U.S. Coastal Research Program

Request for Proposals 2024



January 2, 2024

The <u>U.S. Coastal Research Program (USCRP)</u> is a multi-agency led effort to coordinate federal activities, strengthen academic programs, and address coastal community needs by identifying coastal research priorities, enhancing funding for coastal academic programs, fostering collaboration, and promoting science translation. USCRP is guided by priorities of coastal leaders in federal agencies, academics, and non-governmental organizations and by the overarching framework and needs as identified in the seminal 2014 Nearshore Research Report (Elko et al. 2015)¹. Past USCRP opportunities have funded university researchers across the U.S. to tackle coastal science and engineering questions in a variety of environments along all the nation's coastlines. The goal of the USCRP is to build a community of practice to address societal needs along the coast.

Subject to the availability of federal funding in fiscal year 2024 (FY24), this announcement describes how eligible applicants should apply for this funding opportunity. It is anticipated that approximately \$4M may be available to fund academic projects for proposals that address program priorities by re-investing in previously collected data and resources to explore new science questions, hypotheses, and problems. Though the data should be from a previous collection effort (USCRP is not funding new data collection for this RFP), the data do not need to be from previously funded USCRP projects (although encouraged). Previous data sets not collected by USCRP projects must address at least one of the USCRP research priorities of long-term coastal processes, extreme events, or human and ecosystem health. These academic proposals should include funding for graduate students to help build their expertise in coastal research and develop the next generation of leaders. Researchers and students at U.S. institutions of higher education are invited to respond to this request for proposals (RFP). Preference will be given to researchers and students who are U.S. citizens.

¹Elko, N., Feddersen, F., Foster, F., Hapke, C., Mcninch, J., Mulligan, R., Özkan-Haller, H.T., Plant, N., and B. Raubenheimer (eds.), 2015. "The future of nearshore processes research." Shore & Beach, 83(1), 13.

Application Process

A research proposal describing the science/engineering questions to be addressed and planned work should be submitted to the USCRP in response to this RFP. The format and content of the research

proposal is described below. Direct all questions to <u>contact.uscrp@gmail.com</u>. Instructions to register for an informational webinar that will provide an overview and opportunity for Q/A related to this opportunity will be posted on the USCRP website under Funding Announcements, 2024 Awards Info.

Pre-Proposal and Proposal Submission and Timeline

Pre-proposals will allow the USCRP to gauge interest and projects that may be submitted for full consideration. To be eligible to submit a full proposal, pre-proposals must be submitted by 11:59 PM (EST) on February 1, 2024. Pre-proposals should be submitted to the USCRP request for proposals posted on the USCRP website under Funding Announcements, 2024 Awards Info. Required pre-proposal content (no more than 5 pages) is listed below. Emails will be sent to applicants acknowledging receipt of the pre-proposals. Late pre-proposals will not be considered, and any associated full proposals will not be accepted.

Full research proposals are due by March 1, 2024, at 11:59 PM (EST). Required full proposal content (no more than 10 pages) is listed below. Full proposals should be submitted to the USCRP request for proposals posted on the USCRP website under Funding Announcements, 2024 Awards Info. Click on the submit proposal button. Emails will be sent to applicants acknowledging receipt of proposals.

Award Information

Subject to the availability of federal funding in fiscal year 2024 (FY24), total anticipated funding for all awards is up to approximately \$4M inclusive of indirect costs. Previously awarded applicants must be in good standing with previous USCRP awards to receive FY24 funds. All applicants must meet eligibility requirements. The amount of the individual awards should not exceed \$500K, inclusive of indirect costs. The exact amount of funds for each award will be finalized in pre-award discussions and negotiations between the applicant and USCRP representatives. There is no guarantee that funds will be available to make awards, or that any proposal will be selected for funding.

Applicants may submit proposals with a period of performance of up to 2 years from the anticipated start date of September 30, 2024. Awards will be multi-year contracts funded incrementally. Multi-year contract funding is subject to the availability of future federal funding.

Approximate Timeline for Proposals and Awards:

Anticipated Dates	Task
February 1 2024	Pre-proposal due to USCRP (No more than 5 Pages)
March 1 2024	Full research proposals due to USCRP (No more than 10 pages)

March - April 2024	Proposals reviewed
April 1 2024	Proposals recommended for funding; researchers notified
April 15 2024	Recommended proposals submitted through the USACE Broad Agency Announcement (BAA) process
August - September 2024	Awards made, Anticipated project start

Eligible Applicants

The PI should be a researcher at a U.S. institution of higher learning and in a role that includes educating and supervising graduate students. Supporting a graduate student who is developing research skills is a higher priority to the USCRP than supporting a post-doctoral researcher who already has expertise in these areas. The USCRP encourages support and leadership roles, as appropriate, for STEM undergraduates into the coastal field. Academic collaborations of interdisciplinary teams are highly encouraged. Disbursements of funding should be handled by the lead university, who will receive the USCRP award, and detailed in the proposed budget including overhead for the collaborating universities. Preference will be given to researchers and students who are U.S. citizens. Collaborations with international academics are acceptable.

Research Topics & Prioritized Needs

The USCRP seeks academic proposals that address at least one of the USCRP research priorities of long-term coastal processes, extreme events, or human and ecosystem health by leveraging existing data and resources to continue analysis or explore new science questions, hypotheses, and challenges. Reinvesting in previously collected datasets and collaborating with other researchers, has the potential for new and significant findings that address challenges faced by coastal communities. Additionally, allowing new students to work with existing data towards a new analysis, supports the USCRP goal of supporting the next generation of coastal researchers.

Data applied in the proposed study does not need to be from previously funded USCRP projects but should address one of the three research priorities listed previously. Those interested in applying existing USCRP data and resources from past USCRP projects can query the <u>USCRP Project Database</u>.

- Potential example topics include:
 - Strategic investment in extending previously funded collaborative studies (Duck 82, Duck 85, SuperDuck, DUNEX, etc)
 - Analyze existing long term datasets
 - Combine existing datasets to explore interdisciplinary topics
 - Use existing data to run/evaluate numerical models

- Use existing data to train machine learning models
- Explore follow on research topics as highlighted from next-steps of previous research projects
- Use existing data to transition tools and technology
- Use existing data to address new/current stakeholder needs

Priority will be given to proposals that emphasize:

- Training the next generation of coastal engineers and researchers
- Collaboration across departments and disciplines
- Working with underserved communities and minorities

Pre-Proposal Content

Pre-proposals must be no more than five pages (single-spaced, 12- point font).

Pre-proposals must provide the following information (maximum of 5 pages):

- 1. Project title and names, titles, affiliations, and contact information (email and phone number) of PIs (lead and co-PIs)
- 2. Duration of the project
- 3. Estimated overall cost (i.e., labor costs, material costs, burdens, etc.)
- 4. Statements describing the objective(s) or goal(s) of the working hypothesis, if appropriate.
- 5. Executive summary describing the background, scope of work, project plan, and expected results and deliverables.
- 6. One or more paragraphs describing the nature of the existing dataset (where/when from, how/who collected, products derived from dataset to date, etc.) and the proposed work that is new, novel, transformational, etc.
- 7. A one-page curriculum vitae of the lead principal investigator.

Emails will be sent to applicants acknowledging receipt of the pre-proposal. Late pre-proposals will not be considered, and any associated full applications will not be accepted.

Full Research Proposal Content

The proposal should describe the research plan, show how the work aligns with prioritized needs, specify the graduate student(s) role, and present a detailed budget. The proposals will be ranked on individual merit. Please avoid submitting blanket proposals that address several needs or topic areas.

Research proposals must be no more than ten pages (single-spaced, 12- point font). The data management plan, diversity statement, work cited, CVs, and letters of support can be included as appendices and do not count towards the page limit. Proposals must be submitted electronically as a single pdf file. Only material that is submitted as a single pdf will be reviewed. Files that cannot be opened or downloaded will not be reviewed. You will be notified of receipt of your proposal via email.

Do not name your proposal USCRPresearchProposal.pdf. Name the file as follows: [Lastname_University.pdf] eg. Smith_Purdue.pdf.

The research proposal should include the following sections:

- 1. Research Proposal Overview:
 - PI Name, Title, Organization and Contact Information
 - Research Proposal Title
 - Research Topic
 - Proposed project performance period (start and end dates)
 - Funding request by year, as appropriate, and total funding
 - Geographic location (i.e., state) where research will take place, if applicable
 - Project Abstract
- 2. Goal and Objectives: Include statements describing the basic or applied goals and objectives of the working hypothesis. Goals and objectives should be specific for each year of the work plan presented. How is the proposal addressing the priorities of this funding opportunity and how is the proposal leveraging existing data and resources? Note: recipients will be required to submit quarterly progress reports, an annual in progress review (IPR) presentation at a USCRP monthly community meeting, and a final technical report in which progress against these goals and objectives will be reported.
- 3. Societal Relevance: Provide sufficient background information for reviewers to independently assess the significance of the proposed project. Summarize the problem, knowledge gap or need to be addressed and the status of ongoing efforts and coordination to address the identified needs or gaps. Summarize how the research aligns with prioritized needs. Describe benefits to coastal communities and/or federal agencies as applicable.
- 4. Scientific and Technical Approach: Explain the technical approach to be taken in the course of the research that will advance coastal science related to the topical area. Include a description of the key assumptions to be made, the scientific basis for the analysis, and the numerical procedures to be used. Required- include a very clear description of the dataset to be used in the research including who collected the data, where the data was collected, why was the data originally collected (as part of what project), who funded the data collection, what data was collected and how, what products were derived from the original dataset (i.e., publications), etc. Describe expected outcomes and potential breakthroughs that should/may arise from this research to improve the state of knowledge or understanding. Provide a research timeline to ensure the scope of work can be completed in the stated period of performance.
- 5. Deliverables: Provide a brief description of and timeline for products, such as publications, tools, services, metadata, data sharing plan, communication of results to federal partners, etc. Clear deliverables at the end of each year are required. Acknowledge willingness to meet USCRP performance assessment and communication requirements, including annual presentation of research findings, quarterly progress reports, final technical report, and a

research highlight for program communications.

6. Qualifications:

Include the following:

- Brief biographical sketch. The amount of information provided about coinvestigators, if applicable, should be relative to the amount of work they will contribute to the total effort.
- Relevant past projects and experience as they relate to the present effort.
- Description of the role of the student(s), explain the differences between the roles
 of the PI and the student, and outline opportunities for student research leadership.
 Include funding for the student in the detailed budget. USCRP program priorities
 include funding graduate students and undergraduates in STEM fields.
- Brief description of existing capabilities that will help you to successfully complete the project (e.g., equipment, etc.).
- **7. Partners:** If applicable, list partners and describe their expected role and responsibilities. Describe how the project implements strategies that align with USCRP and the partner(s) goals. Describe the approach to leveraging available resources such as programs, partnerships, data, and tools across the government, industry, and NGOs. There are no restrictions on hiring subcontractors.
- 8. Project Budget: Provide a detailed budget table of estimated costs, tasks, and deliverables broken down by year with a narrative justification. Indirect costs should be included in your budget estimates. Overhead amounts are generally set by the university. There are no restrictions on USCRP funds supporting international travel for science meetings and/or collaborations. Do not submit a full university budget with signature pages. Identify the cost of separable elements of the proposed work and identify the elements of the project that could be revised or eliminated if sufficient funding is not available for all proposed activities.
- 9. Diversity Statement: (required, does not count towards page limit)
 Describe how well the proposed activity broadens the participation of historically
 underrepresented or under-resourced groups (e.g., race/ethnicity, gender, sexual
 orientation, disability, geography, etc.) and how these groups are given a voice in the
 project. Examples could include (but are not limited to) the full participation of women,
 persons with disabilities, and underrepresented minorities in conducting this work or
 benefitting from its outcomes.
- 10. Data Management Plan: (required, does not count towards page limit) Describe what data will be generated through the course of the proposed research and what will be shared and preserved, how it will be done, or explain why data sharing or preservation is not possible or scientifically appropriate, or why the costs of sharing or preservation are incommensurate with the value of doing so.

The data management plan must include the following:

• The types of data, software, and other materials to be produced.

- How the data will be acquired.
- Time and location of data acquisition, if scientifically pertinent.
- How the data will be processed.
- The file formats and the naming conventions that will be used.
- A description of dataset origin when existing data resources are used.
- A description of the standards to be used for data and metadata format and content.
- **11. Works Cited:** (required, does not count towards page limit)
- **12. CVs:** (required, does not count towards page limit, 2-page limit per CV). Each person's CV is required for lead investigator and co-investigators. CVs for graduate and/or undergraduate students are permitted but not required and should not be longer than 2 pages. Excess pages will not be included in the review.
- **13. Letters of Support:** (optional, 2-page limit per letter, does not count towards page limit). Letters should address specific areas of collaboration to support the project objectives. Letters that provide broad encouragement for funding are not necessary.

Proposal Process

Applicants should submit pre-proposals to USCRP by February 1 and full proposals to USCRP by March 1, 2024. Successful proposals will receive a letter of recommendation from the USCRP and then will be asked to submit their proposal with any suggested revisions through the USACE Broad Agency Announcement (BAA) process. Details on how to apply through the BAA process will be described in the letter of recommendation from USCRP, however the BAA process can be accessed at any time¹. Anyone, with or without a USCRP letter of recommendation can submit a proposal to the USACE BAA program, but a letter of recommendation from USCRP will identify that the proposal has been endorsed by the process described herein. Awards and anticipated project start dates from this request for proposals will be between August 1-September 30, 2024.

¹2023 ERDC Broad Agency Announcement (BAA)

Evaluation Criteria

The evaluation method and selection criteria for awards will include:

1. Scope - 20%

- Does the proposal address research topics and priority needs outlined in the RFP?
- Does the proposal explain how existing data and resources will be leveraged?
- How does the research improve the state of knowledge or understanding?

2. Scientific and Technical Merit - 20%

Are the goals, objectives, and deliverables clearly stated and described?

- Is an adequate data management plan included? Is a clear description of the dataset to be used in the research included?
- Are the methods novel and creative?
- Does the research advance fundamental or applied science to improve knowledge or understanding?

3. Experience / Research Team / Partners - 20%

- Do the project teams demonstrate the appropriate experience, qualifications and skill for successful completion of the project?
- Do the project teams have the capacity and resources such as equipment and staff necessary to complete the work?
- Is there collaboration across departments and disciplines?
- Have collaborations and partnerships been pursued? If so, does it tie back to the objectives and tasks of the proposed plan?

4. Deliverables - 10%

- Are deliverables such as publications, open-source numerical models, advancements in improving instrumentation, products, tools, services, metadata, etc described? Are there tangible deliverables at the end of each year?
- Are USCRP requirements of an annual presentation of research findings, quarterly progress reports, final technical report, and a research highlight for program communications understood?

5. Student Opportunities - 15%

- Does the project support a graduate student and have opportunities for undergraduates in STEM fields?
- Are there leadership opportunities for the student?
- Are there opportunities to work with and support underserved communities and minorities?

6. Timeline - 5%

- Is a research timeline to ensure the scope of work can be completed in the stated period of performance provided?
- Are the project phases and milestones clearly described?
- Is the proposed workload feasible given the project duration?

7. Budget - 10%

- Is a detailed budget table with deliverables and justification by year provided?
- Are salaries and contractor costs, travel, and equipment/publication costs justified and appropriate to project needs?