

PROJECT ANNOUNCEMENT

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

Title: Depth-Resolved Algal Bloom Mapping at Lake Okeechobee, FL

Announcement Type: Initial Announcement

Funding Opportunity Number: W81EWF-26-SOI-0001

Assistance Listing Number: 12.630

Date Issued: 14 January 2026

Key Dates: Phase I announcement will be open to receive statements of interest continuously until 12:00 noon Central Time (CT), 13 February 2026, 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), 15 March 2025.

Estimated Award Ceiling: \$95,500.00

Estimated Total Program Funding: \$95,500.00

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

I. Program Description

A. Short Description of Funding Opportunity

ERDC seeks applications for a lake assessment effort to be funded by the U.S. Army Corps of Engineers (USACE) Engineer Research and Development Center (ERDC) to provide assistance with an R&D effort on Okeechobee that will involve environmental data collection via sensors and surface water sample collection and analysis.

B. Background

Harmful algal blooms (HABs) in freshwater environments pose significant risks to public health, particularly when they occur in or near drinking water sources. HABs release compounds such as microcystins, anatoxins, and cylindrospermopsin, which can contaminate water supplies and overwhelm treatment facilities not designed to remove high toxin loads. Even when toxins remain below regulatory limits, HAB aggregates can clog intake systems, produce unpleasant tastes and odors, and increase treatment costs for municipalities. In extreme cases, drinking water advisories or shutdowns may be required, leaving communities without safe water until the bloom dissipates or additional treatment is implemented. Thus, HABs present both an acute and chronic threat to safe, reliable drinking water.

Recreational activities are also severely disrupted by freshwater HABs. Lakes and reservoirs affected by HABs may be closed to swimming, boating, and fishing because direct contact with bloom-contaminated water can cause skin irritation, gastrointestinal illness, and respiratory distress. Pets and livestock are especially vulnerable to ingestion of contaminated water. Beyond health concerns, HABs degrade the recreational experience by producing foul odors, unsightly surface scums, and reduced water clarity; all of which can negatively impact local, tourism-based economies.

Furthermore, neighboring aquatic ecosystems suffer substantial stress during and after algal bloom events. Dense blooms block sunlight, inhibiting photosynthesis in submerged vegetation and disrupting habitat for fish and invertebrates. When blooms die off, decomposition rapidly consumes dissolved oxygen, often leading to hypoxic or anoxic conditions that can trigger fish kills and biodiversity loss. The imbalance created by recurring blooms can shift food webs, favoring pollution-tolerant species while reducing populations of sensitive or economically valuable organisms. Additionally, nutrient cycling becomes distorted, and internal loading from sediments can perpetuate future blooms. Over time, these ecological disruptions degrade the overall health, resilience, and stability of freshwater systems, making recovery more difficult and increasing the long-term management burden for communities. Because this effort focuses on gaining insight into HAB behavior relative to environmental triggers, ERDC requests assistance with this R&D work on Okeechobee that will involve environmental data collection via sensors and surface water sample collection.

C. Program Description/Objective: (brief description of the anticipated work)

Effective management of HABs requires extensive, long-term water quality monitoring capable of capturing the complex conditions that lead to bloom formation. Because HAB events are highly unpredictable, it is essential to collect a wide array of water quality parameters across both bloom and non-bloom seasons to identify the intricate combination of environmental triggers involved. In Lake Okeechobee, this need is especially important due

to its relatively shallow depth, which creates unique thermal and ecological dynamics that differ substantially from those observed in deeper lakes. These site-specific differences may influence bloom frequency, intensity, and duration, making detailed, sustained monitoring a critical step toward understanding HAB behavior in this system.

To address this need, the proposed work will involve several months of intensive water quality data collection in and/or near Lake Okeechobee, extending through the bloom season and including approximately 30 days before and after to capture rapid seasonal transitions. Surface water sampling and subsurface sensor measurements will be supported by HAB ecology and monitoring experts, who will also assist with equipment setup, deployment, and routine maintenance. The newly collected data from Lake Okeechobee will be compared to historical datasets from Clinton Lake in Lawrence, KS, enabling a comparative analysis of HAB triggers across two distinct lake environments. This comparison is expected to provide valuable insights into the site-specific behavior of HABs in Lake Okeechobee and contribute to a broader understanding of bloom dynamics. Ultimately, the objective is to generate the critical information needed to elucidate the environmental drivers of HAB formation in Lake Okeechobee.

D. Public Benefit

The public will benefit from this work in the form of improved understanding of the causes of algal blooms relative to environmental and water quality changes in a public reservoir used for drinking water and recreation. Identifying environmental and water quality triggers can assist lake managers in taking actions that allow local agencies to issue timely advisories that can protect residents and pets from exposure to algae toxins. This information can also help communities project when blooms are most likely to occur, thereby reducing the risk of sudden lake closures or public health emergencies. The data gathered through this work will be publicly available in the form a web tool that can ultimately support other research and monitoring efforts in the lake.

E. Authorization: 10 USC 4001

F. 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>.

G. Program-Specific Requirements

Successful applicants should have expert knowledge and experience working on Lake Okeechobee, as well as the canal near Clewiston, FL. The candidates should have prior experience with data sonde operation, maintenance, and deployment. The candidates will also be required to submit monthly field data, and one (1) annual report at the end of the year to provide a summary of tasks performed, data collected, and interpreted results. Collaboration on a peer review publication, written with the Government, will be the final deliverable for

this effort.

II. Federal Award Information

The following information applies to awards issued under this announcement:

- This is a new program
- The Government anticipates 1 Federal award 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 \$95,500.00
- The expected amount of funding for each award is \$95,500.00 for Year 1
- Award(s) from this announcement will be Cooperative Agreement(s)
- The anticipated period of performance is 1 year.
- 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.
- Government's substantial involvement includes working cooperatively with the investigator to identify issues the protocol must address, develop field and training materials, and assist the investigator personnel with activity logistics and field work.
- The Government will provide up to 22 hydro lab sensors and accessory equipment (anchors, buoys, and Android interface device) and assist in initial deployment and final retrieval of sensors. However, all government supplied equipment to investigator for use in field research must be returned to the Government.
- The government will coordinate with the university on data analysis, interpretation, and reporting for a peer reviewed publication.
- A peer reviewed publication in collaboration with the Government shall be the final product for this effort.

III. Eligibility Information

A. Eligible Applicants

This opportunity is restricted to non-federal partners of the Gulf Coast 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 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 Craig, Kisha.M.Craig@usace.army.mil

2. ERDC will only accept SOIs submitted on or before 13 February 2025, 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.

The administrative point of contact is Stacy Thurman, Stacy.D.Thurman@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. In addition, a data management plan is required to be included.
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.
- (11) A statement that the data cannot be made available to the public

when there are national security or controlled unclassified information concerns (e.g., “This data cannot be cleared for public release in accordance with the requirements in DoD Directive 5230.09.”)

- 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)

3. ERDC will only accept full application packages submitted on or before 15 March 2026, 12 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 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; and
- 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 as a whole 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 into that system. Comments made by applicants will be taken into account 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	Progress during the period covered by the corresponding SF 270 via email submission	Upon submission of the SF 270	E-mail
Research Performance Progress Reports (Interim and/or Final)	OMB Control Number: 0704-0527	Annually	E-mail
Financial Report	SF 425	Quarterly	E-mail
Payment Report	SF 270	Monthly	E-mail
Closeout Report	See OAR Article VI of DoD R&D General Terms and Conditions	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 Craig
Grants Specialist
Kisha.M.Craig@usace.army.mil

Zavien Beal
Grants Officer
Zavien.T.Beal@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.