants include peer-reviewed journal contributions or conference papers, posters, extension bulletins, and other technology transfer products. Awards up to $5,000 will be made.

All projects must demonstrate student training as required by federal program guidelines, and must include plans for technology transfer.

Note that **pre-propsosals** briefly describing the background, rationale, objectives, goals and expected outcomes of the proposed project (no more than 3 pages; see template and instructions in eProjects; http://www.soest.hawaii.edu/eProjects/logn/
logn_login.php) **are due Wednesday, November 30, 2016**.

Required deliverables for projects funded under this program include:

- an annual report in the USGS format
- one or more student theses, presentations, and/or posters
- a final project deliverable, which may take the form of a published or submitted paper. For proof-of-concept/exploratory grants, investigators may also submit as the final deliverable, a follow-on proposal to another funding source.

Program Objectives:

This program supports:

- Research projects that respond to high-priority state research issues in freshwater or coastal environments as outlined below;
- Research projects deemed highly likely to generate significant additional funding in the future from other agencies; and
- Information transfer projects that enhance communication of research results, or serve a broad environmental education or public service function.

Research Priorities for 2018-2020:

Research priorities for WRRC are set by the advisory councils representing broad stakeholder groups in Hawai'i and American Samoa. In addition, the 2006 reauthorization of the Water Resources Research Act shifted priorities in the direction of water supply and reliability questions. Hence, water quality-oriented proposals should refer to improving quality as a means of increasing availability and reliability of water supply. These considerations lead to the following priorities for proposals under this program:

- Water supply: satisfying growing water demand, including desalination, reuse, transfer, conservation, demand management; identifying and assessing new water sources
- Water system infrastructure: modeling of asset replacement; analysis of infrastructure integrity; forensic analysis
- Water quality: methods to restore water quality, especially leading to increasing usable water supply, including models of the fate and transport of contaminants and methods of treating wastewater
- Water institutions, law, economics: methods of increasing usable water supply through institutional refinement; water allocation laws and institutions in Hawaii; methods of planning for or pricing water to increase efficiency of use.

Selection:

Pending anticipated federal funding, WRRC expects to issue awards in support of approximately 8-10 proposals in 2018-2020. Successful projects will: 1) be hypothesis driven; 2) demonstrate strong evidence of scholarly merit that leads to papers in peer-refereed journals; 3) focus on the mentoring of graduate and undergraduate students; 4) identify and include targeted strategies for transfer of research results to specific user groups; and 5) address critical needs and issues as defined in the priorities above. While all priorities are at the same level, some weight may be given to balance among disciplines in the overall research program. Multiple referees using the following criteria will evaluate each proposal submitted:

1) Scientific merit; 2) relevance to WRRC's mission; 3) qualifications of the PI; 4) qualifications of Co-PI(s); 5) value to graduate and/or undergraduate education; 6) benefit to Hawai'i; and 7) overall value of the proposal.

More information:

For program-related questions, contact Darren T. Lerner (808-956-7031; lerner@hawaii.edu or Aly El-Kadi (808- 956-6331; elkadi@hawaii.edu) For technical and fiscally related matters contact Phillip Moravcik (808-956-3097; morav@hawaii.edu) or Kevin Nishimura (808-956- 7847; kpnishim@hawaii.edu), respectively.