

## OFFICE OF THE VICE PRESIDENT FOR RESEARCH

### South Carolina Resilience to Extreme Storms

#### **New Internal Funding Opportunity to Pursue Research on Social, Environmental, and Health Dimensions of the October 2015 Catastrophic Flooding**

##### **Purpose:**

We recently experienced a 1,000-year rainfall event that caused catastrophic flooding in South Carolina. This has led to breach in dams, damage to properties, roads and bridges, loss of homes, contamination of drinking water, and agriculture loss, to name a few of the calamities.

The 2015 October storm provides USC faculty a common platform to help our community through research and examine all aspects of community resilience including the immediate and long-term impacts on both natural ecosystems and human communities. It is critical to capture perishable data in order to understand the resilience of natural processes and ecosystem characteristics, to the societal changes that will occur in response to this extreme event. Such knowledge derived from the natural, engineering, health, and social sciences, as well as the humanities, is essential for the development of the requisite data, models, tools, and understanding that will enable critical improvements in resilience in the future. This initiative is focused on those research questions that must be addressed within the time frame of natural and human system response to the extreme impacts of the October 2015 storm.

##### **Eligibility and Funding:**

To augment our understanding of earth systems and its human dimensions, including the longer term recovery of the region, the Office of the Vice President for Research is making pilot grant awards to fund research in any area that is relevant to the October 2015 storm, and its aftermath, through a competitive process.

Interested faculty on all USC campuses are eligible to submit proposals to conduct this research. These funds are primarily designed but not limited to support post-reconnaissance field studies and the collection of perishable data that might otherwise be lost. The goal is to capture these valuable data and to utilize the natural laboratory for pilot studies that can then be expanded into larger multi-disciplinary extramural research proposals around the broad theme of system resilience. Advancements in our understanding of coastal resilience and vulnerability science as well as our understanding of the value of cultural preservation and livelihoods also provides an opportunity to translate state-of-the-art research findings to public policy decision making, thereby demonstrating the relevance of university-based research to the betterment of the state, region, and nation.

**Proposal Preparation:** Proposals are limited to **three pages** (Items 4-10). Please use 12 size font and 1 inch margin. The application must include the following:

1. Title
2. Lead Investigator and Home Unit/Department

3. Names and Units/Departments of other key personnel involved in the proposed project (faculty, students)
4. Abstract (100 words) that includes the research problem, significance, approach/methods, and broader social impacts of the project
5. Research Background
6. Significance and Innovation
7. Overall Research Design (including the demonstration of the need for such data; human subjects protocol, where appropriate)
8. Plan for rapid data collection including logistical challenges in gaining access to such data and procedures for data sharing, where applicable.
9. Theoretical and/or applied benefits that might be realized from the project
10. Suggested Timeframe is October 23<sup>rd</sup> through May 15<sup>th</sup> (6 months)
11. BUDGET: We plan to fund grants, each in the range of \$15,000-\$30,000. Individual investigator-initiated grants are typically \$15,000 while multiple-PI interdisciplinary grants can be in the \$30,000 range. Any faculty salary support should be minimal; food is not an allowable expense. Budget justification should be provided addressing the role of all key personnel.
12. Appendices: Current CV (**2 pages maximum**) that details relevant qualifications and publications, including current and pending support

**Proposal Due Date:** Proposals should be submitted through USCERA (<http://sam.research.sc.edu/uscera>) by 5 p.m. Monday October 19<sup>th</sup>, 2015. Please select “Internal Request: VP for Research” and choose the **SCFLOODS** category type from dropdown box in USCERA to ensure proper routing of proposals.

**Application Review:** All applications will be reviewed by an expert committee consisting of faculty experienced in the areas of research. They will make the recommendations to the VPR who will make the final decision about funding.

**Progress Report:** A final report is due to the Vice President’s Office of Research one month after completion of your project. This will describe the research program, findings, and conclusions, as well as information on how this project will generate external funding opportunities. The final report will be used to prepare a comprehensive report to describe the University’s research response to the October 2015 Floods.

**Contact:** For questions, please contact Beth Herron at 803-777-2885 or [bherron@mailbox.sc.edu](mailto:bherron@mailbox.sc.edu).

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**A NOTE OF CAUTION:** Given the nature and expanse of the disaster, post-flooding reconnaissance might be difficult. There will be many legal and logistical challenges in conducting these field studies including access to the affected areas, local accommodations (shelter, food, water), and infrastructure (transportation, power). Researchers are reminded that the area is a disaster zone and that they must fully appreciate the environment and context within which they are operating. You should plan for complete self-sufficiency, as we do not want researchers to divert basic resources (shelter, food, water, fuel) from those most at need—the affected residents.