Request for Statements of Interest
Funding Opportunity Announcement

Federal Awarding Agency:
U.S. Army Corps of Engineers,
Engineer Research and Development Center
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

Funding Opportunity No: W81EWF-21-SOI-0023
CFDA No: 12.630
Statutory Authority: 10 USC 2358
Program Title: Developing Case Studies from Pre/Post Natural disaster monitoring of natural features

Announcement Type: Initial announcement
Issue Date: 1 July 2021
Statement of Interest/Qualifications Due Date: July 31, 2021. 17:00 CST.
Full Application Package Due Date, if Invited: August 20, 2021. 17:00 CST.
Estimated Award Ceiling: (dollars per single award excluding any options) $23.5K will be available for Year 1. No additional years will be available. Anticipate funding up to 3 single awards for one year of funding each (3 awards for $23.5K for 1 year each).
Estimated Total Program Funding (optional): $70.5K
Expected Number of Awards: up to 3.

Section I: Funding Opportunity Description

Background:
An evaluation of avoided losses attributed to natural features in both “indirect” and “direct” impact scenarios combined with a systematic approach to relating the avoidance of loss to Natural and Nature Based Features (NNBF) would help in broadening NNBF usage. Results would also inform future policy and actions related to marginalized communities living within high risk coastal regions. Hurricanes Katrina (2005), Hurricane Harvey (2016), and extreme flooding in Louisiana (2016) have revealed disparities in how communities recover from extreme events. With such studies and information, issues of equity, vulnerability, and resilience could be woven into the strategy for how the project is planned. For example, the 2020 Atlantic hurricane season produced a record 30 named storms. In addition to record storm seasons, sea level rise continues to threaten coastlines, and intensifying rainstorms amplify individual and compound flood events. Thus, the importance of understanding how natural features and NNBFs perform under hurricane and other extreme wind or rainstorm conditions as well as other natural disasters is critical.

Brief Description of Anticipated Work:

This work represents an opportunity to develop case studies highlighting the performance/impact to natural features or natural and nature based features (NNBF) during recent natural disaster events such as hurricanes, and flooding. Many university researchers have gathered recent pre/post storm data using various metrics. While there are often mechanisms to collect data, opportunities to analyze the collected data and develop case studies are not always feasible. This requirement is to develop a subset of sampling events into a case study in collaboration with USACE. This is an opportunity to identify and use existing data from past storm seasons to develop case studies demonstrating the performance of natural features. Ultimately, case study results would also be used to relate natural performance to anticipated performance of NNBF features. Case studies could be focused on natural features such as dunes, marshes, reefs, etc. or NNBFs. Previously collected data used to develop case studies might include (but is not limited to) a combination of wave attenuation and water movement data, sediment transport data, elevation data, and vegetation or other ecological data.

The findings of this cooperative agreement will be made publicly available through the release of public reports or peer-reviewed journal articles as well as a public seminar describing results. The Government will be involved with the research by providing technical guidance on the research, assisting with the experimental design, and collaborating on the journal articles. The Government is not expecting the periods of performances to overlap.

Identified project tasks are:

1. Describe previously collected data and justification for how it can be used as a case study for monitoring natural or NNBF features pre/post natural disaster.
2. Work collaboratively with ERDC to analyze data and develop case study/.
3. Work collaboratively with ERDC publish case study via ERDC or peer reviewed publications.

Requirements:

Successful applicants should have expert knowledge of 1) NNBF and Natural features, 2) available pre and post natural disaster (e.g., hurricane, flood event, etc.) monitoring data in hand associated with a natural feature or NNBF, and 3) knowledge of planned statistical approaches for analysis of those datasets.

Areas of expertise required to perform this study include:
1) Knowledge and experience monitoring extreme events.
2) Statistical analysis.

Applicants will be required to submit quarterly status reports and a final report within 4 months of completion of the study. ERDC and the candidates will develop a draft of the journal article or articles for internal peer review during cooperative agreement’s period of performance.

Public Benefit:

Coastal wetlands are important to the public because they provide flood protection, habitat for wildlife and plants, and nutrient cycling. Coastal wetlands comprise less than 10 percent of the continental United States land area. However, 39 percent of the United States population lives in these areas, and those numbers are expected to continue to increase. Coastal wetlands, such as salt marshes and dunes, are naturally occurring features that provide defense from large storm and to protect lives and property. These ecosystems buffer inland areas from storm surges by absorbing the storm energy and preventing the intrusion of salt water into upland ecosystems. Without these coastal wetlands, inland habitat and property will be destroyed, and there will be increased erosion of the coastline. Landowners are interested in the natural and nature-based features associated with these ecosystems to protect and improve the quality of lives and property associated with the populations living in these coastal areas. Results from this cooperative agreement will inform monitoring practices and future actions related to marginalized communities living within high risk coastal regions. Hurricanes Katrina (2005), Hurricane Harvey (2016), and extreme flooding in Louisiana (2016) revealed disparities in how communities recover from extreme events. With such studies and information, issues of equity, vulnerability, and resilience could be woven into the strategy for how the project is planned. For example, the 2020 Atlantic hurricane season produced a record 30 named storms. Thus, the importance of understanding how NNBFs perform under hurricane and other extreme wind or rainstorm conditions as well as other natural disasters is critical.

Section II: Award Information

Responses to this Request for Statements of Interest will be used to identify potential investigators for studies to be sponsored by the Engineer Research and Development Center to develop case studies. The estimated level of funding for FY21 is approximately $23.5K for one year. Up to three separate cooperative agreements may be award from this FOA.

Government Involvement:

The ERDC will work cooperatively with the investigator to identify issues related to analysis of data, logistics and work plan development, and will review status reports and will provide input to data interpretation for final reports. ERDC scientists will assist in the dissemination of study results through local scientific presentations and website postings and will participate in the preparation of peer-reviewed journal papers to insure wide dissemination of these finding. ERDC scientists will incorporate the data and analyses into a centralized database that will be used to evaluate project outcomes and provide guidance and justification for proposed restoration measures.

Section III: Eligibility Information

1. Eligible Applicants – This opportunity is restricted to non-federal partners of the North Atlantic Coast, Chesapeake Watershed, Piedmont-South Atlantic Coast, South Florida-Caribbean, and Gulf Coast Cooperative Ecosystems Studies Units (CESUs).

2. Cost Sharing – This action will be 100% funded by USACE.

Section IV: Application and Submission Information – Two Phase Process

Phase I: Submission of a Statement of Interest/Qualifications.

1. Materials Requested for Statement of Interest/Qualifications:
   Please provide the following via e-mail attachment to: crystal.e.north@usace.army.mil (Maximum length: 2 pages, single-spaced 12 pt. font).

    1. Name, Organization and Contact Information

    2. Brief Statement of Qualifications (including):
       - Biographical Sketch,

- Relevant past projects and clients with brief descriptions of these projects,
- Staff, faculty or students available to work on this project and their areas of expertise,
- Any brief description of capabilities to successfully complete the project you may wish to add (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.).

Note: A proposed budget is NOT requested at this time.

The administrative point of contact is Crystal North, crystal.e.north@usace.army.mil

2. Statement of Interest/Qualifications shall be submitted NO LATER THAN July 31, 2021. 17:00 CST.

Based on a review of the Statements of Interest received, an investigator or investigators will be invited to move to Phase II which is to prepare a full study proposal. Statements will be evaluated based on the investigator's specific experience and capabilities in areas related to the study requirements.

Phase II: Submission of a complete application package to include a full technical proposal including budget, if invited.

1. Address to Request Application Package

The complete funding opportunity announcement, application forms, and instructions are available for download at Grants.gov.

The administrative point of contact is Specialist, crystal.e.north@usace.army.mil

2. Content and Form of Application Submission

All mandatory forms and any applicable optional forms must be completed in accordance with the instructions on the forms and the additional instructions below.

a. SF 424 R&R - Application for Federal Assistance
b. Full Technical Proposal – Discussion of the nature and scope of the research and technical approach. Additional information on prior work in this area, descriptions of available equipment, data and facilities, and resumes of personnel who will be participating in this effort should also be included.
c. Cost Proposal/Budget – Clear, concise, and accurate cost proposals reflect the offeror's financial plan for accomplishing the effort contained in the technical proposal. As part of its cost proposal, the offeror shall submit cost element breakdowns in sufficient detail so that a reasonableness determination can be made. The SF 424 Research & Related Budget Form can be used as a guide but is required if you choose to utilize the subaward budget form. The cost breakdown should include the following, if applicable:
    1. Direct Labor: Direct labor should be detailed by level of effort (i.e. numbers of hours, etc.) of each labor category and the applicable labor rate. The source of labor rates shall be identified and verified. If rates are estimated, please provide the historical based used and clearly identify all escalation applied to derive the proposed rates.
    2. Fringe Benefit Rates: The source of fringe benefit rate shall be identified and verified.
    3. Travel: Travel costs must include a purpose and breakdown per trip to include destination, number of travelers, and duration.
    4. Materials/Equipment: List all material/equipment items by type and kind with associated costs and advise if the costs are based on vendor quotes and/or

engineering estimates; provide copies of vendor quotes and/or catalog pricing data.

5. Subrecipient costs: Submit all subrecipient proposals and analyses. Provide the method of selection used to determine the subrecipient.
6. Tuition: Provide details and verification for any tuition amounts proposed.
7. Indirect Costs: Currently the negotiated indirect rate for awards through the CESU is 17.5%.
8. Any other proposed costs: The source should be identified and verified.

3. Application package shall be submitted NO LATER THAN August 20, 2021. 17:00 CST.

4. Submission Instructions

Applications may be submitted by, e-mail, or Grants.gov. Choose ONE of the following submission methods:

a. E-mail:
Format all documents to print on Letter (8 ½ x 11") paper. E-mail proposal to crystal.e.north@usace.army.mil

b. Grants.gov: https://www.grants.gov/:
Applicants are not required to submit proposals through Grants.gov. However, if applications are submitted via the internet, applicants are responsible for ensuring that their Grants.gov proposal submission is received in its entirety.

All applicants choosing to use Grants.gov to submit proposals must be registered and have and account with Grants.gov. It may take up to three weeks to complete Grants.gov registration. For more information on registration, go to https://www.grants.gov/web/grants/applicants.html.

Section V: Application Review Information

1. **Peer or Scientific Review Criteria:** In accordance with DoDGARs 22.315(c), an impartial peer review will be conducted. Subject to funding availability, all proposals will be reviewed using the criteria listed below (technical and cost/price). All proposals will be evaluated under the following two criteria which are of descending importance.

a. **Technical (items i. and ii. are of equal importance):**
i. Technical merits of proposed R&D.
ii. Potential relationship of proposed R&D to DoD missions.

b. **Cost/Price:** Overall realism of the proposed costs will be evaluated.

2. **Review and Selection Process**

a. **Categories:** Based on the Peer or Scientific Review, proposals will be categorized as Selectable or Not Selectable (see definitions below). The selection of the source for award will be based on the Peer or Scientific Review, as well as importance to agency programs and funding availability.

i. **Selectable:** Proposals are recommended for acceptance if sufficient funding is available.

ii. **Not Selectable:** Even if sufficient funding existed, the proposal should not be funded.

Note: The Government reserves the right to award some, all, or none of proposals. When the

Government elects to award only a part of a proposal, the selected part may be categorized as Selectable, though the proposal as a whole may not merit such a categorization.

b. No other criteria will be used.

c. Prior to award of a potentially successful offer, the Grants Officer will make a determination regarding price reasonableness.

Section VI: Award Administration Information

1. Award Notices
   Written notice of award will be given in conjunction with issuance of a cooperative agreement signed by a Grants Officer. The cooperative agreement will contain the effective date of the agreement, the period of performance, funding information, and all terms and conditions. The recipient is required to sign and return the document before work under the agreement commences. **Work described in this announcement SHALL NOT begin without prior authorization from a Grants Officer.**

2. Administrative Requirements
   The cooperative agreement issued as a result of this announcement is subject to the administrative requirements in 2 CFR Subtitle A; 2 CFR Subtitle B, Ch. XI, Part 1103; and 32 CFR Subchapter C, except Parts 32 and 33.

3. Reporting
   See 2 CFR Sections 200.327 for financial reporting requirements,
   200.328 for performance reporting requirements, and 200.329 for real property reporting requirements.

Section VII: Agency Contact

Crystal North, Grants Specialist
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