

US Coastal Research Program Request for Proposals FY2020

(Updated 2/20/2020, update in orange)

(Updated 2/14/2020, update in red)

(Updated 02/07/2020, updates in blue)

The U.S. Coastal Research Program (USCRP: <https://uscoastalresearch.org/>) is a collaboration of federal agencies, academics, and stakeholders that aims to connect scientific and engineering research to societally-relevant coastal challenges. By building a strong community of practice, the USCRP has fostered collaborative opportunities, enhanced available funding, and promoted science translation to users.

In FY2020, the USCRP is providing up to \$5M for competitive academic awards addressing the topics described below. Academic proposals should align with or support federal science and engineering priorities to address critical research needs within the coastal community and advance the state of knowledge. These academic awards will also fund graduate students to help build expertise in the coastal research and develop the next generation of leaders. Researchers at U.S. institutions of higher education are invited to respond to this RFP. The period of performance for the awards is up to 3 years.

Application Process*

In order to compete for funding, applicants should indicate research topics of interest via [Google Form](#) at <https://uscoastalresearch.org/2020-awards-info> by **January 24, 2020**, and attend topical meetings to discuss science with federal PIs. Based on interest identified in the google form, federal PIs will contact potential applicants via email to schedule group discussions. Proposals that align with or support these federal research topics will be given priority.

A Research Proposal, describing the science/engineering questions and planned work, should be submitted to the American Shore and Beach Association (ASBPA) in response to this RFP. The format and content of the research proposal is described below.

Please direct all questions to info@uscoastalresearch.org. FAQs are posted at: <https://uscoastalresearch.org/2020-awards-info>

Research Proposal Deadline

The research proposals are due by February 26, 2020 at 11:59 PM (EST). The proposals should be submitted to ASBPA online at: <http://asbpa.org/us-coastal-research/>.

*Note: Information pertaining to the CESU process has been removed.

Award Information*

Total anticipated funding for all awards is up to \$5 million for FY2020 to support [approximately 10 awards](#). Applicants must be in good standing with previous USCRP awards to receive FY20 funds. [The amount of the individual awards will be from \\$100K to \\$400K, inclusive of indirect costs. The exact amount of funds for each award will be finalized in pre-award discussions/negotiations between the applicant and USCRP representatives.](#) Eligible funding applicants are institutions of higher education.

Applicants may submit proposals with a period of performance of up to 3 years from the anticipated start date. For FY20 awards, the anticipated start date should be between October 1, 2020 and January 1, 2021.

Evaluation Criteria

The evaluation method and selection criteria for research and development awards will include:

- 1. Relevance and applicability of proposed project to the USCRP goals**
 - Aligns with current Federal research priorities
 - Shows a clear connection between science and application
 - Supports a graduate student and provides an opportunity for research leadership
- 2. Technical and scientific merit**
 - Research advances fundamental science
 - Goals, objectives, and deliverables are clearly stated and described
 - Methods are novel and creative; enable future breakthrough technologies
- 3. Likelihood for success**
 - Applicant demonstrates the experience and capacity to lead proposed work
 - The appropriate federal partners and their stakeholders are included
 - The scope of work can be successfully completed within the stated period of performance
- 4. Project costs**
 - A detailed budget is provided. Costs are reasonable and well justified
 - Optimizes the cost effectiveness by leveraging federal resources or in-kind matches

Approximate timetable for proposals and awards*

2020 Timing	Task
January 24	Interest submitted via google form (available on USCRP site).

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late January	Meetings to discuss research priority topics with federal PIs.
February 26	Research proposals due to ASBPA.
March	Proposals reviewed.
Summer	Funded proposal selected; Researchers notified.
Late Summer to Fall	Awards made.

Research Topics and Agency Priority Areas

Proposals should address one of the following federal research priorities.

Long-term processes and coastal response along open coast shorelines.

- L1. Decadal-scale modeling of barrier island evolution under future storms and sea level rise
- L2. Role of nonlinear interactions of physical processes on long-term coastal evolution
- L3. Groundwater changes due to sea level rise and corresponding landscape response, particularly behind coastal defense structures (focus on models and predictions)
- L4. Barrier island survival during future climate conditions (changing sea level, storms), particularly as related to the long-term sand volume budget (focus on monitoring nearshore bathymetry)
- ~~L5. Effects of land use and fresh water management practices on water quality and harmful algal blooms~~
- L6: Sediment Budgets: Limitations on our predictive capability of sediment resource budgeting and long-term management practices
- L7: Tidal Inlets: Management of sediment resources in the vicinity of tidal inlets which must address uncertainty in the impacts of long-term processes such as sea-level change, land-use change, and sediment supply
- L8: a) Dune Dynamics, and b) Human reaction to repetitive flood loss
- L9: Linking short-term (seconds to seasons) nearshore morphologic variability, sediment transport, waves, and water levels to long-term morphology change
- L10. Change in focus from the 1-percent-annual-chance condition to a better understanding of the graduated risk due to coastal hazards at the structure level
- L11. Human influence on long-term coastal erosion trends and sediment budgets
- L12. Long-term feedbacks of dredging and environmental habitat
- L13. Implications of adding sediment from outside the littoral system on the sediment budget of a coastal system and long-term coastal resiliency

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Processes influencing the ability of estuarine ecosystems to provide 1) storm protection, 2) economic benefit, and/or 3) critical habitat

- E1. Estuarine and marsh evolution due to short- and long-term drivers (focus on integrated data collection and modeling)
- E2. Developing tools to assess future evolution of coastal habitats in response to sediment supply, sea-level rise, hydrodynamics, and bio-physical interactions
- E3. Effects of hydrological management in coastal wetlands on the biogeochemical processes that drive soil accretion, and the implications for subsidence and diminished ecosystem services in response to sea level rise
- E4. Restoring and Sustaining Ecological Function in Coastal Marshes Affected by Sea Level Rise and Assessing and Improving the Resilience of Bay and Coastal Marshes and Islands
- E5. Quantifying the inundation effects on marsh vegetation with focus on field data collection

Research Proposal Content*

The **beginning** of the proposal should summarize your qualifications. The remainder of the proposal will be used to describe the research plan, show how the work aligns with federal priorities and stakeholders needs specify the graduate student(s) role, and present a detailed budget.

Research proposals must be no more than six pages (single-spaced, 12 point font). Appendices should not be included. Proposals must be submitted electronically in a single pdf file). Only material that is submitted as a single pdf will be reviewed.

Reviewers will not consider information provided in excess of stated page limit. The total electronic file size of the proposal narrative and appendices combined should not exceed 4 megabytes in storage space. Files that are larger than three megabytes may not be properly downloaded, uploaded, or received by the agency or the reviewers. Files that cannot be opened or downloaded will not be reviewed.

The research proposal should include the following sections:

1. Summary of Qualifications

- a. Name, Organization and Contact Information
- b. Qualifications (including):
 - i. Biographical sketch,
 - ii. Relevant past projects and clients with brief descriptions of these projects,
 - iii. Staff, faculty or students available to work on this project and their areas of expertise,

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- iv. Brief description of existing capabilities that will help you to successfully complete the project (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.).

2. **Research Proposal Overview**

- a. Proposed project performance period (start and end dates)
 - b. Funding request by year, as appropriate
 - c. Geographic location (ie. state) where research will take place, if applicable
3. **Goal and Objectives.** Statements describing the goal and objectives of the working hypothesis. If the proposal is for a multi-year project, goals and objectives should be specific for each year of the work plan presented. Recipients will be required to submit annual progress reports in which progress against these goals and objectives will be reported.
4. **Relevance.** Provide sufficient background information for reviewers to independently assess the significance of the proposed project. Summarize the problem, 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 existing federal research priorities. Explain how the research will address a fundamental science question, and how the results of the research will apply to an ongoing federal project or program. Describe benefits to federal stakeholders if applicable.
5. **Graduate Student.** Describe 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.
6. **Approach.** Explain the technical approach to be taken in the course of the research that will advance fundamental coastal science related to the topical area. If experimental, include a description of the scope of the testing program. If analytical, include key assumptions to be made, the scientific basis for the analysis, and the numerical procedures to be used. Describe expected outcomes and potential breakthroughs that should/may arise from this research. Provide a research timeline to ensure the scope of work can be completed in the stated period of performance.
7. **Deliverables.** Provide a brief description of and timeline for products, such as documentation of scientific findings, data sharing plan, communication of results to federal partners, etc.
8. **Partners.** List federal partners and describe their expected role and responsibilities. Describe how the project implements strategies that align with USCRP and the federal

agency partner(s) goals. Describe the approach to leveraging available resources such as programs, partnerships, plans, tools and trainings across the government, industry and NGOs. Do not include letters of support.

9. **Project Budget.** Provide up to a one-page categorized budget with a narrative justification. **Indirect costs should be included in your budget estimates. Overhead amounts are generally set by the university.** Do not submit a full university budget with signature pages. Include travel information and allocate travel funds for coordination meetings with federal partner(s) and/or conferences. Identify the cost of separable elements of the proposed work and identify the elements of the project that the cooperator would recommend for revision or elimination if sufficient funding is not available for all proposed activities.