

PROJECT ANNOUNCEMENT

**US Army Corps of Engineers (USACE)
Engineer Research and Development Center (ERDC)**

Title: Development and Testing Advancements in Spectral Wave Measurements, and Nearshore Process Methods for Risk-Based Guidance.

Announcement Type: Initial Announcement

Funding Opportunity Number: W81EWF-24-SOI-0012

Assistance Listing Number: 12.630

Date Issued: 23 January 2024

Key Dates: Phase I announcement will be open to receive statements of interest continuously until 12:00 noon Central Time (CT), 22 February 2024, at which point all statements of interest must be received.

If invited to Phase II, full proposal applications will be due at 12:00 noon Central Time (CT), 22 March 2024.

Estimated Award Ceiling: \$6,500,000.00

Estimated Total Program Funding: \$40,000,000.00

Agency Contact: Kisha M. Craig, Kisha.M.Craig@usace.army.mil

I. Program Description

A. Short Description of Funding Opportunity

ERDC seeks applications for data services measuring waves, currents and coastal morphologic response to these forcing factors, and subsequent analysis with a focus on improving our understanding and ability to model the physical processes driving that change, with implications for improving management of US national coastlines.

B. Background

The study of surface gravity waves and their impacts to the coast has been an on-going research initiative since the U.S. Army Corps of Engineers (USACE) entered in the field of coastal engineering. Waves are the primary forcing function affecting the USACE's coastal engineering work and mission, and spatial and temporal variations in wave climate can impact spatial variability of coastal evolution. Coastal wave observations are critical to informing USACE's development of wave modeling technology and understanding of the processes driving coastal morphology evolution, across a range of space and timescales. Long-term monitoring of both waves and coastal morphology are required to quantify the influence of climate change and assess the risks of future damage to our coastal environment. Long-term, robust, and continuous observations of climate enable calculations of numerical model performance, development of new or improved numerical wave models, development of new observation technology, and improved understanding of the impacts of climate change to the nearshore wave climate. Beach and nearshore monitoring are vital to quantify long-term, seasonal, and storm-induced dune, beach, and nearshore environment changes. These data also promote research and development of methodologies essential to the determination of erosion and accretion rates, sand budgets, inlet or entrance shoaling, beach fill requirements, and shoreline impacts of engineered activities and natural events. Combined, high- on nearshore environmental parameters (hydrodynamics, morphology response, sediment transport) that enable development of numerical simulation technology are critical for improving USACE's ability to improve coastal navigation projects, coastal storm risk management projects across all phases of engineering (planning, design, construction, operation, and maintenance).

C. Program Description/Objective:

In the field of surface gravity wave estimation and research, there is a need for data to update and improve state-of-the-art wave modeling technologies. The collection of high-resolution directional wave measurements at strategic locations along all US coastal waters is essential to a continued collaborative development and evaluation of state-of-the-art wave modeling technologies that support public, private, and commercial users. High-resolution directional wave measurements are used to assess predictive spectral wave model performance and are paramount to understanding the mechanisms affecting the temporal and spatial

variability in the wave climate. New and innovative techniques are needed to quantify model to measurement errors. Field experiments with multiple buoy systems are needed to perform necessary analysis on wave generation source terms (atmospheric input, nonlinear wave-wave interaction, dissipation, shallow water wave-bottom effects, etc.) and will lead to better wave models and more accurate long-term wave estimates.

With an increased amount of long-term data records available, tracking monthly, annual, and multi-decadal changes in climate variability will be related to large-scale markers such as the Pacific Decadal Oscillation, the North Atlantic Oscillation, and the El Nino Southern Oscillation (PDO, NAO, and ENSO). Long-term measurements seldom are continuous, and occasionally miss storm extremes. New and innovative techniques (RH-Tests for Homogeneity, Neural Network, temporal correlation functions, and geo-statistical interpolation) to fill those gaps are needed in the USACE's wave climate studies.

New, innovative wave measurement systems such as small drifters could be deployed in areas where moored buoys are unable to perform. Water bodies containing ice (annual development and decay), and persistent currents as in the case of the Florida and Gulf Stream, are areas where drifters could be applicable. It is equally important to ascertain the energy derived from distant storm events originating in the far northwestern Pacific Ocean where moored buoys could not be deployed, and altimeters, despite their resounding success, may not be able to measure extreme significant wave heights in the events. An array of drifters could monitor areas, transmitting real-time directional wave data until its power supply fails.

Waves are the primary energy input into the coastal zone. As they reach shallow water, waves interact with near-coast bathymetry transforming until they break in the surf zone. Surf-zone wave processes drive complex circulation patterns and ultimately result in sediment transport and morphology evolution. In addition, inundation at the shoreline is directly controlled by the transformation of infragravity and sea-swell waves across the surf-zone bathymetry and beach foreshore. Wave-driven setup and run-up can be large during storms and alongshore gradients in wave setup can drive surf-zone flows. The resultant bathymetric and topographic evolution (m's of vertical change) can be rapid (minutes to days) and vary in space and time over the course of a storm. This morphological evolution is driven by interactions between cross-shore undertow, alongshore currents, and oscillatory incident- and infragravity wave-driven flows to change sediment transport magnitude and direction. While many of the aforementioned wave and hydrodynamic processes are fairly well understood and can be well simulated with state-of-the-art coastal numerical models, the resultant sediment transport is poorly understood. Estimating morphology evolution at longer time scales involves summing over these short timescales, while including potential changes in wave climate, water level, and sediment supply. Basic research on sediment transport at a range of spatial and temporal scales is needed to drive improvements in the USACE's ability to properly

manage both sediment and risks during coastal storms and over project-relevant (30-year) timescales.

D. Public Benefit

The benefits based on the dissemination of wave observations would be realized from the recreational boating community, commercial fishing/shipping industries, serving various Federal, State and Local agencies, from early warning (e.g., high surf, increased surge resulting from wave set-up, rip current formation, safely navigating into and out of coastal harbors) to Search and Rescue. Beach and nearshore monitoring will stimulate research efforts (model development, improvements, and new methodologies) and ultimately serve the public from the results of the investigations leading to impacts on commercial, private, and public usage of US waterways.

E. Detailed Objectives:

The project has five primary activities: (1) collect, analyze and archive critical data using innovative methods; (2) evaluate and develop new wave, morphology evolution, and sediment transport observation and monitoring techniques; (3) execute field experiments using new and proven technologies; (4) analyze experiment results utilizing (or developing) relevant state-of-the-art numerical models when appropriate; and (5) develop new coastal engineering capabilities that can be integrated into USACE operational technology. A successful proposal requires a collaborative research and development effort between the vendor and the USACE to conduct scientific research on open ocean, nearshore and surfzone waves and resultant forcing of nearshore processes and morphology change. In the spirit of the U.S. Coastal Research Program, the USACE encourages wave and nearshore processes research that is both grounded in strong, physics-based analysis at storm through decadal timescales but also recognizes the interdisciplinary nature of the nearshore and emphasizes a systems-based approach to the research, including incorporation of hydrological, geological, biological, ecological, chemical, and sociological processes when relevant (while maintaining a focus on the physical processes). The project is organized into two main components: (1) Operational Data Collection and (2) Basic and Applied Research and Technology Development.

Operational Data Collection:

(1) National Wave Measurements [All Years]:

- Central Infrastructure, collection of real-time directional wave observation for sites along all US coasts (including the Great Lakes and US Territorial waters)
- Monitor all operating buoys 24/7 for consistency, operating in watch circle, battery consumption, biofouling, etc. and subject to scheduled/unscheduled visits to the site.
- Quality Control / Quality Assurance (QA/QC) of acquired data.
- Posting of the data on local website and transmitted to the National Oceanographic and Atmospheric Administration's (NOAA) National Data Buoy

Center's (NDBC) data portal. And when applicable, transmitted to other agency websites for further use.

- Maintain complete local archive of all acquired data, and metadata, and transmit archives to NOAA's National Centers for Environmental Information (NCEI).
- Display residual values between observations and most recent forecast (as available) to highlight to coastal practitioners as actual conditions deviate from forecast.
- Include data from operational drifting buoys in USACE-accessible national data archive.
- Field / Local Operations
- Plan for scheduled maintenance visits to each buoy. Unscheduled visits based on monitoring performed under Acquisition.
- Trained local field team, planned vessel for deployment/maintenance/recovery.
- Calibration and refurbishment procedures and facilities.

(2) Coastal Morphology Data Collection [All Years]

- Collection of long-term large-scale beach and surf-zone morphological data along the southern California coastline.
- Data should include diverse coastlines where possible (developed, undeveloped, cliffs, inlets, sandy beaches, cobble beaches, etc.).
- Data should include both sub-aerial beach topography and sub-aqueous bathymetry.
- Data should span long stretches of coastline (10s to 100s of km).
- Data should be collected frequently enough to quantify relevant changes to the system on storm through decadal timescales.
- Areas of interest should overlap with existing data collected, building historical long-term record.
- At least one site should include overlapping sustained remotely sensed data collection.

Basic and Applied Research and Technology Development:

The following subject areas represent basic, applied, and technology development research topics of interest to USACE. For all topics, data should be maintained and archived in publicly accessible databases and published in appropriate data-focused scientific journals. Data analysis and scientific findings should be documented in peer-reviewed journal articles and include evaluation of state-of-the art numerical models. Codebases for new methods should be provided in public, version-controlled repositories. Specific areas of research and desired timelines for execution are provided below. For areas of research which are indicated to span all years, please provide concrete year-by-year tasks that build on each other with expected specific milestones and/or products at the end of each year. Where possible, connect final deliverables for each task to identified USACE products and ongoing research efforts.

1. Nearshore Wave Hindcast Technology Development (Support to USACE Wave Information Studies)
 - Develop methods to bring Wave Information System hindcast observations to shallow water in sandy, rocky and reef environments accounting for uncertainties in nearshore bathymetry, winds, and water levels. [All years]
2. Deep Water Wave Hindcast Technology Development (Support to USACE Wave Information Studies)
 - Incorporate storm tracking methods into WIS evaluation [Base Year]
 - Develop approaches to improve time of arrival of wave systems including wave generation, propagation, and temporal impact to the 10m isobath [Option Year 2/3]
 - Develop methods to incorporate wave measurements into wave hindcast estimates. [Option Year 3/4]
3. Deep Water Waves Basic & Applied Research (Support to USACE Wave Information Studies)
 - Execute field experiments [All Years]
 - Investigate effects of wave-current interactions on precision of WIS predictions using buoys and satellite altimeter wave measurements. [Base, Option Year 1]
 - Great Lakes and Alaska over-winter buoy and drifter deployment to fill in ice/wave interaction data gaps in WIS and other USACE wave model validation time series. [Base, Option Year 1]
 - Design, plan and execute wind-generated surface gravity wave directional wave measurements to evaluate and improve USACE's discrete spectral wave modeling technologies. [Option Years 3/4]
 - Investigate ability to invert wave-spectra measurements to estimate winds including uncertainty estimates [All Years].
 - Analyze long term (decadal) variation in the National wave climate. [All Years]
4. Close-Range Remote Sensing Technology Development for Coastal Applications (Support to USACE CorpsCam Network)
 - Deploy continuous coastal imaging observation stations compatible with USACE CorpsCam network on U.S. Pacific Coastlines. [Base Year]
 - Maintain continuous coastal imaging observation stations compatible with USACE CorpsCam network on U.S. Pacific Coastlines [All Years].
 - Develop approaches to incorporate lidar observations into continuous coastal monitoring stations. [All Years]
5. Close-Range Remote Sensing Basic & Applied Research for Coastal Applications (Support to USACE CorpsCam Network)
 - Investigate bathymetry inversion algorithms for non-sandy high-relief coasts [Base Year/Option Year 1]
 - Investigate approaches to assimilate remotely sensed, multi-variable,

- observations (e.g., wave speed, frequency of breaking, wave runup, etc.) in phase-resolving or phase-averaged hydrodynamic models to improve nearshore bathymetry estimation algorithms. [Option Years 1/2/3]
- Investigate methods to exploit full-frame imagery for coastal processes research (e.g., image segmentation, etc.). [Option Years 3/4]
6. Satellite Remote Sensing Basic & Applied Research for Coastal Applications (Support to USACE Now-State Operational Data)
- Investigate methodology to quantify long-term shoreline change on dissipative beaches, near inlets, fronting cliffs, and along engineered/structure-backed coastlines [All Years]
 - Analyze national-scale, satellite-based shoreline changes datasets to inform USACE management of our Nation's coasts, with a particular emphasis on (1) quantifying impacts of federal beach nourishment activities and (2) understanding beach recovery and coastal resilience as a result of changing climate forcings [All Years].
 - Investigate methodology to use high spatial & temporal resolution satellite imagery to quantify coastal storm impacts to include shoreline change, beach-dune erosion, compound flooding (inland standing water), etc. [Option Years 1, 2, 3].
7. Basic & Applied Research into Coastal Processes (Support to Water Modeling Strategic Focus Area: Open Coast Physical Processes; Coastal Hazards System)
- Execute field experiments and analyze results to improve USACE's ability to predict coastal erosion, waves, and inundation along reefed coastlines, extending knowledge from sandy environments. [All Years]
 - Execute collaborative field experiments on US east and west coasts and analyze results to improve models of storm-driven morphology evolution and investigate recovery processes of sandy beaches. [Option Years 1, 2]
 - Initiate west-coast instance of the ERDC-developed coastal model test bed to explore methods for data assimilation, deficiencies in numerical model physics, and incorporation of uncertainty in nearshore wave and morphology modeling. [Option Year 2/3/4]
 - Analyze survey & remote-sensing data sets with a focus on improving morphologic models, regional sediment management techniques, and predictions of annual to decadal-scale coastal morphology evolution, including analysis of alongshore-variations in long-term erosion/accretion rates and needed frequency/magnitude of beach nourishment efforts. [Option Year 2/3/4]
8. Other Innovative Coastal and Ocean Research:
- Development of other innovative nearshore processes research ideas and methodologies. While the USACE has specific needs relating to beach and surf-zone sediment transport, in the spirit of basic research, the USACE also recognizes that there may be other topics of relevance and interest to navigation, regional sediment management, and coastal storm risk management that are not explicitly described above and encourages

submission of option year tasks addressing these needs. [All Years as needed]

Successful applicants should have expert knowledge and experience handling wave measurement systems (deployment, and recovery). They should also have technical expertise in the field of wave data evaluation, QA/QC, statistical analysis, higher order analysis skills (e.g., Neural Network, EOF, and Canonical Correlation), climate trend analysis, data archiving systems, and dissemination of the data to the public in usable form. Applicants should also have knowledge, experience, and expertise in field data collection, analysis, and numerical modeling of surf-zone morphodynamical processes and strong signal processing skills. Applicants must have an excellent publication record on these topics and have proven experience collecting in-situ and remotely sensed data successfully in the nearshore region.

F. Authorization: 10 USC 4001

G. Legal Requirements

Each Cooperative Agreement awarded under this announcement will be governed by 2 CFR 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", 2 CFR 1100 Subchapter D—Administrative Requirements Terms and Conditions for Cost-Type Grants and Cooperative Agreements to Nonprofit and Governmental Entities and the DoD research general terms and conditions located at <https://www.nre.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions>.

II. Federal Award Information

The following information applies to awards issued under this announcement:

- This is a one-time initiative
- The Government anticipates 1 Federal awards from this announcement, but reserves the right to award more or less
- The total amount of funding expected to be awarded through this announcement is \$40,000,000.00.
- The expected amount of funding for initial award is \$6,000,000.00.
- Award(s) from this announcement will be Cooperative Agreement(s)
- The anticipated period of performance is 1-year base period, with 4 – One year option periods for a total of 5 years.
- Applications for renewal or supplementation of existing projects are eligible to compete with applications for new Federal awards.
- The government reserves the right to accept only portions of an application and to negotiate with potential awardees.
- The USACE will also facilitate and participate in researcher coordination efforts

and meetings either in person or by webinar during the study.

III. Eligibility Information

A. Eligible Applicants

This opportunity is restricted to non-federal partners of the Californian Region Cooperative Ecosystems Studies Unit (CESU).

Disclosures of current and pending support made in this application may render an applicant ineligible for funding. Prior to award and throughout the period of performance, ERDC may continue to request updated continuing and pending support information, which will be reviewed and may result in discontinuation of funding.

Religious organizations are entitled to compete on equal footing with secular organizations for Federal financial assistance as described in E.O. 13798, "Promoting Free Speech and Religious Liberty."

B. Cost Sharing or Matching

This action will be 100% funded by USACE.

C. Conflict of Interest

a) General Requirement for Disclosure

You and your organization must disclose any potential or actual scientific or nonscientific conflict of interest(s) to us. You must also disclose any potential or actual conflict(s) of interest for any identified sub recipient you include in your application. We may have to ask you more questions if we need more information.

At our discretion, we may ask you for a conflict-of-interest mitigation plan after you submit your application. Your plan is subject to our approval.

b) Scientific Conflict of Interest

Scientific collaborations on research and development projects are generally the result of close collaboration prior to the submission of applications for support. Accordingly, these collaborations should be considered when considering potential conflicts of interest. The potential conflict is mitigated by the disclosure of these collaborations, and the list of current and pending support you provide for senior and key researchers. Therefore, you must include in your list of current and pending support all collaborators, even if they did not formally provide support.

D. Other

a) Licensure or Certification

You must include the Acknowledgment of Support and Disclaimer on all materials created or produced under our awards. This language may be found in the Terms and Conditions included in the award documents.

E. Certifications, representations, and assurances

1. To apply for grants and other funding opportunities the applicant entity must have an active registration in the System for Award Management (SAM). Applications will not be accepted through Grants.gov or other methods unless the entity is registered in SAM. Registration in SAM now includes the acceptance of Certifications and Assurances. See <https://www.grants.gov/web/grants/grantors/grantor-standard-language.html> for details on how to register in SAM, and Grants.gov
2. The Federal Assistance Certifications Report is an attestation that the entity will abide by the requirements of the various laws and regulations; therefore, as applicable, you are still required to submit any documentation, including the SF-LLL Disclosure of Lobbying Activities (if award value exceeds \$100,000.00), and, if applicable, informing DoD of unpaid delinquent tax liability or a felony conviction under any Federal law.
3. Certification Regarding Disclosure of Funding Sources. By checking "I Agree" on the SF 424 (R&R) block 17 you agree to abide by the following statement: "By signing this application, I certify the proposing entity is in compliance with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 which requires that: (a) the PI and other key personnel certify that the current and pending support provided on the proposal is current, accurate and complete; (B) agree to update such disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award; and (c) the PI and other key personnel have been made aware of the requirements under Section 223(a)(1) of this Act. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 218, Section 1001)."

IV. Application and Submission Information (2 Phase Process)

A. Phase I: Submission of Statement of Interest (SOI)

1. Materials Requested for Statement of Interest/Qualifications:

a. Please provide the following via e-mail attachment to: Kisha M. Craig, Kisha.M.Craig@usace.army.mil (Maximum length: 2 pages, single-spaced 12 pt. font).

i. Name, Organization and Contact Information

ii. 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 Kisha M. Craig, Kisha.M.Craig@usace.army.mil

2. ERDC will only accept SOIs submitted on or before 22 February 2024, 12:00 noon Central Time (CT).

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.

B. Phase II (if invited): Submission of Full Application Package

1. Address to Request Application Package

The complete funding opportunity announcement, application forms, and instructions are available for download at [Grants.gov](https://www.grants.gov).

The administrative point of contact is Kisha M. Craig, Kisha.M.Craig@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 a full budget in sufficient detail so that a reasonableness determination can be made. A recommended template will be included in the invitation to Phase II. The SF 424 Research & Related Budget Form can be used as a guide but is required if the sub-recipient uses it. 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.

- d. R&R Senior/Key Person Profile
 1. Biographical Sketch
 2. Disclosure of Current and Pending Support:
 - i. A list of all current projects the individual is working on, in addition to any future support the individual has applied to receive, regardless of the source.
 - ii. Title and objectives of the other research projects.
 - iii. The percentage per year to be devoted to the other projects.

- iv. The total amount of support the individual is receiving in connection to each of the other research projects or will receive if other applications are awarded.
- v. Name and address of the agencies and/or other parties supporting the other research projects.
- vi. Period of performance for the other research projects.

e. SF-LLL Disclosure of Lobbying Activities (if award value exceeds \$100,000.00)

f. Data Management Plan:

A data management plan is a document that describes which data generated through the course of the proposed research will be shared and preserved, how it will be done, or explains 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. See also: DoD Instruction 3200.12.

<https://www.esd.whs.mil/Directives/issuances/dodi/>

Data management plans are generally 2 pages in length, and must include the following considerations:

- (1) The types of data, software, and other materials to be produced.
- (2) How the data will be acquired.
- (3) Time and location of data acquisition, if scientifically pertinent.
- (4) How the data will be processed.
- (5) The file formats and the naming conventions that will be used.
- (6) A description of the quality assurance and quality control measures during collection, analysis, and processing.
- (7) A description of dataset origin when existing data resources are used.
- (8) A description of the standards to be used for data and metadata format and content.
- (9) Appropriate timeframe for preservation.
- (10) The plan may consider the balance between the relative value of data preservation and other factors such as the associated cost and administrative burden. The plan will provide a justification for such decisions.

3. ERDC will only accept full application packages submitted on or before 22 March 2024, 12:00 noon Central Time (CT).

4. Submission Instructions

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 Kisha M. Craig, Kisha.M.Craig@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 an 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>.

Organizations must have a Unique Entity Identifier (UEI) and active System for Award Management (SAM) registration to apply for Federal financial assistance.

C. Application Withdrawal:

An applicant may withdraw an application at any time before award by written notice via email. Notice of withdrawal shall be sent to the agency point of contact identified in this announcement and are effective upon receipt.

D. Funding Restrictions

Per 2 CFR § 200.216, funds may not be used to procure telecommunications equipment or video surveillance services or equipment produced by

- Huawei Technologies Company,
- ZTE Corporation Hytera Communications Corporation,
- Hangzhou Hikvision Digital Technology Company,
- Dahua Technology Company
- any subsidiary or affiliate of such entities

Funds from an award may not be used to attain fee or profit.

V. Application Review Information

A. Selection Criteria

Applications will be evaluated using the following criteria, listed in descending order of importance:

- Technical merits of the proposed research and development:
 - Preference will be given to investigators with extensive field monitoring experience on the Indiana shoreline. Field monitoring experience should include topographic/bathymetric coastal surveying, and long-term measurements of waves and currents.
 - Because data collected from this project will be used as a shoreline model validation dataset, experience developing reduced complexity shoreline models and satellite derived shoreline detection techniques is preferred.

- Potential relationship of the proposed research and development to Department of Defense missions

B. Review and Selection Process:

Each application will be reviewed based on the selection criteria above rather than against other applications submitted under this Announcement.

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 may not merit such a categorization.

In addition to the technical/program review, the DoD performs a budget review and a risk review as directed by 2 CFR 200.206, including a review of the Federal Awardee Performance and Integrity Information System (FAPIIS). Applicants may review information in FAPIIS and comment on any information entered in that system. Comments made by applicants will be considered in addition to other information in considering applicants' integrity, business ethics, and record of performance.

VI. Federal Award Administration Information

The notification e-mail regarding a selection is not authorization to commit or expend DoD funds. A DoD grants officer is the only person authorized to obligate and approve the use of federal funds. This authorization is in the form of a signed Notice of Award. Applicants whose applications are recommended will be contacted by a DoD grants officer to discuss any additional information required for award. This may include representations and certifications, revised budgets or budget explanations, or other information as applicable to the proposed award. The award start date will be determined at this time.

VII. Reporting Requirements

The terms and conditions of the award will provide the specifics on how to submit the reports and any required sections for those reports.

In accordance with 2 CFR 200.328 (Financial Reporting) and 2 CFR 200.329 (Program Performance)

Report	Requirements/Form	Frequency	Means of Submission
ERDC Progress Report		Monthly	E-mail
Research Performance Progress Reports (Interim and Final)	OMB Control Number: 0704-0527	Annually	E-mail
Financial Report	SF 425	Bi-annually	E-mail
Payment Report	SF 270	Monthly	E-mail
Closeout Report		Once	E-mail

Awardees will need to comply with the reporting requirements in 2 CFR 170: Reporting Subaward and Executive Compensation Information.

The terms and conditions of the award will provide the specifics on how to submit the reports and any required sections for those reports.

VIII. Federal Contacts

Questions should be directed to:

Kisha M. Craig
 Grants Specialist
Kisha.M.Craig@usace.army.mil

Timothy D. Black
 Grants Officer
Timothy.D.Black@usace.army.mil

Questions regarding Grants.gov should be directed to: the toll-free number 1-800-518-4726 and email at support@grants.gov.

IX. Other Information

The Federal government is not obligated to make any Federal award as a result of the announcement. Only grants officers can bind the Federal government to the expenditure of fund.

Applicants are advised to monitor Grants.gov for potential amendments to this Notice of Funding Opportunity. You can also elect to be automatically notified by Grants.gov whenever there is a change to the opportunity.

Applications must not include any information that has been identified as classified national security information under authorities established in Executive Order 12958, Classified National Security Information.